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Publications

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Theses

K. Höinghaus
Nachweis von Radikalen durch Resonanzfluoreszenz, Entwicklung geeigneter Lichtquellen
Diplomarbeit, Universität Bochum, Juli 1975

K. Kohse-Höinghaus
Vakuum-UV-Photolyse mit einem Wasserstoff-Laser: Erzeugung von $O(^3P)$ und $O_2(b^1\Sigma_g^+)$ und Untersuchung der Temperaturabhängigkeit ihres Verhaltens in Gegenwart verschiedener Gase
Dissertation, Universität Bochum, Dezember 1978

K. Kohse-Höinghaus
Laseroptische Verfahren für die quantitative Bestimmung der Konzentrationen reaktiver Teilchen sowie der Temperatur in Verbrennungssystemen
Habilitationsschrift, Fakultät Energietechnik der Universität Stuttgart, Dezember 1992

Books

K. Kohse-Höinghaus, J.B. Jeffries (eds.)
Applied Combustion Diagnostics
Taylor and Francis, New York, 2002

K. Kohse-Höinghaus
Burning for Science – A Women in a Technical Field
In the autobiography series: "Lives in Chemistry" (l-i-c.org), GDCh and GNT-Verlag, 2025

Articles in scientific journals with review process

1) K. Höinghaus, H. W. Biermann, C. Zetzsch, F. Stuhl
Nachweis von atmosphärischem NO im ppb-Bereich mittels Fluoreszenzanregung durch NO-γ-Banden
Z. Naturforsch. **31**a, 239–243 (1976)

2) I. Hansen, K. Höinghaus, C. Zetzsch, F. Stuhl
Detection of $NH(X^3\Sigma^-)$ by resonance fluorescence in the pulsed vacuum-UV photolysis of NH_3 and its application to reactions of NH-radicals
Chem. Phys. Lett. **42**, 370–372 (1976)

3) K. Kohse-Höinghaus, F. Stuhl
H_2-laser photolysis study of the quenching of $O_2(b^1\Sigma_g^+)$ by H_2 and D_2
Ber. Bunsen-Ges. Phys. Chemie **82**, 828–830 (1978)

4) K. Kohse-Höinghaus, F. Stuhl
H_2-laser photochemical study of the temperature dependent quenching of $O_2(b^1\Sigma_g^+)$
J. Chem. Phys. **72**, 3720–3726 (1980)

5) M. Schieferstein, K. Kohse-Höinghaus, F. Stuhl
Temperature dependence of the rate constants of the reaction O + NO + M → NO_2 + M (M = He, NO, N_2, CH_4)
Ber. Bunsen-Ges. Phys. Chemie **87**, 361–366 (1983)

6) K. Kohse-Höinghaus, W. Perc, Th. Just
Laser-induced saturated fluorescence as a method for the determination of radical concentrations in flames
Ber. Bunsen-Ges. Phys. Chem. **87**, 1052–1057 (1983)

7) K. Kohse-Höinghaus, R. Heidenreich, Th. Just
Determination of absolute OH and CH concentrations in a low pressure flame by laser-induced saturated fluorescence
Proc. Combust. Inst. **20**, 1177–1188 (1984)

8) U. Meier, K. Kohse-Höinghaus, Th. Just
H and O atom detection for combustion applications: Study of quenching and laser photolysis effects
Chem. Phys. Lett. **126**, 567–573 (1986)

9) K. Kohse-Höinghaus, P. Koczar, Th. Just
Absolute concentration measurements of OH in low-pressure hydrogen-oxygen, methane-oxygen, and acetylene-oxygen flames
Proc. Combust. Inst. **21**, 1719–1727 (1986)

10) U. Meier, K. Kohse-Höinghaus
REMPI detection of CH_3 in low-pressure flames
Chem. Phys. Lett. **142**, 498–502 (1987)

11) J. Bittner, K. Kohse-Höinghaus, U. Meier, Th. Just
Quenching of two-photon-excited H(3s, 3d) and O(3p $^3P_{2,1,0}$) atoms by rare gases and small molecules
Chem. Phys. Lett. **143**, 571–576 (1988)

12) J. Bittner, K. Kohse-Höinghaus, U. Meier, S. Kelm, Th. Just
Determination of absolute H atom concentrations in low-pressure flames by two-photon laser-excited fluorescence
Combust. Flame **71**, 41–50 (1988)

13) J.B. Jeffries, K. Kohse-Höinghaus, G.P. Smith, R.A. Copeland, D.R. Crosley
Rotational-level-dependent quenching of OH ($A^2\Sigma^+$) at flame temperatures
Chem. Phys. Lett. **152**, 160–166 (1988)

14) U. Meier, J. Bittner, K. Kohse-Höinghaus, Th. Just

Discussion of two-photon laser-excited fluorescence as a method for quantitative detection of oxygen atoms in flames
Proc. Combust. Inst. **22**, 1887–1896 (1988)

15) K. Kohse-Höinghaus, J.B. Jeffries, R.A. Copeland, G.P. Smith, D.R. Crosley
The quantitative LIF determination of OH concentrations in low-pressure flames
Proc. Combust. Inst. **22**, 1857–1866 (1988)

16) K. Kohse-Höinghaus, D.F. Davidson, A.Y. Chang, R.K. Hanson
Quantitative NH_2 concentration determination in shock tube laser-absorption experiments
J. Quant. Spectrosc. Radiat. Transfer **42**, 1–17 (1989)

17) K.J. Rensberger, J.B. Jeffries, R.A. Copeland, K. Kohse-Höinghaus, M.L. Wise, D.R. Crosley
Laser-induced fluorescence determination of temperatures in low pressure flames
Appl. Opt. **28**, 3556–3566 (1989)

18) D.F. Davidson, A.Y. Chang, K. Kohse-Höinghaus, R.K. Hanson
High temperature absorption coefficients of O_2, NH_3, and H_2O for broadband ArF excimer laser radiation
J. Quant. Spectrosc. Radiat. Transfer **42**, 267–278 (1989)

19) D.F. Davidson, K. Kohse-Höinghaus, A.Y. Chang, R.K. Hanson
A pyrolysis mechanism for ammonia
Int. J. Chem. Kinet. **22**, 513–535 (1990)

20) K. Kohse-Höinghaus, U. Meier, B. Attal-Trétout
Laser-induced fluorescence study of OH in flat flames of 1-10 bar compared with resonance CARS experiments
Appl. Opt. **29**, 1560–1569 (1990)

21) K. Kohse-Höinghaus
Quantitative laser-induced fluorescence: Some recent developments in combustion diagnostics
Appl. Phys. B **50**, 455–461 (1990)

22) A. Jörg, U. Meier, K. Kohse-Höinghaus
Rotational energy transfer in OH ($A^2\Sigma^+$, v'=0): A method for the direct determination of state-to-state transfer coefficients
J. Chem. Phys. **93**, 6453–6462 (1990)

23) A. Lawitzki, I. Plath, W. Stricker, J. Bittner, U. Meier, K. Kohse-Höinghaus
Laser-induced fluorescence determination of flame temperatures in comparison with CARS measurements
Appl. Phys. B **50**, 513–518 (1990)

24) U. Meier, K. Kohse-Höinghaus, L. Schäfer, C.-P. Klages
Two-photon excited LIF determination of H-atom concentrations near a heated filament in a low pressure H_2 environment
Appl. Opt. **29**, 4993–4999 (1990)

25) A. Lawitzki, J. Bittner, K. Kohse-Höinghaus
Determination of N-atom concentrations in low-pressure premixed $H_2/O_2/N_2$ flames doped with NH_3, HCN, and $(CN)_2$

Chem. Phys. Lett. **175**, 429–433 (1990)

26) J. Bittner, A. Lawitzki, U. Meier, K. Kohse-Höinghaus
Nitrogen atom detection in low-pressure flames by two-photon laser-excited fluorescence
Appl. Phys. B **52**, 108–116 (1991)

27) J. D. Mertens, K. Kohse-Höinghaus, R.K. Hanson, C.T. Bowman
A shock tube study of H + HNCO $\rightarrow$ NH_2 + CO
Int. J. Chem. Kinet. **23**, 655–668 (1991)

28) L. Schäfer, C.-P. Klages, U. Meier, K. Kohse-Höinghaus
Atomic hydrogen concentration profiles at filaments used for chemical vapor deposition of diamond
Appl. Phys. Lett. **58**, 571–573 (1991)

29) A. Jörg, U. Meier, R. Kienle, K. Kohse-Höinghaus
State-specific rotational energy transfer in OH ($A^2\Sigma^+$, v'=0) by some combustion-relevant collision partners
Appl. Phys. B **55**, 305–310 (1992)

30) U. Meier, R. Kienle, I. Plath, K. Kohse-Höinghaus
Two-dimensional LIF approaches for the accurate determination of radical concentrations and temperature in combustion
Ber. Bunsen-Ges. Phys. Chem. **96**, 1401–1410 (1992)

31) R. Kienle, A. Jörg, K. Kohse-Höinghaus
State-to-State rotational energy transfer in OH ($A^2\Sigma^+$, v'=1)
Appl. Phys. B **56**, 249–258 (1993*)*

32) B. Atakan, V. Jörres, K. Kohse-Höinghaus
Double-pulse 2D LIF as a means for following flow and chemistry development in turbulent combustion
Ber. Bunsen-Ges. Phys. Chem. **97**, 1706–1710 (1993)

33) M.P. Lee, R. Kienle, K. Kohse-Höinghaus
Measurements of rotational energy transfer and quenching in OH $A^2\Sigma^+$, v'=0 at elevated temperature
Appl. Phys.B **58**, 447–457 (1994)

34) J. Heinze, N. Heberle, K. Kohse-Höinghaus
The $CH_3\ 3p_z\ ^2A_2'' \leftarrow \tilde{X}\ ^2A_2''\ 0_0^0$ band at temperatures up to 1700 K investigated by REMPI spectroscopy
Chem. Phys. Lett. **223**, 305–312 (1994)

35) K. Kohse-Höinghaus
Laser techniques for the quantitative detection of reactive intermediates in combustion systems
Prog. Energy Combust. Sci. **20**, 203–279 (1994) ***invited***

36) A. Brockhinke, P. Andresen, K. Kohse-Höinghaus
Quantitative one-dimensional single-pulse multi-species concentration and temperature measurement in the lift-off region of a turbulent H_2/air diffusion flame
Appl. Phys. B **61**, 533–545 (1995)

37) R. Kienle, M.P. Lee, K. Kohse-Höinghaus
A detailed rate equation model for the simulation of energy transfer in OH laser-induced fluorescence
Appl. Phys. B **62**, 583–599 (1996)

38) G. Robertson, K. Kohse-Höinghaus, S. Le Boiteux, F. Aguerre, B. Attal-Trétout
Observation of strong field effects and rotational line coupling in DFWM processes resonant with $^2\Sigma$ -$^2\Pi$ electronic system
J. Quant. Spectrosc. Radiat. Transfer **55**, 71–101 (1996)

39) R. Kienle, M.P. Lee, K. Kohse-Höinghaus
A scaling formalism for the representation of rotational energy transfer in OH ($A^2\Sigma^+$) in combustion experiments
Appl. Phys. B **63**, 403–418 (1996)

40) A. Brockhinke, P. Andresen, K. Kohse-Höinghaus
Contribution to the analysis of temporal and spatial structures near the lift-off region of a turbulent hydrogen diffusion flame
Proc. Combust. Inst. **26**, 153–159 (1996)

41) A. Brockhinke, K. Kohse-Höinghaus, P. Andresen
Double-pulse one-dimensional Raman and Rayleigh measurements for the detection of temporal and spatial structures in a turbulent H_2/air diffusion flame
Opt. Lett. **21**, 2029–2031 (1996)

42) A.T. Hartlieb, D. Markus, W. Kreutner, K. Kohse-Höinghaus
Measurement of vibrational energy transfer of OH ($A^2\Sigma^+$, v'=0→1) in low-pressure flames
Appl. Phys. B **65**, 81–91 (1997)

43) U. Bergmann, K. Lummer, B. Atakan, K. Kohse-Höinghaus
Flame deposition of diamond films: an experimental study of the effects of stoichiometry, temperature, time and the influence of acetone
Ber. Bunsen-Ges. Phys. Chem. **102**, 906–914 (1998)

44) B. Atakan, A.T. Hartlieb, J. Brand, K. Kohse-Höinghaus
An experimental investigation of premixed fuel-rich low-pressure propene/oxygen/argon flames by laser spectroscopy and molecular beam mass spectrometry
Proc. Combust. Inst. **27**, 435–444 (1998)

45) A. Brockhinke, A.T. Hartlieb, K. Kohse-Höinghaus, D.R. Crosley
Tunable KrF laser-induced fluorescence of C_2 in a sooting flame
Appl. Phys. B **67**, 659–665 (1998)

46) B. Atakan, M. Beuger, K. Kohse-Höinghaus
Nitrogen compounds and their influence on diamond deposition in flames
Phys. Chem. Chem. Phys. **1**, 705–708 (1999)

47) A.G. Löwe, A.T. Hartlieb, J. Brand, B. Atakan, K. Kohse-Höinghaus
Diamond deposition in low-pressure acetylene flames: *In situ* temperature and species concentration measurements by laser diagnostics and molecular beam mass spectrometry
Combust. Flame **118**, 37–50 (1999)

48) A. Lamprecht, W. Eimer, K. Kohse-Höinghaus

Dynamic light scattering in sooting premixed atmospheric-pressure methane-, propane-, ethene- and propene-oxygen flames
Combust. Flame **118**, 140–150 (1999)

49) K. Kohse-Höinghaus
Laser and probe diagnostics in fundamental combustion research
Isr. J. Chem. **39**, 25–39 (1999) ***invited***

50) U. Rahmann, W. Kreutner, K. Kohse-Höinghaus
Rate-equation modeling of single- and multiple-quantum vibrational energy transfer of OH ($A^2\Sigma^+$, v'=0 to 3)
Appl. Phys. B **69**, 61–70 (1999)

51) B. Atakan, K. Lummer, K. Kohse-Höinghaus
Diamond deposition in acetylene-oxygen flames: nucleation and early growth on molybdenum substrates for different pretreatment procedures
Phys. Chem. Chem. Phys. **1**, 3151–3156 (1999)

52) A. Brockhinke, W. Kreutner, U. Rahmann, K. Kohse-Höinghaus, T.B. Settersten, M.A. Linne
Time-, wavelength- and polarization-resolved measurements of OH ($A^2\Sigma^+$) picosecond laser-induced fluorescence in atmospheric pressure flames
Appl. Phys. B **69**, 477–485 (1999)

53) A.T. Hartlieb, B. Atakan, K. Kohse-Höinghaus
Temperature measurement in fuel-rich non-sooting low-pressure hydrocarbon flames
Appl. Phys. B **70**, 435–445 (2000)

54) A. Brockhinke, S. Haufe, K. Kohse-Höinghaus
Structural properties of lifted hydrogen jet flames measured by laser spectroscopic techniques
Combust. Flame **121**, 367–377 (2000)

55) A.T. Hartlieb, B. Atakan, K. Kohse-Höinghaus
Effects of a sampling quartz nozzle on the flame structure of a fuel-rich low-pressure propene flame
Combust. Flame **121**, 610–624 (2000)

56) R. Plessow, A. Brockhinke, W. Eimer, K. Kohse-Höinghaus
Intrinsic time- and wavelength-resolved fluorescence of oligonucleotides: A systematic investigation using a novel picosecond laser approach
J. Phys. Chem. B **104**(15), 3695–3704 (2000)

57) K. Kohse-Höinghaus, A.G. Löwe, B. Atakan
Investigations of the gas phase mechanism of diamond deposition in combustion CVD
Thin Solid Films **368**, 185–192 (2000) ***invited***

58) A. Lamprecht, B. Atakan, K. Kohse-Höinghaus
Fuel-rich propene and acetylene flames: a comparison of their flame chemistries
Combust. Flame **122**, 483–491 (2000)

59) Z.-J. Liu, B. Atakan, K. Kohse-Höinghaus
Deposition of hexagonal GaN using propylamine as a nitrogen precursor
J. Crystal Growth **219**, 176–179 (2000)

60) H. Böhm, A. Lamprecht, B. Atakan, K. Kohse-Höinghaus
Modelling of a fuel-rich premixed propene-oxygen-argon flame and comparison with experiments
Phys. Chem. Chem. Phys. **2**, 4956–4961 (2000)

61) A. Brockhinke, R. Plessow, P. Dittrich, K. Kohse-Höinghaus
Analysis of the local conformation of proteins with two-dimensional fluorescence techniques
Appl. Phys. B **71**, 755–763 (2000)

62) A. Lamprecht, B. Atakan, K. Kohse-Höinghaus
Fuel-rich flame chemistry in low-pressure cyclopentene flames
Proc. Combust. Inst. **28**, 1817–1824 (2000)

63) H. Böhm, K. Kohse-Höinghaus, F. Lacas, J.C. Rolon, N. Darabiha, S. Candel
On PAH formation in strained counterflow diffusion flames
Combust. Flame **124**, 127–136 (2001)

64) A. Brockhinke, A. Bülter, J.C. Rolon, K. Kohse-Höinghaus
ps-LIF measurements of minor species concentration in a counterflow diffusion flame interacting with a vortex
Appl. Phys. B **72**, 491–496 (2001)

65) B. Atakan, K. Kohse-Höinghaus
Combustion CVD of diamond: gas phase diagnostics and mechanistic studies
New Diamond Front. Carbon Technol. **11**, 159–171 (2001) ***invited***

66) G. González Alatorre, H. Böhm, B. Atakan, K. Kohse-Höinghaus
Experimental and modelling study of 1-pentene combustion at fuel-rich conditions
Z. Phys. Chem. **215**, 981–995 (2001) ***contribution to special issue***

67) M. Hofstätter, B. Atakan, K. Kohse-Höinghaus
CVD growth of silicon films at high rates
J. Phys. IV **11**, Pr3-293–Pr3-299 (2001)

68) E. Fischer Rivera, B. Atakan, K. Kohse-Höinghaus
CVD deposition of cobalt oxide (Co_3O_4) from $Co(acac)_2$
J. Phys. IV **11**, Pr3-629–Pr3-635 (2001)

69) K. Kohse-Höinghaus, M. Kamphus, G. González Alatorre, B. Atakan, A. Schocker, A. Brockhinke
Concentration and temperature measurement in fuel-rich flames
C. R. Acad. Sci., Ser. IV **2**(7), 973–982 (2001), ***invited***

70) A. Brockhinke, K. Kohse-Höinghaus
Energy transfer in combustion diagnostics: Experiment and modeling
Faraday Discuss. **119**, 275–286 (2001), ***invited***

71) B. Atakan, K. Kohse-Höinghaus
On the importance of gas phase chemistry in two CVD systems: deposition of silicon and diamond
Z. Metallkd. **92**, 1139–1144 (2001), ***invited***

72) K. Kohse-Höinghaus, B. Atakan, A. Lamprecht, G. González Alatorre, M. Kamphus, T. Kasper, N.-N. Liu
Contributions to the investigation of reaction pathways in fuel-rich flames
Phys. Chem. Chem. Phys. **4**, 2056–2062 (2002), ***contribution to special issue***

73) H. Schmidt, Y. Shen, M. Leschke, Th. Haase, K. Kohse-Höinghaus, H. Lang
Phosphanstabilisierte Silber(I)-Carboxylate: Synthese und Verwendung in der Silber-CVD
J. Organomet. Chem. **669**, 25–31 (2003)

74) T. Haase, K. Kohse-Höinghaus, B. Atakan, H. Schmidt, H. Lang
Gas phase study of systems for the CVD of silver
Chem. Vap. Deposition **9**, 144–148 (2003)

75) B. Atakan, A. Lamprecht, K. Kohse-Höinghaus
An experimental study of fuel-rich 1,3-pentadiene and acetylene/propene flames
Combust. Flame **133**, 431–440 (2003)

76) A. Brockhinke, R. Plessow, K. Kohse-Höinghaus, Ch. Herrmann
Structural changes in the Ras protein revealed by fluorescence spectroscopy
Phys. Chem. Chem. Phys. **5**(16), 3498–3506 (2003)

77) S. Blittersdorf, N. Bahlawane, K. Kohse-Höinghaus, B. Atakan, J. Müller
CVD of Al_2O_3 thin films using aluminum tri-isopropoxide
Chem. Vap. Deposition **9**(4), 194–198 (2003)

78) A. Bülter, U. Rahmann, K. Kohse-Höinghaus, A. Brockhinke
Study of energy transfer processes in CH as prerequisite for quantitative minor species concentration measurements
Appl. Phys. B **79**(1), 113–120 (2004)

79) N. Bahlawane, S. Blittersdorf, K. Kohse-Höinghaus, B. Atakan, J. Müller
Investigation of CVD processes to perform dense α-alumina coating on superalloys
J. Electrochem. Soc. **151**(3), C182–C186 (2004)

80) N. Bahlawane, E. Fischer Rivera, K. Kohse-Höinghaus, A. Brechling, U. Kleineberg
Characterization and tests of planar Co_3O_4 model catalysts prepared by chemical vapor deposition
Appl. Catal. B: Environmental **53**(4), 245–255 (2004)

81) K. Kohse-Höinghaus, R.S. Barlow, M. Aldén, J. Wolfrum
Combustion at the focus: laser diagnostics and control
Proc. Combust. Inst. **30**, 89–123 (2005), ***invited***

82) A. Brockhinke, U. Lenhard, A. Bülter, K. Kohse-Höinghaus
Energy transfer in the OH $A^2\Sigma^+$ state: The role of polarization and of multi-quantum energy transfer
Phys. Chem. Chem. Phys. **7**(5), 874–881 (2005), ***contribution to special issue***

83) T. Haase, K. Kohse-Höinghaus, N. Bahlawane, P. Djiele, H. Lang
CVD with Tri-^{n}butylphosphine Silver(I) Complexes: Mass Spectrometric Investigations and Depositions
Chem. Vap. Deposition **11**(4), 195–205 (2005)

84) K. Kohse-Höinghaus, A. Schocker, T. Kasper, M. Kamphus, A. Brockhinke
Combination of laser- and mass-spectroscopic techniques for the investigation of fuel-rich flames
Z. Phys. Chem. **219**, 583–599 (2005)

85) B. Atakan, M. Hofstätter, K. Kohse-Höinghaus

High-growth-rate chemical vapor deposition of silicon: an experimental and modeling approach
Z. Phys. Chem. **219**, 649–664 (2005)

86) C.A. Taatjes, N. Hansen, A. McIlroy, J.A. Miller, J.P. Senosiain, S.J. Klippenstein, F. Qi, L. Sheng, Y. Zhang, T.A. Cool, J. Wang, P.R. Westmoreland, M.E. Law, T. Kasper, K. Kohse-Höinghaus
Enols are common intermediates in hydrocarbon oxidation
Science **308**, 1887–1889 (2005)

87) H. Schmidt, A. Jakob, T. Haase, K. Kohse-Höinghaus, S.E. Schulz, T. Wächtler, T. Gessner, H. Lang
Bu_3P-Silber(I)-ß-Diketonate: Synthese, Gasphasenuntersuchungen und Verwendung als CVD-Precursoren
Z. Anorg. Allg. Chem. **631**, 2786–2791 (2005)

88) A. Schocker, K. Kohse-Höinghaus, A. Brockhinke
Quantitative determination of combustion intermediates with cavity ring-down spectroscopy: systematic study in propene flames near the soot-formation limit
Appl. Opt. **44**(31), 6660–6672 (2005), ***invited***

89) C.S. McEnally, L.D. Pfefferle, B. Atakan, K. Kohse-Höinghaus
Studies of aromatic hydrocarbon formation mechanisms in flames: Progress towards closing the fuel gap
Prog. Energy Combust. Sci. **32**(3), 247–294 (2006), ***invited***

90) C.A. Taatjes, N. Hansen, J.A. Miller, T.A. Cool, J. Wang, P.R. Westmoreland, M.E. Law, T. Kasper, K. Kohse-Höinghaus
Combustion chemistry of enols: Possible ethenol precursors in flames
J. Phys. Chem. A **110**(9), 3254–3260 (2006), ***contribution to special issue***

91) A. Brockhinke, M. Letzgus, S. Rinne, K. Kohse-Höinghaus
Energy transfer in the $d^3\Pi_g$ - $a^3\Pi_u$ (0-0) swan bands of C_2: Implications for quantitative measurements
J. Phys. Chem. A **110**(9), 3028–3035 (2006), ***contribution to special issue***

92) N. Hansen, S.J. Klippenstein, J.A. Miller, J. Wang, T.A. Cool, M.E. Law, P.R. Westmoreland, T. Kasper, K. Kohse-Höinghaus
Identification of C_5H_x isomers in fuel-rich flames by photoionization mass spectrometry and electronic structure calculations
J. Phys. Chem. A **110**(13), 4376–4388 (2006)

93) T.A. Cool, J. Wang, N. Hansen, P.R. Westmoreland, F.L. Dryer, Z. Zhao, A. Kazakov, T. Kasper, K. Kohse-Höinghaus
Photoionization mass spectrometry and modeling studies of the chemistry of fuel-rich dimethyl ether flames
Proc. Combust. Inst. **31**, 285–293 (2007)

94) K. Kohse-Höinghaus, P. Oßwald, U. Struckmeier, T. Kasper, N. Hansen, C.A. Taatjes, J. Wang, T.A. Cool, S. Gon, P.R. Westmoreland
The influence of ethanol addition on premixed fuel-rich propene-oxygen-argon flames
Proc. Combust. Inst. **31**, 1119–1127 (2007)

95) B. Yang, P. Oßwald, Y. Li, J. Wang, L. Wei, Z. Tian, F. Qi, K. Kohse-Höinghaus

Identification of combustion intermediates in isomeric fuel-rich premixed butanol-oxygen flames at low pressure
Combust. Flame **148**(4), 198–209 (2007)

96) N. Bahlawane, P.A. Premkumar, J. Feldmann, K. Kohse-Höinghaus
Preparation of doped spinel cobalt oxide thin films and evaluation of their thermal stability
Chem. Vap. Deposition **13**(2-3), 118–122 (2007)

97) N. Hansen, T. Kasper, S.J. Klippenstein, P.R. Westmoreland, M.E. Law, C.A. Taatjes, K. Kohse-Höinghaus, J. Wang, T.A. Cool
Initial steps of aromatic ring formation in a laminar premixed fuel-rich cyclopentene flame
J. Phys. Chem. A **111**(19), 4081–4092 (2007), ***contribution to special issue***

98) P. Oßwald, U. Struckmeier, T. Kasper, K. Kohse-Höinghaus, J. Wang, T.A. Cool, N. Hansen, P.R. Westmoreland
Isomer-specific fuel destruction pathways in rich flames of methyl acetate and ethyl formate and consequences for the combustion chemistry of esters
J. Phys. Chem. A **111**(19), 4093–4101 (2007), ***contribution to special issue***

99) P.A. Premkumar, N. Bahlawane, K. Kohse-Höinghaus
CVD of metals using alcohols and metal acetylacetonates. Part I: Optimisation of process parameters and electrical characterisation of synthesised films
Chem. Vap. Deposition **13**(5), 219–226 (2007)

100) P.A. Premkumar, N. Bahlawane, G. Reiss, K. Kohse-Höinghaus
CVD of metals using alcohols and metal acetylacetonates. Part II: Role of solvent and characterisation of metal films made by pulsed spray evaporation CVD
Chem. Vap. Deposition **13**(5), 227–231 (2007)

101) T.S. Kasper, P. Oßwald, M. Kamphus, K. Kohse-Höinghaus
Ethanol flame structure investigated by molecular beam mass spectrometry
Combust. Flame **150**(3), 220–231 (2007)

102) N. Bahlawane, P.A. Premkumar, K. Onwuka, K. Rott, G. Reiss, K. Kohse-Höinghaus
Catalytically enhanced H_2-free CVD of transition metals using commercially available precursors
Surf. Coat. Technol. **201**(22-23), 8914–8918 (2007)

103) S. Schulz, S. Fahrenholz, D. Schuchmann, A. Kuczkowski, W. Assenmacher, F. Reilmann, N. Bahlawane, K. Kohse-Höinghaus
Single Source Precursor-based HV-MOCVD deposition of binary group 13-antimonide thin films
Surf. Coat. Technol. **201**(22-23), 9071–9075 (2007)

104) N. Bahlawane, P.A. Premkumar, A. Brechling, G. Reiss, K. Kohse-Höinghaus
Alcohol-assisted CVD of silver using commercially available precursors
Chem. Vap. Deposition **13**(8), 401–407 (2007)

105) N. Bahlawane, P.A. Premkumar, K. Onwuka, K. Kohse-Höinghaus, G. Reiss
Self-catalyzed chemical vapor deposition method for the growth of device-quality metal thin films
Microelectron. Eng. **84**, 2481–2485 (2007)

106) M. Kamphus, M. Braun-Unkhoff, K. Kohse-Höinghaus
Formation of small PAHs in laminar premixed low-pressure propene and cyclopentene flames: Experiment and modeling
Combust. Flame **152**(1-2), 28–59 (2008)

107) C.A. Taatjes, N. Hansen, D.L. Osborn, K. Kohse-Höinghaus, T.A. Cool, P.R. Westmoreland
"Imaging" combustion chemistry *via* multiplexed synchrotron-photoionization mass spectrometry
Phys. Chem. Chem. Phys. **10**(1), 20–34 (2008), ***invited***

108) N. Hansen, S.J. Klippenstein, P.R. Westmoreland, T. Kasper, K. Kohse-Höinghaus, J. Wang, T.A. Cool
A combined *ab initio* and photoionization mass spectrometric study of polyynes in fuel-rich flames
Phys. Chem. Chem. Phys. **10**(3), 366–374 (2008)

109) J. Wang, U. Struckmeier, B. Yang, T.A. Cool, P. Oßwald, K. Kohse-Höinghaus, T. Kasper, N. Hansen, P.R. Westmoreland
Isomer-specific influences on the composition of reaction intermediates in dimethyl ether/propene and ethanol/propene flames
J. Phys. Chem. A **112**, 9255–9265 (2008), ***contribution to special issue***

110) N. Bahlawane, F. Reilmann, L.-C. Salameh, K. Kohse-Höinghaus
Mass-spectrometric monitoring of the thermally induced decomposition of trimethylgallium, tris(*tert*-butyl)gallium and triethylantimony at low-pressure conditions
J. Am. Soc. Mass Spectr. **19**(7), 947–954 (2008)

111) N. Bahlawane, F. Reilmann, S. Schulz, D. Schuchmann, K. Kohse-Höinghaus
Low-temperature thermolysis behavior of tetramethyl- and tetraethyldistibines
J. Am. Soc. Mass Spectr. **19**(9), 1336–1342 (2008)

112) N. Hansen, J.A. Miller, T. Kasper, K. Kohse-Höinghaus, P.R. Westmoreland, J. Wang, T.A. Cool
Benzene formation in premixed fuel-rich 1,3-butadiene flames
Proc. Combust. Inst. **32**, 623–630 (2009)

113) T. Kasper, U. Struckmeier, P. Oßwald, K. Kohse-Höinghaus
Structure of a stoichiometric propanal flame at low pressure
Proc. Combust. Inst. **32**, 1285–1292 (2009)

114) A. Lucassen, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, T. Kasper, N. Hansen, T.A. Cool, P.R. Westmoreland
Species identification in a laminar premixed low-pressure flame of morpholine as a model substance for oxygenated nitrogen-containing fuels
Proc. Combust. Inst. **32**, 1269–1276 (2009)

115) C.K. Westbrook, W.J. Pitz, P.R. Westmoreland, F.L. Dryer, M. Chaos, P. Oßwald, K. Kohse-Höinghaus, T.A. Cool, J. Wang, B. Yang, N. Hansen, T. Kasper
A detailed chemical kinetic reaction mechanism for oxidation of four small alkyl esters in laminar premixed flames
Proc. Combust. Inst. **32**, 221–228 (2009)

116) N. Hansen, T.A. Cool, P.R. Westmoreland, K. Kohse-Höinghaus
Recent contributions of flame-sampling molecular-beam mass spectrometry to a fundamental understanding of combustion chemistry
Prog. Energy Combust. Sci. **35**, 168–191 (2009), ***invited***

117) J. Wang, M. Chaos, B. Yang, T.A. Cool, F.L. Dryer, T. Kasper, N. Hansen, P. Oßwald, K. Kohse-Höinghaus, P.R. Westmoreland
Composition of reaction intermediates for stoichiometric and fuel-rich dimethyl ether flames:

flame-sampling mass spectrometry and modeling studies
Phys. Chem. Chem. Phys. 2009 **11**(9), 1328–1339 (2009), ***selected as "hot article"***

118) T. Kasper, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, C.A. Taatjes, J. Wang, T.A. Cool, M.E. Law, A. Morel, P.R. Westmoreland
Combustion chemistry of the propanol isomers – investigated by electron ionization and VUV-photoionization molecular-beam mass spectrometry
Combust. Flame **156**, 1181–1201 (2009)

119) K. Kohse-Höinghaus, A. Brockhinke
Experimental and numerical methods for studying the flame structure
Combust., Expl., Shock Waves **45**(4), 349–364 (2009), ***contribution to special issue***

120) U. Struckmeier, P. Oßwald, T. Kasper, L. Böhling, M. Heusing, M. Köhler, A. Brockhinke, K. Kohse-Höinghaus
Sampling probe influences on temperature and species concentrations in molecular beam mass spectroscopic investigations of flat premixed low-pressure flames
Z. Phys. Chem. **223**, 503–537 (2009) ***invited***

121) N. Bahlawane, P.A. Premkumar, F. Reilmann, K. Kohse-Höinghaus, J. Wang, F. Qi, B. Gehl, M. Bäumer
CVD of conducting ultrathin copper films
J. Electrochem. Soc. **156**(10), D452–D455 (2009)

122) N. Hansen, J.A. Miller, P.R. Westmoreland, T. Kasper, K. Kohse-Höinghaus, J. Wang, T.A. Cool
Isomer-specific combustion chemistry in allene and propyne flames
Combust. Flame **156**(11), 2153–2164 (2009)

123) N. Bahlawane, P.H. Tchoua Ngamou, V. Vannier, T. Kottke, J. Heberle, K. Kohse-Höinghaus
Tailoring the properties and the reactivity of the spinel cobalt oxide
Phys. Chem. Chem. Phys. **11**, 9224–9232 (2009)

124) Z. Tian, N. Bahlawane, F. Qi, K. Kohse-Höinghaus
Catalytic oxidation of hydrocarbons over Co_3O_4 catalyst prepared by CVD
Catal. Commun. **11**, 118–122 (2009)

125) P.H. Tchoua Ngamou, K. Kohse-Höinghaus, N. Bahlawane
Unusual two-dimensional electrical charge transport at the surface of polycrystalline perovskite ultrathin films
J. Appl. Phys. **106**(7), 073714 (2009)

126) N. Bahlawane, P.H. Tchoua Ngamou, K. Kohse-Höinghaus
Structure, electrical properties, and surface reactivity of CVD-made functional complex oxides
J. Electrochem. Soc. **157**(1), D16–D20 (2010)

127) N. Bahlawane, P. A. Premkumar, Z. Tian, X. Hong, F. Qi, K. Kohse-Höinghaus
Nickel and nickel-based nanoalloy thin films from alcohol-assisted chemical vapor deposition
Chem. Mater **22**(1), 92–100 (2010)

128) M. Köhler, A. Brockhinke, M. Braun-Unkhoff, K. Kohse-Höinghaus
Quantitative laser diagnostic and modeling study of C_2 and CH chemistry in combustion
J. Phys. Chem. A **114**(14), 4719–4734 (2010), ***invited***

129) K. Kohse-Höinghaus, P. Oßwald, T.A. Cool, T. Kasper, N. Hansen, F. Qi, C.K. Westbrook, P.R. Westmoreland
Biofuel combustion chemistry: from ethanol to biodiesel
Angew. Chem. Int. Ed. **49**(21), 3572–3597 (2010), ***invited***

K. Kohse-Höinghaus, P. Oßwald, T.A. Cool, T. Kasper, N. Hansen, F. Qi, C.K. Westbrook, P.R. Westmoreland
Verbrennungschemie der Biokraftstoffe: von Ethanol bis Biodiesel
Angew. Chem. **122**(21), 3652-3679 (2010), ***invited***

130) U. Struckmeier, A. Lucassen, N. Hansen, T. Wada, N. Peters, K. Kohse-Höinghaus
Demonstration of a burner for the investigation of partially premixed low-temperature flames
Combust. Flame **157**(10), 1966–1975 (2010)

131) P. Nau, A. Seipel, A. Lucassen, A. Brockhinke, K. Kohse-Höinghaus
Intermediate species detection in a morpholine flame: Contributions to fuel-bound nitrogen conversion from a model biofuel
Exp. Fluids **49**(4), 761–773 (2010), ***invited***

132) A. Jakob, T. Rüffer, H. Schmidt, P. Djiele, K. Körbitz, P. Ecorchard, T. Haase, K. Kohse-Höinghaus, S. Frühauf, T. Wächtler, S. Schulz, T. Gessner, H. Lang
Disilver(I) coordination complexes: Synthesis, reaction chemistry, and their potential use in CVD and spin-coating processes for silver deposition
Eur. J. Inorg. Chem. **2010**(19), 2975–2986 (2010)

133) Z. Wang, A. Lucassen, L. Zhang, J. Yang, K. Kohse-Höinghaus, F. Qi
Experimental and theoretical studies on decomposition of pyrrolidine
Proc. Combust. Inst. **33**(1), 415–423 (2011)

134) N. Hansen, T. Kasper, B. Yang, T.A. Cool, W. Li, P.R. Westmoreland, P. Oßwald, K. Kohse-Höinghaus
Fuel-structure dependence of benzene formation processes in premixed flames fueled by C_6H_{12} isomers
Proc. Combust. Inst. **33**(1), 585–592 (2011)

135) P. Oßwald, H. Güldenberg, K. Kohse-Höinghaus, B. Yang, T. Yuan, F. Qi
Combustion of butanol isomers – a detailed molecular beam mass spectrometry investigation of their flame chemistry
Combust. Flame **158**(1), 2–15 (2011)

136) A. Frassoldati, T. Faravelli, E. Ranzi, K. Kohse-Höinghaus, P.R. Westmoreland
Kinetic modeling study of ethanol and dimethyl ether addition to premixed low-pressure propene-oxygen-argon flames
Combust. Flame **158**(7), 1264–1276 (2011)

137) A. Jakob, H. Schmidt, B. Walfort, T. Rüffer, T. Haase, K. Kohse-Höinghaus, H. Lang
Phosphane- and phosphite-silver(I) phenolates: Synthesis, characterization and their use as CVD precursors
Inorg. Chim. Acta **365**(1), 1–9 (2011)

138) B. Yang, C.K. Westbrook, T.A. Cool, N. Hansen, K. Kohse-Höinghaus
Fuel-specific influences on the composition of reaction intermediates in premixed flames of three $C_5H_{10}O_2$ ester isomers

Phys. Chem. Chem. Phys. **13**(15), 6901–6913 (2011)

139) A. Lucassen, N. Labbe, P.R. Westmoreland, K. Kohse-Höinghaus
Combustion chemistry and fuel-nitrogen conversion in a laminar premixed flame of morpholine as a model biofuel
Combust. Flame **158**(9), 1647–1666 (2011)

140) W. Li, M.E. Law, P.R. Westmoreland, T. Kasper, N. Hansen, K. Kohse-Höinghaus
Multiple benzene-formation paths in a fuel-rich cyclohexane flame
Combust. Flame **158**(11), 2077–2089 (2011)

141) P.H. Tchoua Ngamou, K. Kohse-Höinghaus, N. Bahlawane
CO and ethanol oxidation over $LaCoO_3$ planar model catalysts: Effect of the thickness
Catal. Com. **12**(14), 1344–1350 (2011)

142) N. Bahlawane, K. Kohse-Höinghaus, T. Weimann, P. Hinze, S. Röhe, M. Bäumer
Rational design of functional oxide thin films with embedded magnetic or plasmonic metallic nanoparticles
Angew. Chem. Int. Ed. **50**(42), 9957–9960 (2011), ***selected as "hot paper"***

N. Bahlawane, K. Kohse-Höinghaus, T. Weimann, P. Hinze, S. Röhe, M. Bäumer
Rationales Design dünner funktioneller Oxidfilme mit eingebetteten magnetischen oder plasmonischen Metallnanopartikeln
Angew. Chem. **123**(42), 10131–10135 (2011), ***selected as "hot paper"***

143) P. Oßwald, K. Kohse-Höinghaus, U. Struckmeier, T. Zeuch, L. Seidel, L. Leon, F. Mauss
Combustion chemistry of the butane isomers in premixed low-pressure flames
Z. Phys. Chem. **225**(9-10), 1029–1054 (2011), ***invited***

144) T. Kasper, A. Lucassen, A.W. Jasper, W. Li, P.R. Westmoreland, K. Kohse-Höinghaus, B. Yang, J. Wang, T.A. Cool, N. Hansen
Identification of tetrahydrofuran reaction pathways in premixed flames
Z. Phys. Chem. **225**(11-12), 1237–1270 (2011), ***invited***

145) B. Yang, C.K. Westbrook, T.A. Cool, N. Hansen, K. Kohse-Höinghaus
The effect of carbon-carbon double bonds on the combustion chemistry of small fatty acid esters
Z. Phys. Chem. **225**(11-12), 1293–1314 (2011), ***invited***

146) V. Vannier, M. Schenk, K. Kohse-Höinghaus, N. Bahlawane
Preparation and characterisation of chromium-doped cobalt oxide spinel thin films
J. Mater. Sci. **47**(3), 1348–1353 (2012)

147) Z.-Y. Tian, P.H. Tchoua Ngamou, V. Vannier, K. Kohse-Höinghaus, N. Bahlawane
Catalytic oxidation of VOCs over mixed Co-Mn oxides
Appl. Catal. B **117-118**, 125–134 (2012)

148) N. Bahlawane, K. Kohse-Höinghaus, P.A. Premkumar, D. Lenoble
Advances in the deposition chemistry of metal-containing thin films using gas phase processes
Chem. Science **3**(4), 929–941 (2012), ***invited***

149) S.M. Sarathy, S. Vranckx, K. Yasunaga, M. Mehl, P. Oßwald, W.K. Metcalfe, C.K. Westbrook, W.J. Pitz, K. Kohse-Höinghaus, R.X. Fernandes, H.J. Curran
A comprehensive chemical kinetic combustion model for the four butanol isomers
Combust. Flame **159**(6), 2028–2055 (2012)

150) A. Lucassen, K. Zhang, J. Warkentin, K. Moshammer, P. Glarborg, P. Marshall, K. Kohse-Höinghaus
Fuel-nitrogen conversion in the combustion of small amines using dimethylamine and ethylamine as biomass-related model fuels
Combust. Flame **159**(7), 2254–2279 (2012)

151) A. Frassoldati, R. Grana, T. Faravelli, E. Ranzi, P. Oßwald, K. Kohse-Höinghaus
Detailed kinetic modeling of the combustion of the four butanol isomers in premixed low-pressure flames
Combust. Flame **159**(7), 2295–2311 (2012)

152) N. Hansen, J.A. Miller, S.J. Klippenstein, P.R. Westmoreland, K. Kohse-Höinghaus
Exploring formation pathways of aromatic compounds in laboratory-based model flames of aliphatic fuels
Combust. Expl. Shock Waves **48**(5), 508–515 (2012)

153) P. Mountapmbeme Kouotou, Z.-Y. Tian, U. Mundloch, N. Bahlawane, K. Kohse-Höinghaus
Controlled synthesis of Co_3O_4 spinel with $Co(acac)_3$ as precursor
RSC Adv. **2**(29), 10809–10812 (2012)

154) A. Lucassen, Z. Wang, L. Zhang, F. Zhang, W. Yuan, Y. Wang, F. Qi, K. Kohse-Höinghaus
An experimental and theoretical study of pyrrolidine pyrolysis at low pressure
Proc. Combust. Inst. **34**(1), 641–648 (2013)

155) B. Yang, C.K. Westbrook, T.A. Cool, N. Hansen, K. Kohse-Höinghaus
Photoionization mass spectrometry and modeling study of premixed flames of three unsaturated $C_5H_8O_2$ esters
Proc. Combust. Inst. **34**(1), 443–451 (2013)

156) J. Weng, L. Jia, Y. Wang, S. Sun, X. Tang, Z. Zhou, K. Kohse-Höinghaus, F. Qi
Pyrolysis study of poplar biomass by tunable synchrotron vacuum ultraviolet photoionization mass spectrometry
Proc. Combust. Inst. **34**(2), 2347–2354 (2013)

157) K. Zhang, K. Moshammer, P. Oßwald, K. Kohse-Höinghaus
Experimental investigation of partially premixed, highly-diluted dimethyl ether flames at low temperatures
Proc. Combust. Inst. **34**(1), 763–770 (2013)

158) F. Herrmann, P. Oßwald, K. Kohse-Höinghaus
Mass spectrometric investigation of the low-temperature dimethyl ether oxidation in an atmospheric pressure laminar flow reactor
Proc. Combust. Inst. **34**(1), 771–778 (2013)

159) Z.-Y. Tian, N. Bahlawane, V. Vannier, K. Kohse-Höinghaus
Structure sensitivity of propene oxidation over Co-Mn spinels
Proc. Combust. Inst. **34**(2), 2261–2268 (2013)

160) M. Schenk, L. Leon, K. Moshammer, P. Oßwald, T. Zeuch, L. Seidel, F. Mauss, K. Kohse-Höinghaus
Detailed mass spectrometric and modeling study of isomeric butene flames
Combust. Flame **160**(3), 487–503 (2013)

161) Z.-Y. Tian, T. Chafik, M. Assebban, S. Harti, N. Bahlawane, P. Mountapmbeme Kouotou, K. Kohse-Höinghaus
Towards biofuel combustion with an easily extruded clay as a natural catalyst
Appl. Energy **107**, 149–156 (2013)

Z.-Y. Tian, T. Chafik, M. Assebban, S. Harti, H. Vidal, J.M. Gatica, G.A. Cifredo, N. Bahlawane, P. Mountapmbeme Kouotou, K. Kohse-Höinghaus
Corrigendum to: Towards biofuel combustion with an easily extruded clay as a natural catalyst
[Appl. Energy 107 (2013) 149–156]
Appl. Energy **108**, 528–529, 2013

162) S. Li, D.F. Davidson, R.K. Hanson, N.J. Labbe, P.R. Westmoreland, P. Oßwald, K. Kohse-Höinghaus
Shock tube measurements and model development for morpholine pyrolysis and oxidation at high pressures
Combust. Flame **160**(9), 1559–1571 (2013)

163) Z.-Y. Tian, H.J. Herrenbrück, P. Mountapmbeme Kouotou, H. Vieker, A. Beyer, A. Gölzhäuser, K. Kohse-Höinghaus
Facile synthesis of catalytically active copper oxide from pulsed-spray evaporation CVD
Surf. Coat. Technol. **230**, 33–38 (2013)

164) P. Mountapmbeme Kouotou, Z.-Y. Tian, H. Vieker, K. Kohse-Höinghaus
Pulsed-spray evaporation CVD synthesis of hematite thin films for catalytic conversion of CO
Surf. Coat. Technol. **230**, 59–65 (2013); Corrigendum Surf. Coat. Technol. **482**, 130698 (2024)

165) P. Mountapmbeme Kouotou, Z.-Y. Tian, H. Vieker, A. Beyer, A. Gölzhäuser, K. Kohse-Höinghaus
Selective synthesis of α-Fe_2O_3 thin films and effect of the deposition temperature and lattice oxygen on the catalytic combustion of propene
J. Mater. Chem. A **1**(35), 10495–10504 (2013) retracted (2025)

166) M. Schenk, S. Lieb, H. Vieker, A. Beyer, A. Gölzhäuser, H. Wang, K. Kohse-Höinghaus
Imaging nano carbon materials – tiniest soot particles in flames are not structurally homogeneous
ChemPhysChem **14**(14), 3248–3254 (2013)

167) D. Liu, J. Santner, C. Togbé, D. Felsmann, J. Koppmann, A. Lackner, X. Yang, X. Shen, Y. Ju, K. Kohse-Höinghaus
Flame structure and kinetic studies of carbon dioxide-diluted dimethyl ether flames at reduced and elevated pressures
Combust. Flame **160**(12), 2645–2668 (2013)

168) K. Moshammer, S. Vranckx, H.K. Chakravarty, P. Parab, R.X. Fernandes, K. Kohse-Höinghaus
An experimental and kinetic modeling study of 2-methyltetrahydrofuran flames
Combust. Flame **160**(12), 2729–2743 (2013)

169) F. Herrmann, B. Jochim, P. Oßwald, L. Cai, H. Pitsch, K. Kohse-Höinghaus
Experimental and numerical low-temperature oxidation study of ethanol and dimethyl ether
Combust. Flame **161**(2), 384–397 (2014)

170) D. Liu, C. Togbé, L.-S. Tran, D. Felsmann, P. Oßwald, P. Nau, J. Koppmann, A. Lackner, P.-A. Glaude, B. Sirjean, R. Fournet, F. Battin-Leclerc, K. Kohse-Höinghaus
Combustion chemistry and flame structure of furan group biofuels using molecular-beam mass

spectrometry and gas chromatography – Part I: Furan
Combust. Flame **161**(3), 748–765 (2014)

171) L.-S. Tran, C. Togbé, D. Liu, D. Felsmann, P. Oßwald, P.-A. Glaude, R. Fournet, B. Sirjean, F. Battin-Leclerc, K. Kohse-Höinghaus
Combustion chemistry and flame structure of furan group biofuels using molecular-beam mass spectrometry and gas chromatography – Part II: 2-Methylfuran
Combust. Flame **161**(3), 766–779 (2014)

172) C. Togbé, L.-S. Tran, D. Liu, D. Felsmann, P. Oßwald, P.-A. Glaude, B. Sirjean, R. Fournet, F. Battin-Leclerc, K. Kohse-Höinghaus
Combustion chemistry and flame structure of furan group biofuels using molecular-beam mass spectrometry and gas chromatography – Part III: 2,5-Dimethylfuran
Combust. Flame **161**(3), 780–797 (2014)

173) N. Hansen, S.A. Skeen, H.A. Michelsen, K.R. Wilson, K. Kohse-Höinghaus
Flame experiments at the Advanced Light Source: New insights into soot formation processes
J. Vis. Exp. **87**, 2014, e51369, DOI: 10.3791/51369

174) F.N. Egolfopoulos, N. Hansen, Y. Ju, K. Kohse-Höinghaus, C.K. Law, F. Qi
Advances and challenges in laminar flame experiments and implications for combustion chemistry
Prog. Energy Combust. Sci. **43**, 36–67 (2014), ***invited***

175) S.M. Sarathy, P. Oßwald, N. Hansen, K. Kohse-Höinghaus
Alcohol combustion chemistry
Prog. Energy Combust. Sci. **44**, 40-102 (2014), ***invited***

176) P. Mountapmbeme Kouotou, H. Vieker, Z.Y. Tian, P.H. Tchoua Ngamou, A. El Kasmi, A. Beyer, A. Gölzhäuser, K. Kohse-Höinghaus
Structure-activity relation of spinel-type Co-Fe oxides for low-temperature CO oxidation
Catal. Sci. Technol. **4**(9), 3359–3367 (2014)

177) J. Krüger, G.A. Garcia, D. Felsmann, K. Moshammer, A. Lackner, A. Brockhinke, L. Nahon, K. Kohse-Höinghaus
Photoelectron-photoion coincidence spectroscopy for multiplexed detection of intermediate species in a flame
Phys. Chem. Chem. Phys. **16**(41), 22791–22804 (2014)

178) J. Krüger, J. Koppmann, P. Nau, A. Brockhinke, M. Schenk, N. Hansen, U. Werner, K. Kohse-Höinghaus
From precursors to pollutants: Some advances in combustion chemistry diagnostics
Eurasian Chem.-Technol. J. **16**, 91–105 (2014), ***invited***

179) T. Weiss, M. Nowak, U. Mundloch, V. Zielasek, K. Kohse-Höinghaus, M. Bäumer
Design of a compact UHV-compatible setup for the analysis of chemical vapor deposition processes
Rev. Sci. Instrum. **85**(10), 104104 (2014)

180) X. Yang, D. Felsmann, N. Kurimoto, J. Krüger, T. Wada, T. Tan, E.A. Carter, K. Kohse-Höinghaus, Y. Ju
Kinetic studies of methyl acetate pyrolysis and oxidation in a flow reactor and a low-pressure flat flame using molecular-beam mass spectrometry
Proc. Combust. Inst. **35**(1), 491–498 (2015)

181) D. Felsmann, K. Moshammer, J. Krüger, A. Lackner, A. Brockhinke, T. Kasper, T. Bierkandt, E. Akyildiz, N. Hansen, A. Lucassen, P. Oßwald, M. Köhler, G.A. Garcia, L. Nahon, P. Hemberger, A. Bodi, T. Gerber, K. Kohse-Höinghaus
Electron ionization, photoionization and photoelectron/photoion coincidence spectroscopy in mass-spectrometric investigations of a low-pressure ethylene/oxygen flame
Proc. Combust. Inst. **35**(1), 779–786 (2015)

182) V. Gururajan, F.N. Egolfopoulos, K. Kohse-Höinghaus
Direct numerical simulations of probe effects in low-pressure flame sampling
Proc. Combust. Inst. **35**(1), 821–829 (2015)

183) L.-S. Tran, B. Sirjean, P.-A. Glaude, K. Kohse-Höinghaus, F. Battin-Leclerc
Influence of substituted furans on the formation of Polycyclic Aromatic Hydrocarbons in flames
Proc. Combust. Inst. **35**(2), 1735–1743 (2015)

184) M. Schenk, N. Hansen, H. Vieker, A. Beyer, A. Gölzhäuser, K. Kohse-Höinghaus
PAH formation and soot morphology in flames of C_4 fuels
Proc. Combust. Inst. **35**(2), 1761–1769 (2015)

185) M. Schenk, S. Lieb, H. Vieker, A. Beyer, A. Gölzhäuser, H. Wang, K. Kohse-Höinghaus
Morphology of nascent soot in ethylene flames
Proc. Combust. Inst. **35**(2), 1879–1886 (2015)

186) Z.-Y. Tian, P. Mountapmbeme Kouotou, A. El Kasmi, P.H. Tchoua Ngamou, K. Kohse-Höinghaus, H. Vieker, A. Beyer, A. Gölzhäuser
Low-temperature deep oxidation of olefins and DME over cobalt ferrite
Proc. Combust. Inst. **35**(2), 2207–2214 (2015)

187) Z. Wang, X. Zhang, L. Xing, L. Zhang, F. Herrmann, K. Moshammer, F. Qi, K. Kohse-Höinghaus
Experimental and kinetic modeling study of the low- and intermediate-temperature oxidation of dimethyl ether
Combust. Flame **162**(4), 1113–1125 (2015)

188) P. Nau, J. Koppmann, A. Lackner, K. Kohse-Höinghaus, A. Brockhinke
Quantum cascade laser-based MIR spectrometer for the determination of CO and CO_2 concentrations and temperature in flames
Appl. Phys. B **118**(3), 361–368 (2015)

189) D. Mayer, K. Moshammer, L. Cai, H. Pitsch, K. Kohse-Höinghaus
A numerical study of highly-diluted, burner-stabilised dimethyl ether flames
Combust. Theory Model. **19**(2), 238–259 (2015)

190) K. Moshammer, A. Lucassen, C. Togbé, K. Kohse-Höinghaus, N. Hansen
Formation of oxygenated and hydrocarbon intermediates in premixed combustion of 2-methylfuran
Z. Phys. Chem. **229**(4), 507–528 (2015), ***contribution to special issue***

191) L. Seidel, K. Moshammer, X. Wang, T. Zeuch, K. Kohse-Höinghaus, F. Mauss
Comprehensive kinetic modeling and experimental study of a fuel-rich, premixed *n*-heptane flame
Combust. Flame **162**(5), 2045–2058 (2015)

192) K. Moshammer, A.W. Jasper, D.M. Popolan-Vaida, A. Lucassen, P. Diévart, H. Selim, A.J. Eskola, C.A. Taatjes, S.R. Leone, S.M. Sarathy, Y. Ju, P. Dagaut, K. Kohse-Höinghaus, N.

Hansen
Detection and identification of the keto-hydroperoxide ($HOOCH_2OCHO$) and other intermediates during low-temperature oxidation of dimethyl ether
J. Phys. Chem. A **119**(28), 7361–7374 (2015), ***contribution to special issue***

193) K. Kohse-Höinghaus
Kinetics of combustion
Reference Module in Chemistry, Molecular Sciences and Chemical Engineering, 2015; DOI: 10.1016/B978-0-12-409547-2.11005-4, ***invited***

194) P.H. Tchoua Ngamou, A. El Kasmi, Th. Weiss, H. Vieker, A. Beyer, V. Zielasek, K. Kohse-Höinghaus, M. Bäumer
Investigation of the growth behaviour of cobalt thin films from chemical vapour deposition, using directly coupled X-ray photoelectron spectroscopy
Z. Phys. Chem. **229**(10-12), 1887–1905 (2015), ***contribution to special issue***

195) Z. Wang, L. Zhang, K. Moshammer, D.M. Popolan-Vaida, V.S.B. Shankar, A. Lucassen, C. Hemken, C.A. Taatjes, S.R. Leone, K. Kohse-Höinghaus, N. Hansen, P. Dagaut, S.M. Sarathy
Additional chain-branching pathways in the low-temperature oxidation of branched alkanes
Combust. Flame **164**, 386–396 (2016)

196) D. Felsmann, A. Lucassen, J. Krüger, C. Hemken, L.-S. Tran, J. Pieper, G.A. Garcia, A. Brockhinke, L. Nahon, K. Kohse-Höinghaus
Progress in fixed-photon-energy time-efficient double imaging photoelectron/photoion coincidence measurements in quantitative flame analysis
Z. Phys. Chem. **230**, 1067–1097 (2016)

197) K. Kohse-Höinghaus
Combustion chemistry diagnostics for cleaner processes
Chem. Eur. J. **22**(38), 13390–13401 **(**2016), ***invited***

198) L. Ruwe, K. Moshammer, N. Hansen, K. Kohse-Höinghaus
Consumption and hydrocarbon growth processes in a 2-methyl-2-butene flame
Combust. Flame **175**, 34–46 (2017), ***contribution to special Iissue***

199) L.-S. Tran, J. Pieper, M. Zeng, Y. Li, X. Zhang, W. Li, I. Graf, F. Qi, K. Kohse-Höinghaus
Influence of the biofuel isomers diethyl ether and *n*-butanol on flame structure and pollutant formation in premixed *n*-butane flames
Combust. Flame **175**, 47–59 (2017), ***contribution to special issue***

200) L.-S. Tran, J. Pieper, H.-H. Carstensen, H. Zhao, I. Graf, Y. Ju, F. Qi, K. Kohse-Höinghaus
Experimental and kinetic modeling study of diethyl ether flames
Proc. Combust. Inst. **36**, 1165–1173 (2017)

201) D. Felsmann, H. Zhao, Q. Wang, I. Graf, T. Tan, X. Yang, E.A. Carter, Y. Ju, K. Kohse-Höinghaus
Contributions to improving small ester combustion chemistry: Theory, model and experiments
Proc. Combust. Inst. **36**, 543–551 (2017)

202) C. Hemken, U. Burke, I. Graf, L. Ruwe, S. Park, S.M. Sarathy, K.A. Heufer, K. Kohse-Höinghaus
A laminar flame investigation of 2-butanone, and the combustion-related intermediates formed through its oxidation

Proc. Combust. Inst. **36**, 1175–1183 (2017)

203) N. Hansen, M. Schenk, K. Moshammer, K. Kohse-Höinghaus
Investigating repetitive reaction pathways for the formation of polycyclic aromatic hydrocarbons in combustion processes
Combust. Flame **180**, 250–261 (2017)

204) W. Leitner, J. Klankermayer, S. Pischinger, H. Pitsch, K. Kohse-Höinghaus
Advanced biofuels and beyond: Chemistry solutions for propulsion and production
Angew. Chem. Int. Ed. **56**, 5412–5452 (2017), ***invited***

W. Leitner, J. Klankermayer, S. Pischinger, H. Pitsch, K. Kohse-Höinghaus
Synthese, Motor, Emissionen: Chemische Aspekte des Kraftstoffdesigns
Angew. Chem. **129**, 5500–5544 (2017), ***invited***

205) L.-S. Tran, Z. Wang, H.-H. Carstensen, C. Hemken, F. Battin-Leclerc, K. Kohse-Höinghaus
Comparative experimental and modeling study of the low- to moderate-temperature oxidation chemistry of 2,5-dimethylfuran, 2-methylfuran, and furan
Combust. Flame **181**, 251–269 (2017)

206) M. Zeng, J. Wullenkord, I. Graf, K. Kohse-Höinghaus
Influence of dimethyl ether and diethyl ether addition on the flame structure and pollutant formation in premixed *iso*-octane flames
Combust. Flame **184**, 41–54 (2017)

207) C. Hemken, U. Burke, K.-Y. Lam, D.F. Davidson, R.K. Hanson, K.A. Heufer, K. Kohse-Höinghaus
Toward a better understanding of 2-butanone oxidation: Detailed species measurements and kinetic modeling
Combust. Flame **184**, 195–207 (2017)

208) C. Betrancourt, F. Liu, P. Desgroux, X. Mercier, A. Faccinetto, M. Salamanca, L. Ruwe, K. Kohse-Höinghaus, D. Emmrich, A. Beyer, A. Gölzhäuser, T. Tritscher
Investigation of the size of the incandescent incipient soot particles in premixed sooting and nucleation flames of *n*-butane using LII, HIM, and 1nm-SMPS
Aerosol Sci. Technol. **51**(8), 916–935 (2017)

209) H. Hansen, J. Wullenkord, D.A. Obenchain, I. Graf, K. Kohse-Höinghaus, J.-U. Grabow
Microwave spectroscopy detection of flame-samples combustion intermediates
RSC Adv. **7**(60), 37867–37872 (2017)

210) Z. Wang, D.M. Popolan-Vaida, B. Chen, K. Moshammer, S.Y. Mohamed, H. Wang, S. Sioud, M.A. Raji, K. Kohse-Höinghaus, N. Hansen, P. Dagaut, S.R. Leone, S.M. Sarathy
Unraveling the structure and chemical mechanisms of highly oxygenated intermediates in oxidation of organic compounds
Proc. Natl. Acad. Sci. **114**(50), 13102–13107 (2017)

211) Z. Wang, B. Chen, K. Moshammer, D.M. Popolan-Vaida, S. Sioud, V.S. Bhavani Shankar, D. Vuilleumier, T. Tao, L. Ruwe, E. Bräuer, N. Hansen, P. Dagaut, K. Kohse-Höinghaus, M.A. Raji, S.M. Sarathy
n-Heptane cool flame chemistry: unraveling intermediate species measured in a stirred reactor and motored engine
Combust. Flame **187**, 199–216 (2018)

212) J. Wullenkord, L.-S. Tran, J. Böttchers, I. Graf, K. Kohse-Höinghaus
A laminar flame study on di-*n*-butyl ether as a potential biofuel candidate
Combust. Flame **190**, 36–49 (2018)

213) K. Kohse-Höinghaus
Clean combustion: Chemistry and diagnostics for a systems approach in transportation and energy conversion
Prog. Energy Combust. Sci. **65**, 1–5 (2018), ***invited***

214) J. Pieper, S. Schmitt, C. Hemken, E. Davies, J. Wullenkord, A. Brockhinke, J. Krüger, G.A. Garcia, L. Nahon, A. Lucassen, W. Eisfeld, K. Kohse-Höinghaus
Isomer identification in flames with double-imaging photoelectron/photoion coincidence spectroscopy (i^2PEPICO) using measured and calculated reference photoelectron spectra
Z. Phys. Chem. **232**(2), 153–187 (2018)

215) H. Jin, J. Pieper, C. Hemken, E. Bräuer, L. Ruwe, K. Kohse-Höinghaus
Chemical interaction of dual-fuel mixtures in low-temperature oxidation, comparing *n*-pentane/dimethyl ether and *n*-pentane/ethanol
Combust. Flame **193,** 36–53 (2018)

216) K. Kohse-Höinghaus, J. Troe, J.-U. Grabow, M. Olzmann, G. Friedrichs, K.-D. Hungenberg
Kinetics in the real world: linking molecules, processes, and systems
Phys. Chem. Chem. Phys. **20**, 10561–10568 (2018), ***contribution to special issue***

217) L. Ruwe, K. Moshammer, N. Hansen, K. Kohse-Höinghaus
Influences of the molecular fuel structure on combustion reactions towards soot precursors in selected alkane and alkene flames
Phys. Chem. Chem. Phys. **20**, 10780–10795 (2018), ***contribution to special issue***

218) L.-S. Tran, O. Herbinet, Y. Li, J. Wullenkord, M. Zeng, E. Bräuer, F. Qi, K. Kohse-Höinghaus, F. Battin-Leclerc
Low-temperature gas-phase oxidation of diethyl ether: Fuel reactivity and fuel-specific products
Proc. Combust. Inst. **37**(1), 511–519 (2019)

219) J. Pieper, C. Hemken, R. Büttgen, I. Graf, N. Hansen, K.A. Heufer, K. Kohse-Höinghaus
A high-temperature study of 2-pentanone oxidation: experiment and kinetic modeling
Proc. Combust. Inst. **37**(2), 1683–1690 (2019)

220) M. Salamanca, J. Wullenkord, I. Graf, S. Schmitt, L. Ruwe, K. Kohse-Höinghaus
An experimental laminar flame investigation of dual-fuel mixtures of C_4 methyl esters with C_2–C_4 hydrocarbon base fuels
Proc. Combust. Inst. **37**(2), 1725–1732 (2019)

221) K. Kohse-Höinghaus
A new era for combustion research
Pure Appl. Chem. **91**(2), 271–288 (2019), ***invited***

222) L. Ruwe, L. Cai, K. Moshammer, N. Hansen, H. Pitsch, K. Kohse-Höinghaus
The C_5 chemistry preceding the formation of polycyclic aromatic hydrocarbons in a premixed 1-pentene flame
Combust. Flame **206**, 411–423 (2019)

223) L. León, L. Ruwe, K. Moshammer, L. Seidel, K. Prasad Shrestha, X. Wang, F. Mauss, K. Kohse-Höinghaus, N. Hansen

Chemical insights into the larger sooting tendency of 2-methyl-2-butene compared to *n*-pentane
Combust. Flame **208**, 182–197 (2019)

224) L.-S. Tran, J. Wullenkord, Y. Li, O. Herbinet, M. Zeng, F. Qi, K. Kohse-Höinghaus, F. Battin-Leclerc
Probing the low-temperature chemistry of di-*n*-butyl ether: Detection of previously unobserved intermediates
Combust. Flame **210**, 9–24 (2019)

225) J. Wullenkord, I. Graf, M. Baroncelli, D. Felsmann, L. Cai, H. Pitsch, K. Kohse-Höinghaus
Laminar premixed and non-premixed flame investigation on the influence of dimethyl ether addition on *n*-heptane combustion
Combust. Flame **212**, 323–336 (2020)

226) S. Schmitt, M. Wick, C. Wouters, L. Ruwe, I. Graf, J. Andert, N. Hansen, S. Pischinger, K. Kohse-Höinghaus
Effects of water addition on the combustion of *iso*-octane investigated in laminar flames, low-temperature reactors, and an HCCI engine
Combust. Flame **212**, 433–447 (2020)

227) Y. Fenard, J. Pieper, C. Hemken, H. Minwegen, R. D. Büttgen, K. Kohse-Höinghaus, K.A. Heufer
Experimental and modeling study of the low to high temperature oxidation of the linear pentanone isomers: 2-pentanone and 3-pentanone
Combust. Flame **216**, 29–44 (2020)

228) L.-S. Tran, Y. Li, M. Zeng, J. Pieper, F. Qui, F. Battin-Leclerc, K. Kohse-Höinghaus, O. Herbinet
Elevated pressure low-temperatur oxidation of linear five-heavy-atom fuels: diethyl ether, *n*-pentane, and their mixture
Z. Phys. Chem. **234**, 1269–1293 (2020)

229) L. Ruwe, L. Cai, J. Wullenkord, S.C. Schmitt, D. Felsmann, M. Baroncelli, B. Chen, K. Moshammer, N. Hansen, H. Pitsch, K. Kohse-Höinghaus
Low- and high-temperature study of *n*-heptane combustion chemistry
Proc. Combust. Inst. **38**, 405–413 (2021)

230) S.M. Fritz, P. Mishra, J. Wullenkord, P.G. Fugazzi, K. Kohse-Höinghaus, T.S. Zwier, N. Hansen
Detecting combustion intermediates via broadband chirped-pulse microwave spectroscopy
Proc. Combust. Inst. **38**, 1761–1769 (2021)

231) W. Yuan, L. Ruwe, S. Schwarz, C. Cao, J. Yang, O. Deutschmann, K. Kohse-Höinghaus, F. Qi
Insights into the interaction kinetics between propene and NO_x at moderate temperatures with experimental and modeling methods
Proc. Combust. Inst. **38**, 795–803 (2021)

232) K. Kohse-Höinghaus
Combustion in the future: The importance of chemistry
Proc. Combust. Inst. **38**, 1–56 (2021), ***invited***

233) S. Schmitt, S. Schwarz, L. Ruwe, J. Horstmann, F. Sabath, L. Maier, O. Deutschmann, K. Kohse-Höinghaus

Homogeneous conversion of NO_x and NH_3 with CH_4, CO, and C_2H_4 at the diluted conditions of exhaust-gases of lean operated natural gas
Int. J. Chem. Kinet. **53**, 213–229 (2021), ***contribution to special issue***

234) H. Zhang, S. Schmitt, L. Ruwe, K. Kohse-Höinghaus
Inhibiting and promoting effects of NO on dimethyl ether and dimethoxymethane oxidation in a plug-flow reactor
Combust. Flame **224**, 94–107 (2021), ***contribution to special issue***

235) S. Gossler, W. Yuan, L. Ruwe, J. Yang, X. Cheng, S. Schmitt, L. Maier, K. Kohse-Höinghaus, F. Qi, O. Deutschmann
Exploring the interaction kinetics of butene isomers and NO_x at low temperatures and diluted conditions
Combust. Flame **233**, 111557 (2021)

236) H. Zhang, D. Kaczmarek, C. Rudolph, S. Schmitt, N. Gaiser, P. Oßwald, T. Bierkandt, T. Kasper, B. Atakan, K. Kohse-Höinghaus,
Dimethyl ether (DME) and dimethoxymethane (DMM) as reaction enhancers for methane: combining flame experiments with model-assisted exploration of a polygeneration process
Combust. Flame **237**, 111863 (2022)

237) A. Stagni, S. Schmitt, M. Pelucchi, A. Frassoldati, K. Kohse-Höinghaus, T. Faravelli,
Dimethyl ether oxidation analyzed in a given flow reactor: Experimental and modeling uncertainties
Combust. Flame **240**, 111998 (2022)

238) M. Pelucchi, S. Schmitt, N. Gaiser, A. Cuoci, A. Frassoldati, H. Zhang, A. Stagni, P. Oßwald, K. Kohse-Höinghaus, T. Faravelli,
On the influence of NO addition to dimethyl ether oxidation in a flow reactor
Combust. Flame **257**, 112464 (2023), ***contribution to special issue***

239) D. Zhu, L. Ruwe, S. Schmitt, B. Shu, K. Kohse-Höinghaus, A. Lucassen,
Interactions in ammonia and hydrogen oxidation examined in a flow reactor and a shock tube.
J. Chem. Phys. A **127**, 2351–2366 (2023), ***contribution to special issue***

240) S. J. Klippenstein, K. Kohse-Höinghaus
Combustion in a sustainable world: From molecules to processes
J. Chem. Phys. A **127**, 3737–3742 (2023), ***contribution to special issue***

241) K. Kohse-Höinghaus,
Combustion, chemistry, and carbon neutrality
Chem. Rev. **123**, 5139–5219 (2023), ***invited, editor's choice***

242) Z. Li, C. Brackmann, J. Bood, M. Richter, P.-E. Bengtsson, K. Kohse-Höinghaus,
Laser diagnostics in combustion and beyond dedicated to Prof. Marcus Aldén on his 70th birthday
Combust. Flame **263** (2024) 113403, ***invited***

243) S. Schmitt, N. Gaiser, H. Zhang, A. Stagni, J. Bachmann, P. Oßwald, K. Kohse-Höinghaus, M. Köhler
Combining Mass Spectrometry, i^2PEPICO, and FTIR Spectroscopy: Comprehensive Speciation in DMM/NO Oxidation
Proc. Combust. Inst. **40** (2024) 105365

244)

Conference and book articles

1) K. Höinghaus, H.W. Biermann, C. Zetzsch, F. Stuhl
Nachweis von NO im ppb-Bereich mittels Fluoreszenzanregung durch NO-γ -Banden
Ber. Bunsen-Ges. Phys. Chem. **80**, 1226 (1976)

2) I. Hansen, K. Höinghaus, C. Zetzsch, F. Stuhl
Detection and reactions of $NH(X^3\Sigma^{-})$ radicals in the vacuum UV flash photolysis of NH_3 using resonance fluorescence
12th Informal Conference on Photochemistry, Gaithersburg, MD, USA, 28.6.-1.7.1976

3) K. Kohse-Höinghaus, F. Stuhl
H_2-laser photolysis study of the temperature dependence of the quenching of $O_2(b^1\Sigma_g^+)$
J. Photochem. **9**, 102–103 (1978)

4) U. Meier, K.Kohse-Höinghaus, Th. Just
Two-photon laser-excited fluorescence study of H and O atoms for combustion applications
9th International Symposium on Gas Kinetics, Bordeaux, France, 20.-25.07.1986

5) K. Kohse-Höinghaus, U. Meier, S. Kelm, Th. Just
Prüfung chemisch-kinetischer Modelle durch laseroptische Messung von Konzentrationsverläufen in Flammen
Proceedings 2. TECFLAM-Seminar "Chemie und Strömung bei technischen Diffusionsflammen", 10/1986, pp. 23–27

6) K. Kohse-Höinghaus, S. Kelm, U. Meier, J. Bittner, Th. Just
Concentration profiles of flame radicals determined by laser-induced fluorescence.
In: *Complex Chemical Reaction Systems. Mathematical Modelling and Simulation.*
J. Warnatz, W.Jäger (Eds.), Springer-Verlag, Heidelberg, 1987, pp. 292–301

7) J.B. Jeffries, K.J. Rensberger, R.A. Copeland, K. Kohse-Höinghaus, M.L. Wise, D.R. Crosley
LIF determination of temperature in low-pressure flames
Western States Section of the Combustion Institute, Spring Technical Meeting, Salt Lake City, UT, USA, 21.-22.03.1988

8) K. Kohse-Höinghaus, D.F. Davidson, R.K. Hanson
Quantitative NH_2 laser-absorption diagnostic for shock tube kinetics studies
Western States Section of the Combustion Institute, Spring Technical Meeting, Salt Lake City, UT, USA, 21.-22.03.1988

9) U. Meier, K. Kohse-Höinghaus
Some recent developments in optical combustion diagnostics
Proceedings of the IEA XI. Task Leaders Meeting, Glumslöv, Sweden, 25.-30.06.1989

10) A. Lawitzki, R. Tirgrath, U. Meier, K. Kohse-Höinghaus, A. Jörg, Th. Just
Temperature measurements in flames by linear and non-linear laser-induced fluorescence
Proceedings of the Joint Meeting of the German and Italian Sections of the Combustion Institute, Ravello, Italy, 11.-14.09.1989

11) A. Lawitzki, A. Jörg, U. Meier, R. Tirgrath, K. Kohse-Höinghaus
Temperaturbestimmung mit laserinduzierter Fluoreszenz

Proceedings 5.TECFLAM-Seminar "Verbrennungsmodellierung und Lasermeßtechnik", 10/1989, pp. 103–116

12) D.F. Davidson, K. Kohse-Höinghaus, A.Y. Chang, R.K. Hanson
A pyrolysis mechanism for ammonia
Western States Section of the Combustion Institute, Fall Technical Meeting, Livermore, CA, USA, 23.-24.10.1989

13) U. Meier, K. Kohse-Höinghaus, L. Schäfer, C.-P. Klages
H atom concentration measurement by two-photon LIF near a heated filament in a hydrogen environment
Digest of the Topical Meeting on Laser Applications to Chemical Analysis, Optical Society of America, Washington, DC, USA, Vol.2, 1990 pp. 100–102

14) L. Schäfer, U. Bringmann, C.-P. Klages, U. Meier, K. Kohse-Höinghaus
Hydrogen dissociation at hot filaments: Determination of absolute atomic hydrogen concentrations
Proceedings of the NATO Advanced Study Institute on Diamond and Diamond-Like Coatings, Il Ciocco Castelvecchio Pascoli, Italy, 22.07.-03.08.1990

15) J. Bittner, A. Lawitzki, K. Kohse-Höinghaus
Messung von Stickstoffatom-Konzentrationen in Flammen
Proceedings 6.TECFLAM-Seminar "Schadstoffreduktion bei Verbrennungsvorgängen", 10/1990, pp. 65–74

16) A. Lawitzki, J. Bittner, K. Kohse-Höinghaus, C.T. Bowman
N-atom detection by two-photon excited LIF in H_2/O_2 low-pressure flames doped with NH_3, HCN and $(CN)_2$
Joint Meeting of the Soviet and Italian Sections of the Combustion Institute, Pisa, Italy, 05.-09.11.1990, Paper 2.2

17) K. Kohse-Höinghaus
Laser techniques for the quantitative detection of reactive intermediates
5th International Symposium on Laser-Aided Plasma Diagnostics, Bad Honnef, 19.-23.08.1991

18) U. Meier, I. Plath, K. Kohse-Höinghaus
Determination of minority species concentrations and temperature in combustion systems by laser-induced fluorescence
ONERA-DLR-NASA-VKI Advanced Research Workshop on New Trends in Instrumentation for Hypersonic Research, Toulouse, France, 27.04.-01.05.1992

19) I. Plath, U. Meier, K. Kohse-Höinghaus, B. Attal-Trétout
DFWM experiments for NO combustion diagnostics.
In: *Coherent Raman Spectroscopy: applications and new developments*, F. Castellucci, R. Righini, P. Foggi, (Eds.), World Scientific Publishing Co., Singapore 1992

20) K. Kohse-Höinghaus
Quantitative LIF diagnostics in flames and chemical reactors.
In: *Non-Intrusive Combustion Diagnostics*, Kenneth K. Kuo, Timothy P. Parr (Eds.), Begell House, New York, USA, 1994, pp. 23–39

21) M.P. Lee, R. Kienle, K. Kohse-Höinghaus
Measurements of rotational energy transfer in OH A v'=0 at elevated temperatures
In: *Non-Intrusive Combustion Diagnostics*, Kenneth K. Kuo, Timothy P. Parr (Eds.), Begell House, New York, USA, 1994, pp. 65–75

22) R. Kienle, M. Lee, U. Meier, K. Kohse-Höinghaus
Collisional energy transfer in OH (A): Investigations for quantitative LIF combustion diagnostics
In: *Non-Intrusive Combustion Diagnostics*, Kenneth K. Kuo, Timothy P. Parr (Eds.), Begell House, New York, USA, 1994, pp. 76–86

23) K. Kohse-Höinghaus, U.E. Meier
Quantitative two-dimensional single pulse measurements of temperature and species concentrations using LIF
In: *Non-Intrusive Combustion Diagnostics*, Kenneth K. Kuo, Timothy P. Parr (Eds.), Begell House, New York, USA, 1994, pp. 53–64

24) A. Brockhinke, P. Andresen, K. Kohse-Höinghaus
Investigation of the flame-stabilization process in turbulent, lifted flames.
VDI-Bericht 1313 "Verbrennung und Feuerungen", VDI-Verlag, ISBN 3-18-091313-4, 1997, pp. 509–512

25) A. Brockhinke, A.T. Hartlieb, K. Kohse-Höinghaus, D.R. Crosley
Tunable KrF laser-induced fluorescence of C_2 in a sooting flame
Fall 1997 Meeting of the Western States Section of the Combustion Institute, Diamond Bar, CA, USA, 23.10.1997

26) S. Spuler, M. Linne, A. Schocker, A. Brockhinke, K. Kohse-Höinghaus
Measurements of CH_2 and HCO radicals in low-pressure flames by Cavity Ringdown Laser Absorption Spectroscopy (CRLAS)
Spring 2000 Meeting of the Western States Section of the Combustion Institute, Golden, CO, USA, 13.-14.03.2000

27) B. Atakan, M. Hofstätter, K. Kohse-Höinghaus
Comparison between computational modeling and experiment for a CVD growth process of silicon films
Proceedings of the Electrochemical Society, vol. 2001-13, pp. 268-275, 2001.

28) B. Atakan, H. Böhm, K. Kohse-Höinghaus
Fuel-rich chemistry and soot precursors.
In: *Applied Combustion Diagnostics,* K. Kohse-Höinghaus, J.B. Jeffries (Eds.), Taylor and Francis, New York, USA, 2002, pp. 289–316

29) S. Blittersdorf, N. Bahlawane, B. Atakan, K. Kohse-Höinghaus
High temperature chemical vapor deposition of alumina using aluminum tri-isoproxide and oxygen mixture
Z. Anorg. Allg. Chem. **628**, 2185 (2002)

30) E. Fischer Rivera, B. Atakan, K. Kohse-Höinghaus
Chemical vapor deposition of Co_3O_4 on honeycomb substrates for catalytic applications
Proceedings of the CVD XVI/EUROCVD 14 Meeting, The Electrochemical Society, vol. 2003-08, 2003, pp. 1455-1462

31) N. Bahlawane, S. Blittersdorf, K. Kohse-Höinghaus, B. Atakan, J. Müller
Investigation of chemical vapor deposition processes to perform dense α-alumina coating on superalloys
Proceedings of the CVD XVI/EUROCVD 14 Meeting, The Electrochemical Society, vol. 2003-08, 2003, pp. 1335–1342

32) N. Bahlawane, S. Blittersdorf, K. Kohse-Höinghaus, B. Atakan, J. Müller
Structural investigation of alumina thin films deposited by chemical vapor deposition
Mat. Res. Soc. Symp. Proc. **750**, Surface Engineering 2002 – Synthesis, Characterization and Applications, 2003, pp. 279–284

33) A. Bülter, U. Lenhard, U. Rahmann, K. Kohse-Höinghaus, A. Brockhinke
LASKIN: Efficient simulation of spectra affected by energy transfer
Proceedings of LACEA 2004, Laser Applications to Chemical and Environmental Analysis, Annapolis, MD, USA, 09.-11.02.2004

34) T. Haase, N. Bahlawane, J. T. Strong, A. Jakob, Y. Shen, H. Lang, K. Kohse-Höinghaus
Mass spectrometry as a basis for the selection of CVD precursors
Proceedings of EUROCVD-15, The Electrochemical Society, vol. 2005-09, 2005, pp. 276–283

35) J. Feldmann, N. Bahlawane, K. Kohse-Höinghaus
Chemical vapor deposition of $Zn_xCo_{3-x}O_4$ films and their characterization
Proceedings of EUROCVD-15, The Electrochemical Society, vol. 2005-09, 2005, pp. 810–817

36) N. Bahlawane, K. Kohse-Höinghaus, J.-S. Park, R. G. Gordon
ALD process for the preparation of noble-metal-free monolithic catalysts
Proceedings of EUROCVD-15, The Electrochemical Society, vol. 2005-09, 2005, pp. 583–590

37) H. Lang, A. Jakob, H. Schmidt, P. Djiele, B. Walfort, T. Haase, N. Bahlawane, K. Kohse-Höinghaus
Phosphane and phosphite silver(I) complexes as CVD precursor
Proceedings of EUROCVD-15, The Electrochemical Society, vol. 2005-09, 2005, pp. 268–275

38) N. Bahlawane, A. Premkumar, K. Fehling, K. Kohse-Höinghaus
Gas phase synthesis of metal oxide monolithic catalysts for hydrocarbon deep oxidation
In: *Scientific Bases for the Preparation of Heterogeneous Catalysts*, Studies in Surface Science and Catalysis, vol. 162, E. Gaigneaux *et al.* (Eds.), 2006, pp. 625–632

39) T. Kasper, K. Kohse-Höinghaus, N. Hansen, C.A. Taatjes, M.E. Law, A. Morel, P.R. Westmoreland J. Wang, T.A. Cool
Species identification in laminar flames investigated by molecular beam mass spectrometry
Proceedings of the 5th U.S. National Combustion Meeting, University of California San Diego, CA, USA, 25.-28.03.2007

40) N. Hansen, T. Kasper, S.J. Klippenstein, P.R. Westmoreland, M.E. Law, C.A. Taatjes, K. Kohse-Höinghaus, J. Wang, T.A. Cool
Fuel consumption and initial steps of aromatic ring formation in a laminar premixed fuel-rich cyclopentene flame
Proceedings of the 5th U.S. National Combustion Meeting, University of California San Diego, CA, USA, 25.-28.03.2007

41) H. Lang, S. Frühauf, T. Gessner, T. Haase, A. Jakob, K. Kohse-Höinghaus, S.E. Schulz, T. Wächtler
Novel Copper(I) and Silver(I) Complexes as Precursors for the Chemical Vapour Deposition and Spin-Coating of Copper and Silver.
In: *Smart Systems Integration 2007,* Proceedings of the 1st European Conference and Exhibition on Integration Issues of Miniaturized Systems, T. Gessner (Ed.), VDE-Verlag, 2007, pp. 531–534

42) P.R. Westmoreland, M.E. Law, W. Li, M. Chaos, F.L. Dryer, T.A. Cool, J. Wang, B. Yang, N.

Hansen, T. Kasper, K. Kohse-Höinghaus, P. Oßwald, U. Struckmeier, C.K. Westbrook
Using MBMS for characterization and kinetics in hydrocarbon and oxygenate flames
Proceedings of the 2008 Spring Technical Meeting of the Central States Section of The Combustion Institute, University of Alabama, AL, USA, 20.-22.04.2008

43) K. Kohse-Höinghaus
Moleküle haben keine Nationalität.
In: *Der Wettlauf um das Wissen. Außenwissenschaftspolitik im Zeitalter der Wissensrevolution*, Dr. Georg Schütte (Herausgeber), Berlin University Press, 2008, pp. 157–165

44) K. Kohse-Höinghaus
Diagnostics in combustion: Measurements to unravel combustion chemistry.
In: *Combustion Phenomena: Selected Mechanisms of Flame Formation, Propagation and Extinction*, J. Jarosinski and B. Veyssiere (Eds.), Taylor and Francis, 2009, pp. 3–13

45) K. Kohse-Höinghaus, T. Kasper, P. Oßwald, U. Struckmeier, N. Hansen, T.A. Cool, J. Wang, F. Qi, P.R. Westmoreland
Opportunities and issues in chemical analysis of premixed, fuel-rich low-pressure flames of hydrocarbon and oxygenate fuels using in situ mass spectrometry.
In: *Combustion Generated Fine Carbonaceous Particles*, H. Bockhorn, A. D'Anna, A. F. Sarofim, H. Wang (Eds.), Karlsruhe University Press, 2009, pp. 71–89

46) N. Hansen, J.A. Miller, P.R. Westmoreland, T. Kasper, K. Kohse-Höinghaus, J. Wang, T.A. Cool
Isomer-specific combustion chemistry in allene and propyne flames
Proceedings of the 6th U.S. National Combustion Meeting, Ann Arbor, MI, USA, 17.-20.05.2009

47) B. Yang, J. Wang, T.A. Cool, T. Kasper, N. Hansen, K. Kohse-Höinghaus, P.R. Westmoreland
MBMS study of low-pressure premixed $C_5H_{10}O_2$ ethyl and methyl ester flames
Proceedings of the 6th U.S. National Combustion Meeting, Ann Arbor, MI, USA, 17.-20.05.2009

48) W. Li, M.E. Law, N. Labbe, P.R. Westmoreland, T. Kasper, N. Hansen, J. Wang, T.A. Cool, K. Kohse-Höinghaus
Determining oxidation and growth kinetics through photoionization MBMS analysis and modeling of fuel-rich cyclohexane flames
Proceedings of the 6th U.S. National Combustion Meeting, Ann Arbor, MI, USA, 17.-20.05.2009

49) P.R. Westmoreland, W. Li, N. Hansen, T. Kasper, T.A. Cool, A. Lucassen, K. Kohse-Höinghaus
Advances in understanding ethyne chemistry from 45 years of MBMS flame research
Proceedings of the 6th U.S. National Combustion Meeting, Ann Arbor, MI, USA, 17.-20.05.2009

50) N. Bahlawane, P. H. Tchoua Ngamou, K. Kohse-Höinghaus
Pulsed spray evaporation CVD of functional complex oxides: interplay between the structure, electrical properties and surface reactivity
ESC Trans. **25**(8), 265-272 (2009)

51) B. Yang, T.A. Cool, C.K. Westbrook, N. Hansen, K. Kohse-Höinghaus
The effect of carbon-carbon double bonds of the combustion chemistry of fatty acid esters
Proceedings of the 7th U.S. National Combustion Meeting, Georgia Institute of Technology, Atlanta, GA, USA, 20.-23.03.2011

52) W. Li, M.E. Law, P.R. Westmoreland, T. Kasper, N. Hansen, K. Kohse-Höinghaus
Multiple benzene-formation paths in a fuel-rich cyclohexane flame

Proceedings of the 7th U.S. National Combustion Meeting, Georgia Institute of Technology, Atlanta, GA, USA, 20.-23.03.2011

53) N. Labbe, A. Lucassen, P.R. Westmoreland, K. Kohse-Höinghaus
Mechanistic insights into nitrogen fate in a flat, premixed morpholine flame
Proceedings of the 7th U.S. National Combustion Meeting, Georgia Institute of Technology, Atlanta, GA, USA, 20.-23.03.2011

54) S.M. Sarathy, K. Yasunaga, S. Vranckx, P. Oßwald, C.K. Westbrook, M. Mehl, W.J. Pitz, H.J. Curran, T. Tsujimura, K. Kohse-Höinghaus, R.X. Fernandes
Low and high temperature combustion chemistry of butanol isomers in premixed flames and autoignition systems
Proceedings of the 7th U.S. National Combustion Meeting, Georgia Institute of Technology, Atlanta, GA, USA, 20.-23.03.2011

55) J. Koppmann, A. Brockhinke, K. Kohse-Höinghaus
Contributions to combustion chemistry research
Proceedings of the 8th U.S. National Combustion Meeting, University of Utah, Salt Lake City, UT, USA, 19.-22.05.2013

56) S. Li, D.F. Davidson, R.K. Hanson, K. Moshammer, K. Kohse-Höinghaus
Shock tube study of ethylamine pyrolysis and oxidation
Proceedings of the 8th U.S. National Combustion Meeting, University of Utah, Salt Lake City, UT, USA, 19.-22.05.2013

57) B. Yang, T.A. Cool, N. Hansen, K. Moshammer, K. Kohse-Höinghaus
Experimental study of dimethoxymethane and dimethyl carbonate addition to premixed ethane/oxygen/argon flame
Proceedings of the 8th U.S. National Combustion Meeting, University of Utah, Salt Lake City, UT, USA, 19.-22.05.2013

58) F. Herrmann, B. Jochim, K. Moshammer, D. Mayer, H. Pitsch, K. Kohse-Höinghaus
Clean combustion: challenges and research opportunities for chemists
Proceedings of the European Combustion Meeting, Lund, Sweden, 25.-28.06.2013

59) Z. Wang, L. Ye, L. Zhang, F. Zhang, J. Yang, H. Jin, Y. Li, K. Kohse-Höinghaus, F. Qi
An experimental and kinetic modeling study on premixed methylcyclohexane flames at low pressure
Proceedings of the European Combustion Meeting, Lund, Sweden, 25.-28.06.2013

60) K. Kohse-Höinghaus
Verbrennungschemie von Biokraftstoffen – Reaktionswege und Schadstoffbildung.
In: *Kraftstoffe für die Mobilität von morgen*, J. Krahl, A. Munack, P. Eilts, J. Bünger (Eds.), Cuvillier Verlag, Göttingen, 2014, pp. 61-64

61) Z.Y. Tian, H. Vieker, A. Gölzhäuser, and K. Kohse-Höinghaus
Synthesis of copper oxide films and their application for catalytic combustion.
Chin. J. Eng. Thermophys. **35**, 598-603, 2014; *in Chinese.*

62) K. Moshammer, A.W. Jasper, D.M. Popolan-Vaida, A. Lucassen, P. Diévart, H. Selim, A.J. Eskola, C.A. Taatjes, S.M. Sarathy, Y. Ju, P. Dagaut, K. Kohse-Höinghaus, N. Hansen
Advanced insights in low-temperature oxidation of dimethyl ether – a theoretical and experimental approach
Proceedings of the 9th U.S. National Combustion Meeting, Cincinnati, OH, USA, 17.-20.05.2015

63) K. Kohse-Höinghaus, A. Brockhinke
Photons, electrons, and ions: Detective Work in combustion chemistry research
Light, Energy and the Environment Congress of the Optical Society of America, 14.-17.11.2016, Leipzig, Germany; ETu2A. Optics and Photonics in Combustion Diagnostics, DOI: 10.1364/EE.2016.ETu2A.1, ***invited***

64) L. Ruwe, L. Leon, K. Moshammer, L. Seidel, N. Hansen, F. Mauss, K. Kohse-Höinghaus
Experimental and modeling study in a premixed 2-methyl-2-butene flame
8th European Combustion Meeting, Dubrovnik, Croatia, 18.-21.04.2017

65) K. Moshammer, N. Hansen, L. Ruwe, K. Kohse-Höinghaus
Combustion chemistry of n-pentane – an extensive experimental study
8th European Combustion Meeting, Dubrovnik, Croatia, 18.-21.04.2017

66) Z. Wang, B. Chen, K. Moshammer, D.M. Popolan-Vaida, S. Sioud, V.S. Bhavani Shankar, D. Vuilleumier, T. Tao, L. Ruwe, E. Bräuer, N. Hansen, P. Dagaut, K. Kohse-Höinghaus, M.A. Raji, S.M. Sarathy
Detection oxygenated intermediates from the low-temperature oxidation of n-heptane in a stirred reactor and motored engine
8th European Combustion Meeting, Dubrovnik, Croatia, 18.-21.04.2017

67) H. Hansen, J. Wullenkord, D.A. Obenchain, K. Kohse-Höinghaus, J.-U. Grabow
Fourier transform microwave spectroscopic studies of dimethyl ether and ethylene flames
Proceedings of the 10th U.S. National Combustion Meeting, College Park, MD, USA, 23.-26.04.2017

68) L. Ruwe, C. Hemken, K. Kohse-Höinghaus, K. Moshammer, N. Hansen
Detailed chemistry investigations for conventional and alternative fuels
Proceedings of the Symposium for Combustion Control, Aachen, 15.-16.06.2017

69) M. Carrier, A. Gölzhäuser, K. Kohse-Höinghaus
Chapter 3: Understanding Phenomena by Building Models. Methodological Studies on Physical Chemistry
In: *Progress in Science, Progress in Society*, A. Tressaud (Ed.), Springer International Publishing AG, 2018, pp. 19-36

70) Z. Wang, B. Chen, K. Moshammer, D.M. Popolan-Vaida, S. Sioud, V.S. Bhavani Shankar, D. Vuilleumier, T. Tao, L. Ruwe, E. Bräuer, N. Hansen, P. Dagaut, K. Kohse-Höinghaus, M.A. Raji, S.M. Sarathy
n-Heptane cool flame chemistry: unraveling intermediate species measured in a stirred reactor and motored engine
Proceedings of the 11th Asia-Pacific Conference on Combustion, Sydney, Australia, 10.-14.12.2017

71) K. Kohse-Höinghaus
Advances and developments in combustion chemistry and diagnostics
Proceedings of the 25th International Symposium on Chemical Reaction Engineering, Florence, Italy, 20.-23.05.2018

72) J. Wullenkord, M. Zeng, M. Salamanca, I. Graf, S. Schmitt, L. Ruwe, K. Kohse-Höinghaus
Experimental investigation of fuel-specific species formation in blended premixed flames
Proceedings of the Joint Meeting of the German and Italian Sections of the Combustion Institute, Sorrento, Italy, 23.-26.05.2018

73) M. Wick, T. Ottenwälder, C. Wouters, B. Lehrheuer, S. Pischinger, S. Schmitt, K. Kohse-Höinghaus, N. Hansen, J. Andert
Detailed analysis of the influence of direct water injection on HC emissions in HCCI-engines
Proceedings of the Symposium for Combustion Control, Aachen, 05.-06.06.2019

74) S. Schmitt, M. Wick, C. Wouters, I. Graf, J. Andert, N. Hansen, K. Kohse-Höinghaus, S. Pischinger
Detaillierte Untersuchungen zu den Einflüssen von Wasseraddition bei der Verbrennung von *iso*-Oktan im Hinblick auf homogenisierte Kompressionsbrennverfahren
29. Deutscher Flammentag, Bochum, 17.-18.09.2019

75) S. Schwarz, W.H. Yuan, L. Ruwe, S. Schmitt, J. Horstmann, H. Zhang, H. Gossler, L. Maier, F. Qi, K. Kohse-Höinghaus, O. Deutschmann
Kinetische Analyse homogener Gasphasenreaktionen in Abgasnachbehandlungssystemen von Verbrennungsmotoren
29. Deutscher Flammentag, Bochum, 17.-18.09.2019

76) S. Schmitt, S. Goßler, L. Maier, O. Deutschmann, K. Kohse-Höinghaus,
Experimental study on the heterogeneous conversion of NO_x and NH_3 catalyzed by a vanadia-based SCR catalyst at highly diluted conditions,
30. Deutscher Flammentag, Hannover, 28.-29.09.2021

77) N. Gaiser, T. Bierkandt, H. Zhang, S. Schmitt, P. Oßwald, J. Zinsmeister, P. Hemberger, S. Shaqiri, T. Kasper, K. Kohse-Höinghaus, M. Köhler, M. Aigner,
Systematic study on laminar low-pressure oxymethylene ether (OME_{0-4}) flames using molecular beam mass spectrometry and synchrotron photoionization
30. Deutscher Flammentag, Hannover, 28.-29.09.2021

78) K. Kohse-Höinghaus, A.M. Ferris, J.Zetterberg, D.A. Lacoste, P. Fjodorow, S. Wagner, L. Cai, C. Rudolph, J. Zádor, Y. Li, L. Ruwe, N. Gaiser, Z. Wang, K.P. Geigle,
Chemistry diagnostics for monitoring
In: Combustion Chemistry and the Carbon Neutral Future: What will the next 25 years of research require? K. Brezinsky (Ed.), in the series "Developments in Physical & Theoretical Chemistry", Chapter 14, pp. 417–501, Elsevier, 2023

79) K. Kohse-Höinghaus,
Migrationsprozesse – Ein Annäherungsversuch aus naturwissenschaftlich-technischer Perspektive, Kap. 4 in: Thomas Faist, Gerald Echterhoff, Anne Friedrichs, Katharina Kohse-Höinghaus, Walter Krämer, Angelika Nußberger, Arnulf von Scheliha, Christoph M. Schmidt, Rudolf Stichweh, Hans Peter Thurn, Gesellschaft mit Migrationshintergrund. Nordrhein-Westfälische Akademie der Wissenschaften und der Künste, Düsseldorf 2022

80)

General articles

1) K. Kohse-Höinghaus, Th. Just
Flammendiagnostik mit laserinduzierter Fluoreszenz
DFVLR-Nachrichten, Juli 1985, pp. 20–23

2) K. Kohse-Höinghaus, W. Stricker

Flammen im Laserlicht betrachtet
DFVLR-Nachrichten, November 1986, pp. 18–22

3) U. Meier, J. Bittner, K. Kohse-Höinghaus
Anwendung von Lasermeßtechniken für den Nachweis reaktiver Zwischenprodukte in Flammen
Laser und Optoelektronik 2/1987, pp. 135–145

4) K. Kohse-Höinghaus, W. Stricker
Laserspektroskopie: Einblick in komplexe Verbrennungsvorgänge
Spektrum der Wissenschaft 5/1988, pp. 23–27

5) K. Kohse-Höinghaus, W. Kreutner, U. Meier, W. Meier, I. Plath, M. Woyde, W. Stricker
Laserdiagnostik von Verbrennungsvorgängen
DLR-Nachrichten **63**, 42–48 (1991)

6) W. Meier, K. Kohse-Höinghaus, W. Stricker
Lasermeßverfahren für technische Flammen - Neue Wege zum Verständnis von Verbrennungsprozessen
DLR-Nachrichten **65**, 18–23 (1991)

7) K. Kohse-Höinghaus
Diamantfilme und Rußpartikel: Reaktionswege in brennstoffreichen Flammen
Chem. Unserer Zeit **32**, 242–250 (1998), ***invited***

8) K. Kohse-Höinghaus, A. Brockhinke
Von der Gasphase bis zum Biomolekül: Chemische Analyse mit kurzen Laserpulsen
Forschungsmagazin der Universität Bielefeld, 19/1999, pp. 23–30

9) K. Kohse-Höinghaus
Chemikernachwuchs aus der Grundschule?
Nachrichten aus der Chemie **5**, 702–703 (2000)

10) K. Kohse-Höinghaus
Initiative "teutolab" - Mit Experimenten begeistern
Chem. Unserer Zeit **34**, 181–181 (2000)

11) B. Atakan, H. Böhm, K. Kohse-Höinghaus
Wie entstehen Schadstoffe bei der Verbrennung?
Konzepte zur Schadstoffminderung benötigen chemisches Detailwissen
Forschungsmagazin der Universität Bielefeld, 22/2000, pp. 7–11

12) R. Herbers, K. Kohse-Höinghaus
Das Bielefelder *teutolab*: Motivationsschub für den Chemieunterricht?
PdN-ChiS **6/50**, II (2001*)* ***invited***

13) K. Kohse-Höinghaus, R. Herbers, H. Jenett
Chemie – ein langweiliges Fach?
SchulVerwaltung **13**(11), 308–309 (2002), ***invited***

14) R. Herbers, H. Jenett, J. Möller, K. Kohse-Höinghaus
Chemie? Ja, bitte! Schüler, Lehrer und Studierende experimentieren im Bielefelder *teutolab*
PdN-ChiS **8/51**, 6–10 (2002), ***invited***

15) H. Jenett, K. Kohse-Höinghaus

Chemie zum Selbermachen - Mitmachlabors in Deutschland
Nachr. Chem. **2/51**, 144–149 (2003)

16) A. Brandt, J. Möller, K. Kohse-Höinghaus
Das Chemieexperimentierlabor *teutolab* als außerschulischer Lernort. Ergebnisse einer Evaluationsstudie.
In: *Außerschulisches Lernen in Physik und Chemie* (Jahrestagung der GDCP in Flensburg 2002), Band 23, 78-80, 2003, LIT-Verlag, Münster-Hamburg-London

17) K. Kohse-Höinghaus, R. Herbers, A. Brandt, J. Möller
Das ***teutolab*** – eine chemische Verbindung zwischen Schule und Uni.
In: *Facetten einer Wissenschaft – Chemie aus ungewöhnlichen Perspektiven*, A. Müller, H.-J. Quadbeck-Seeger, E. Diemann (Eds.), Wiley-VCH, Weinheim, 2004, pp. 313–327, ***invited***

18) J. Möller, A. Brandt, R. Herbers, G. Lück, K. Kohse-Höinghaus
Schon im Grundschulalter Interesse an der Chemie wecken
Grundschule **4**, 54–57 (2004)

19) H. Jenett, A. Brandt, M. Püttschneider, R. Herbers, K. Kohse-Höinghaus
Chemistry for kids at *teutolab*
Chemistry International **26**(5), 7–10 (2004)

20) K. Kohse-Höinghaus, A. Brockhinke
Zuschauen bei der chemischen Reaktion? Laserdiagnostik mit kurzen Lichtpulsen.
In: *Materie in Raum und Zeit*, Harald Fritzsch *et al.* (Eds.), Verhandlungen der Gesellschaft Deutscher Naturforscher und Ärzte, 123. Versammlung, Passau 2004, 135-149, Hirzel Verlag, Stuttgart.

21) K. Kohse-Höinghaus, F. Königer, R. Herbers
Nanochemistry for high school students. Hands-on experiments and informal science education in the *teutolab* at Bielefeld University
Chemistry Today **25**(2), 50–53 (2007), ***invited***

22) J.F. Driscoll, K. Kohse-Höinghaus
50th Anniversary of the founding of Combustion and Flame
Combust. Flame **148**(1-2) 1–3 (2007)

23) K.Kohse-Höinghaus
Editorial
Combust. Flame **150**(1-2) 1 (2007)

24) R. Herbers, K. Kohse-Höinghaus
Das *teutolab*-Zitronenprojekt – Eine Experimentierreihe von der Primarstufe bis zur Sekundarstufe II
Unterricht Chemie **18**(99), 43–45 (2007), ***invited***

25) K. Kohse-Höinghaus
Editorial
Combust. Flame **153**(1-2), 1 (2008)

26) A. Brandt, J. Möller, K. Kohse-Höinghaus
Was bewirken außerschulische Experimentierlabors? Ein Kontrollgruppenexperiment mit Follow up-Erhebung zu Effekten auf Motivation und Interesse
Z. Pädagog. Psychol. **22**(1), 5–12 (2008)

27) K.Kohse-Höinghaus
Editorial
Combust. Flame **154**(1-2) 1 (2008)

28) K. Kohse-Höinghaus
Editorial
Combust. Flame **155**(1-2) 1 (2008)

29) K. Kohse-Höinghaus, A. Brockhinke
Zuschauen bei der chemischen Reaktion: Detektivarbeit mit Lasern und Massenspektrometern
Nordrhein-Westfälische Akademie der Wissenschaften und der Künste, Vorträge N 474,
Ferdinand Schöningh Verlag, ISBN 978-3-506-76876-6 (2009)

30) K. Kohse-Höinghaus
Editorial: James F. Driscoll retires as Editor
Combust. Flame **156**(1) 1 (2009)

31) K. Kohse-Höinghaus, F. Egolfopoulos
Editorial: Retirements of and new appointments of Associate Editors
Combust. Flame **156**(1) 2 (2009)

32) K. Kohse-Höinghaus
Chemische Konzepte für saubere Abgase
Nachrichten aus der Chemie **57**(12), 1176–1181 (2009), ***invited***

33) K. Kohse-Höinghaus
Editorial
Combust. Flame **157**(1) 1 (2010)

34) K. Kohse-Höinghaus
Editorial Comment
Combust. Flame **157**(2) 207 (2010)

35) K. Kohse-Höinghaus
Editorial Comment
Combust. Flame **157**(7) 1235 (2010)

36) K. Kohse-Höinghaus, F.N. Egolfopoulos
Editorial Comment
Combust. Flame **158**(4) 593 (2011)

37) K. Kohse-Höinghaus, P. Oßwald, F. Herrmann, A. Lucassen
Biokraftstoffe als saubere Alternative? Moderne Analysemethoden verraten Details der Verbrennungschemie
GIT Labor-Fachzeitschrift **6**, 453–455 (2012), ***invited***

38) K. Kohse-Höinghaus
Nanogold – außerschulische Chemie im *teutolab*.
In: *Handbuch Wissenschaftskommunikation*, B. Dernbach, C. Kleinert, H. Münder (Hrsg.),
Springer VS, Wiesbaden, 197-204 (2012), ***invited***

39) J. Lenger, P. Weiß, K. Kohse-Höinghaus
Vermittlung interdisziplinärer Forschungskompetenz: Lehren und Lernen von- und miteinander

Zeitschrift für Hochschulentwicklung (ZFHE) **8**(1), 60–68 (2013)

40) K. Kohse-Höinghaus
Forschungsergebnisse: Gedankengebäude mit Verfallsdatum?
In: *Nachhaltigkeit in der Wissenschaft*, J. Hacker (Hrsg.),
Nova Acta Leopoldina, Neue Folge **117**(398), pp. 87–101 (2013), ***invited***

41) K. Kohse-Höinghaus
Verbrennungsforschung auf den Spuren von Wilhelm Jost
Bunsenmagazin, **6**/2013, pp. 226–240, ***invited***

42) K. Kohse-Höinghaus
Exzellenz – geplant, verdient, erworben?
In: *Exzellenz in der Wissenschaft,* Tagungsband des Österreichischen Wissenschaftsrats 2013, pp. 31–43, ***invited***

43) Interview mit Prof. Dr. Katharina Kohse-Höinghaus
Was macht Gase so besonders? Das Lernpotential von Gasen aus Sicht einer Fachforscherin.
Unterricht Chemie **157**(1), 6–7 (2017)

44) A. Brockhinke, M. Letzgus, K. Kohse-Höinghaus
Clean Combustion - Perspectives from Chemistry and Diagnostics
ZiF-Mitteilungen **3**, 19–32 (2017)

45) K. Kohse-Höinghaus
Verbrennung: von der Kerze bis zum Biobrennstoff
Jahrbuch der Akademie der Wissenschaften zu Göttingen, De Gruyter-Verlag, 205–216 (2016)

46) K. Kohse-Höinghaus, H. Fuchs, T. Zhang, Y. Wu
Explore the unknown – The value of basic research
Angew. Chem. Int. Ed. **58**(50), 17882–17884, 2019, ***invited***

K. Kohse-Höinghaus, H. Fuchs, T. Zhang, Y. Wu
Das Unbekannte erforschen – der Wert der Grundlagenforschung
Angew. Chem. **131**(50), 18048–18050, 2019, ***invited***

47) K. Kohse-Höinghaus
Verbrennung mit Zukunft
Bunsen-Magazin **6/2020**, 134-142 (2020)

48) K. Kohse-Höinghaus
Editorial: A dedication to Professor Ronald K. Hanson
Combust. Flame **224**, 1 (2021)

49)

Patents

1) H.W. Biermann, K. Kohse-Höinghaus, F. Michels, F. Stuhl, C. Zetzsch
Fluoreszenzgerät für den gleichzeitigen Nachweis von Stickstoffmonoxid und Schwefeldioxid
Patentschrift P26 39 946.2, Deutsches Patentamt, München, 4.9.1976

2) K. Kohse-Höinghaus, N. Bahlawane, P.A. Premkumar
New strategy for the CVD of metals

Conference presentations

1) K. Kohse-Höinghaus, F. Stuhl
9th International Conference on Photochemistry, Cambridge, UK, 08/1978, ***poster***
2) K. Kohse-Höinghaus, W. Perc, Th. Just
Hauptversammlung der Deutschen Bunsengesellschaft, 05/1983, ***lecture***

3) K. Kohse-Höinghaus, Th. Just
Gordon Research Conference on Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1983, ***poster***

4) K. Kohse-Höinghaus, R. Heidenreich, Th. Just
20th International Combustion Symposium, Ann Arbor, MI, USA, 08/1984, ***lecture***

5) K. Kohse-Höinghaus
Gordon Research Conference on Laser Diagnostics in Combustion, New London, NH, USA, 07/1985, ***invited plenary lecture***

6) K. Kohse-Höinghaus
Joint Meeting of the Aerodynamic/Chemistry/Heat Transfer Panels of the International Flame Research Foundation, Stockholm, Sweden, 10/1985, ***lecture***

7) K. Kohse-Höinghaus, Th. Just
Jahrestagung der Deutschen Physikalischen Gesellschaft, Stuttgart, 03/1986, ***lecture***

8) U. Meier, K. Kohse-Höinghaus, Th. Just
9th International Symposium on Gas Kinetics, Bordeaux, France, 07/1986, ***poster***

9) U. Meier, K. Kohse-Höinghaus, J. Bittner, Th. Just
21st International Symposium on Combustion, München, 08/1986, ***poster***

10) K. Kohse-Höinghaus, P. Koczar, Th. Just
21st International Symposium on Combustion, München, 08/1986, ***lecture***

11) K. Kohse-Höinghaus, Th. Just
2nd Workshop on Modelling of Chemical Reaction Systems, Heidelberg, 08/1986, ***lecture***

12) K. Kohse-Höinghaus
Gordon Research Conference on Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1987, ***invited plenary lecture***

13) J. Bittner, A. Jörg, K. Kohse-Höinghaus, U. Meier, Th. Just
23. Symposium für Theoretische Chemie, Waldfischbach, 09/1987, ***poster***

14) K. Kohse-Höinghaus
2.Bundesdeutsche Fachtagung Plasmatechnologie, Bochum, 10/1987, ***invited plenary lecture***

15) K. Kohse-Höinghaus, D. F. Davidson, R. K. Hanson
Western States Section of the Combustion Institute, Spring Technical Meeting, Salt Lake City, UT, USA, 03/1988, ***lecture***

16) A. Jörg, U. Meier, K. Kohse-Höinghaus, Th. Just
10th International Symposium on Gas Kinetics, Swansea, UK, 07/1988, ***poster***

17) K. Kohse-Höinghaus, J. B. Jeffries, R. A. Copeland, G. P. Smith, D. R. Crosley
22nd International Combustion Symposium, Seattle, WA, USA, 08/1988, ***lecture***

18) K. Kohse-Höinghaus, D. F. Davidson, A. Y. Chang, R. K. Hanson
22nd International Combustion Symposium, Seattle, WA, USA, 08/1988, ***poster***

19) J. B. Jeffries, K. Kohse-Höinghaus, G. P. Smith, R. A. Copeland, D. R. Crosley
Gordon Research Conference on Atomic and Molecular Interactions, Plymouth, NH, USA, 08/1988, ***poster***

20) K. Kohse-Höinghaus, D. F. Davidson, A. Y. Chang, R. K. Hanson
Hauptversammlung der Deutschen Bunsengesellschaft, Siegen, 05/1989, ***lecture***

21) R. Tirgrath, A. Lawitzki, K. Kohse-Höinghaus, U. Meier, A. Jörg, Th. Just
Gordon Research Conference on Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1989, ***poster***

22) A. Jörg, U. Meier, K. Kohse-Höinghaus
Gordon Research Conference on Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1989, ***poster***

23) J. Bittner, K. Kohse-Höinghaus, U. Meier, Th. Just
Kolloquium "Grundlagen technischer Verbrennungsvorgänge" der Stiftung Volkswagenwerk, Stuttgart, 10/1989, ***lecture***

24) A. Jörg, U. Meier, K. Kohse-Höinghaus, A. Degli Esposti, H.-J. Werner
Nineth European CARS Workshop, Dijon, France, 03/1990, ***poster***

25) K. Kohse-Höinghaus, U. Meier, B. Attal-Trétout
Nineth European CARS Workshop, Dijon, France, 03/1990, ***poster***

26) K. Kohse-Höinghaus
5th Meeting on Diagnostics for Hermes Testing Facilities, Châtillon, France, 03/1990, ***lecture***

27) K. Kohse-Höinghaus
Nineth European CARS Workshop, Dijon, France, 03/1990, ***invited plenary lecture***

28) A. Jörg, U. Meier, K. Kohse-Höinghaus
XIXth Informal Conference on Photochemistry, Ann Arbor, MI, USA, 06/1990, ***poster***

29) J. Bittner, A. Lawitzki, U. Meier, K. Kohse-Höinghaus
23rd International Symposium on Combustion, Orléans, France, 07/1990, ***poster***

30) A. Jörg, U. Meier, K. Kohse-Höinghaus, A. Degli Esposti, H.-J. Werner
Gordon Research Conference on Atomic and Molecular Interactions, Newport, RI, USA, 07/1990, ***poster***

31) T. Griffin, A. Jörg, U. Meier, K. Kohse-Höinghaus
XIth International Symposium on Gas Kinetics, Assisi, Italy, 09/1990, ***poster***

32) R. Kienle, A. Jörg, K. Kohse-Höinghaus
Tenth European CARS Workshop, Garching, 03/1991, ***poster***

33) K. Kohse-Höinghaus
Gordon Research Conference on Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1991, ***invited plenary lecture***

34) R. Kienle, A. Jörg, K. Kohse-Höinghaus,
COMET XII European Research Conference on Molecular Energy Transfer, Nijmegen, Netherlands, 07/1991, ***poster***

35) K. Kohse-Höinghaus
5th International Symposium on Laser-Aided Plasma Diagnostics, Bad Honnef, 08/1991, ***invited plenary lecture***

36) K. Kohse-Höinghaus
7th Meeting on Diagnostics for Hermes Testing Facilities, Palaiseau, France, 10/1991, ***lecture***

37) I. Plath, U. Meier, K. Kohse-Höinghaus, B. Attal-Trétout
11th European CARS Workshop, Florence, Italy, 03/1992, ***lecture***

38) K. Kohse-Höinghaus
ONERA-DLR-NASA-VKI Advanced Research Workshop on New Trends in Instrumentation for Hypersonic Research, Toulouse, France, 04/1992, ***invited plenary lecture***

39) N. Heberle, J. Heinze, K. Kohse-Höinghaus, U.E. Meier
Gordon Research Conference on Diamond Synthesis by Chemical Vapor Deposition, Plymouth, NH, USA, 06/1992, ***poster***

40) N. Heberle, J. Heinze, K. Kohse-Höinghaus
ADUC Chemiedozententagung, Dresden, 02/1993, ***lecture***

41) K. Kohse-Höinghaus
Third International Symposium on Special Topics in Chemical Propulsion, Scheveningen, Netherlands, 05/1993 ***invited plenary lecture***

42) B. Atakan, V. Jörres, K. Kohse-Höinghaus
Laser Diagnostics for Industrial Processes, Diskussionstagung der Deutschen Bunsengesellschaft, Heidelberg, 06/1993, ***poster***

43) K. Kohse-Höinghaus
Gordon Research Conference on Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1993, ***invited plenary lecture***

44) M.P. Lee, R. Kienle, K. Kohse-Höinghaus
Gordon Research Conference on Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1993, ***poster***

45) B. Atakan, V. Jörres, K. Kohse-Höinghaus
Gordon Research Conference on Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1993, ***poster***

46) K. Kohse-Höinghaus

Twentysecond International Symposium on Free Radicals, Doorwerth, Netherlands, 09/1993, ***invited plenary lecture***

47) J. Heinze, N. Heberle, K. Kohse-Höinghaus
Twentysecond International Symposium on Free Radicals, Doorwerth, Netherlands, 09/1993, ***poster***

48) R. Kienle, M. Lee, K. Kohse-Höinghaus
Euromech Colloquium 309 on Optical Flow Diagnostics, Göttingen, 09/1993, ***lecture***

49) A. Brockhinke, P. Andresen, K. Kohse-Höinghaus
Quantitative one-dimensional single-pulse multi-species concentration and temperature measurement in a turbulent H_2/air diffusion flame
25th Symposium (International) on Combustion, Irvine, CA, USA, 08/1994, ***poster***

50) A. Brockhinke, P. Andresen, K. Kohse-Höinghaus
Double-pulse 1D Raman/Rayleigh measurement for the detection of temporal and spatial structures in a turbulent H_2/air flame
Gordon Research Conference on Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1995, ***poster***

51) A. Brockhinke, P. Andresen, K. Kohse-Höinghaus
Time sequences by one-dimensional single-pulse Rayleigh/Raman scattering in turbulent H_2/air diffusion flames
Euromech Colloquium 340 on Statistical Properties of Turbulent Gaseous Flames, Delft, Netherlands, 08/1995, ***lecture***

52) A. Brockhinke, P. Andresen, K. Kohse-Höinghaus
Quantitative 1D single-pulse multispecies concentration and temperature measurements in hydrogen and methane diffusion flames using Raman/Rayleigh polarization properties
Conference of the German and French Section of the Combustion Institute, Mulhouse, France, 10/1995, ***poster***

53) K. Kohse-Höinghaus
Laser diagnostics in high-temperature reactive flows
Windows-on-Science Colloquium, Wright Patterson Airforce Base, Dayton, OH, USA, 03/1996, ***lecture***

54) U. Bergmann, K. Lummer, B. Atakan, K. Kohse-Höinghaus
The influence of acetone on the temperature and stoichiometry dependence of flame deposition of diamond films
26th Symposium (International) on Combustion, Naples, Italy, 08/1996, ***poster***

55) A. Brockhinke, P. Andresen, K. Kohse-Höinghaus
Contribution to the analysis of temporal and spatial structures near the lift-off region of a turbulent hydrogen diffusion flame
26th Symposium (International) on Combustion, Naples, Italy, 08/1996, ***lecture***

56) U. Bergmann, K. Lummer, B. Atakan, K. Kohse-Höinghaus
Untersuchungen zum Wachstumsmechanismus im Flammen-CVD-Verfahren: Der Einfluß von Aceton auf die Qualität von Diamantschichten
Trinationales D-A-Ch-Kolloquium, Les Diablerets, Switzerland, 09/1996, ***poster***

57) A.G. Löwe, A.T. Hartlieb, W. Kreutner, B. Atakan, K. Kohse-Höinghaus
Gasphasendiagnostik bei der Diamantabscheidung in Acetylen/Sauerstoff-Flammen bei 50 mbar
Trinationales D-A-Ch-Kolloquium, Les Diablerets, Switzerland, 09/1996, ***poster***

58) K. Kohse-Höinghaus
Energy transfer in quantitative combustion diagnostics: does an engineer need physics?
Gordon Research Conference on Molecular Energy Transfer, Ventura, CA, USA, 01/1997, ***invited plenary lecture***

59) A.T. Hartlieb, D. Markus, U. Rahmann, W. Kreutner, K. Kohse-Höinghaus
LIF measurements of OH vibrational energy transfer in a low-pressure flame
Gordon Research Conference on Molecular Energy Transfer, Ventura, CA, USA, 01/1997, ***poster***

60) J. Brand, A.G. Löwe, A.T. Hartlieb, B. Atakan, K. Kohse-Höinghaus
Diamantabscheidung aus Niederdruck-Acetylen/Sauerstoffflammen: Gasphasenuntersuchungen mit laserinduzierter Fluoreszenzspektroskopie und Molekularstrahl-Massenspektrometrie
Jahrestagung der Deutschen Physiker-Gesellschaft, Münster, 03/1997, ***lecture***

61) A.T. Hartlieb, D. Markus, U. Rahmann, W. Kreutner, K. Kohse-Höinghaus
LIF measurements of OH vibrational energy transfer in a low-pressure flame
International Workshop on Molecular Energy Transfer in Small Molecules, Bielefeld, 03/1997, ***lecture***

62) T. Croonenbroek, N. Darabiha, U. Rahmann, J.C. Rolon, K. Kohse-Höinghaus
Experimental validation of OH spectroscopy computed with LASKIN by LIF spectroscopy in counterflow diffusion flames
International Workshop on Molecular Energy Transfer in Small Molecules, Bielefeld, 03/1997, ***lecture***

63) B. Atakan, J. Brand, A.G. Löwe, A.T. Hartlieb, K. Kohse-Höinghaus
In-situ Radikalnachweis bei der Diamantabscheidung aus Niederdruck-Acetylen/ Sauerstoffflammen
96. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Darmstadt, 05/1997, ***poster***

64) A. Brockhinke, P. Andresen, K. Kohse-Höinghaus
Investigation of the flame-stabilization process in turbulent, lifted flames
18. Deutsch-Niederländischer Flammentag "Verbrennung und Feuerungen", Delft, Netherlands, 08/1997, ***poster***

65) A. Brockhinke, A. T. Hartlieb, K. Kohse-Höinghaus, D.R. Crosley
Tunable KrF laser induced fluorescence in a highly sooting flame
Gordon Research Conference on the Physics and Chemistry of Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1997, ***poster***

66) A. Brockhinke, S. Haufe, K. Kohse-Höinghaus
Investigations of the flame-stabilization process in turbulent, lifted flames with different Reynolds numbers
Gordon Research Conference on the Physics and Chemistry of Laser Diagnostics in Combustion, Plymouth, NH, USA, 07/1997, ***poster***

67) B. Atakan, A. T. Hartlieb, J. Brand, A. Lamprecht, W. Eimer, K. Kohse-Höinghaus
Diagnostics in fuel-rich flames
Gordon Research Conference on the Physics and Chemistry of Laser Diagnostics in Combustion,

Plymouth, NH, USA, 07/1997 ***poster***

68) A. Brockhinke, A.T. Hartlieb, K. Kohse-Höinghaus, D.R. Crosley
Tunable KrF laser-induced fluorescence of C_2 in a sooting flame
Western States Section/The Combustion Institute 1997 Fall Meeting, Diamond Bar, CA, USA, 10/1997, ***lecture***

69) K. Kohse-Höinghaus
Feuer-Wärme-Licht: Flammen in der chemischen Forschung
14. Fortbildungs- und Vortragstagung der Fachgruppe Chemieunterricht der GDCh 'Erlebniswelt Experimentalchemie', Bielefeld, 09/1997, ***invited plenary lecture***

70) K. Kohse-Höinghaus
Les possibilités des méthodes optiques et laser pour la caractérisation des flammes
Réunion "Stabilisation des flames" organisée par le Groupement Français de Combustion et le Groupement de Recherche "Combustion Propre"; Ecole Centrale, Paris, France, 10/1997, ***invited plenary lecture***

71) B.-L. Marg, A. Brockhinke, K. Kohse-Höinghaus, W. Eimer
Fluoreszenzlebenszeit von DNA-Molekülen unterschiedlicher Konformation
DPG Frühjahrstagung Fachverband Chemische Physik / Biologische Systeme, Bayreuth, 03/1998, ***lecture***

72) A. Brockhinke, D.R. Crosley, K. Kohse-Höinghaus
Quantitativer Nachweis reaktiver Spezies in Flammen durch orts-, spektral- und zeitaufgelöste LIF
97. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Münster, 05/1998, ***poster***

73) B. Atakan, A.T. Hartlieb, J. Brand, K. Kohse-Höinghaus
Untersuchung der Reaktionspfade brennstoffreicher Propenflammen bezüglich der Bildung von C_6-Spezies
97. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Münster, 05/1998, ***lecture***

74) B.-L. Marg, A. Brockhinke, K. Kohse-Höinghaus, W. Eimer
Zeitaufgelöste LIF-Messungen an DNA-Oligonukleotiden unterschiedlicher Konformation
97. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Münster, 05/1998, ***poster***

75) A. Brockhinke, M. Wind, U. Rahmann, J. C. Rolon, K. Kohse-Höinghaus
Quantitative minor species detection and OH energy transfer studies in a counterflow diffusion flame by ps-LIF
Sixième Ecole de Combustion, Centre du CAES du CNRS, Saint Pierre d'Oléron, France, 05/1998 ***poster***

76) A.T. Hartlieb, B. Atakan, A. Brockhinke, K. Kohse-Höinghaus
Temperature and concentration measurements in fuel-rich premixed propene flames using laser spectroscopy
27th International Symposium on Combustion, Boulder, CO, USA, 08/1998, ***poster***

77) A. Brockhinke, S. Haufe, K. Kohse-Höinghaus
Structural properties of lifted hydrogen jet flames measured by laser spectroscopic techniques
27th International Symposium on Combustion, Boulder, CO, USA, 08/1998, ***poster***

78) A. Brockhinke, M. Wind, U. Rahmann, J. C. Rolon, K. Kohse-Höinghaus
Quantitative OH radical and H atom measurements by ps-LIF in a counterflow diffusion flame interacting with a vortex
27th International Symposium on Combustion Boulder, CO, USA, 08/1998, ***poster***

79) K. Kohse-Höinghaus
Novel spectroscopic approaches in complex chemical reaction systems: needs and challenges for pattern recognition techniques
216th ACS National Meeting, Boston, MA, USA, 08/1998, ***invited plenary lecture***

80) B. Atakan, A.G. Löwe, K. Kohse-Höinghaus
Diamantabscheidung in Flammen: Experiment und Modellierung
Kolloquium im trinationalen DACH-Schwerpunkt "Synthese superharter Materialien", Giengen/ Brenz, 10/1998, ***lecture***

81) A.G. Löwe, B. Atakan, K. Kohse-Höinghaus
Untersuchungen zum Mechanismus der Diamantabscheidung in Niederdruckflammen
Kolloquium im trinationalen DACH-Schwerpunkt "Synthese superharter Materialien", Giengen/ Brenz, 10/1998, ***poster***

82) K. Kohse-Höinghaus
Investigations of the gas phase mechanism of diamond deposition in combustion CVD
Asian Conference on Chemical Vapor Deposition 1999, Fudan University, Shanghai, China, 05/1999, ***invited plenary lecture***

83) A. Brockhinke, W. Kreutner, U. Rahmann, K. Kohse-Höinghaus
Quantitativer Nachweis von Minoritätenspezies durch zeitaufgelöste laserinduzierte Fluoreszenz
98. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Dortmund, 05/1999, ***poster***

84) A. Brockhinke, R. Plessow, W. Eimer, K. Kohse-Höinghaus
Untersuchung der lokalen Struktur von Proteinen und DNA-Oligonukleotiden mit zeitaufgelöster LIF
98. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Dortmund, 05/1999, ***poster***

85) A.T. Hartlieb, B. Atakan, K. Kohse-Höinghaus
Temperaturmessungen in brennstoffreichen Niederdruckflammen
98. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Dortmund, 05/1999, ***poster***

86) A. Lamprecht, A.T. Hartlieb, B. Atakan, A.G. Löwe, K. Kohse-Höinghaus
An experimental study of premixed low-pressure fuel-rich propene and acetylene flames
Joint Meeting of the British, German and French Sections of the Combustion Institute, Nancy, France, 05/1999, ***poster***

87) B. Atakan, A.T. Hartlieb, A. Lamprecht, K. Kohse-Höinghaus
Laser diagnostics in near sooting low-pressure flames
10th Gordon Research Conference on Laser Diagnostics in Combustion, Il Ciocco, Italy, 20.-25.06.1999, ***poster***

88) A. Brockhinke, W. Kreutner, U. Rahmann, T. Settersten, M. Linne, K. Kohse-Höinghaus
Polarization effects in time-resolved LIF spectra in atmospheric pressure flames
10th Gordon Research Conference on Laser Diagnostics in Combustion, Il Ciocco, Italy, 20.-

25.06.1999, ***poster***

89) A. Brockhinke, A. Bülter, J.C. Rolon, K. Kohse-Höinghaus
Ps-LIF measurements of minor species concentration in a counterflow diffusion flame interacting with a vortex
10th Gordon Research Conference on Laser Diagnostics in Combustion, Il Ciocco, Italy, 20.-25.06.1999, ***poster***

90) B. Atakan, K. Kohse-Höinghaus
Diamantabscheidung in Flammen
D-A-CH Abschlußkolloquium 2000, Neuhofen a.d.Ybbs, Austria, 06.-09.03.2000, ***lecture***

91) B. Atakan, K. Kohse-Höinghaus
Untersuchung des Gasphasenmechanismus bei der Diamantabscheidung aus Flammen
D-A-CH Abschlußkolloquium 2000, Neuhofen a.d.Ybbs, Austria, 06.-09.03.2000, ***lecture***

92) A. G. Löwe, B. Atakan, K. Kohse-Höinghaus
Untersuchungen zum Mechanismus der Diamantabscheidung in Niederdruckflammen
D-A-CH Abschlußkolloquium 2000, Neuhofen a.d.Ybbs, Austria, 06.-09.03.2000, ***poster***

93) A. Brockhinke, A. Bülter, U. Rahmann, A. Schocker, K. Kohse-Höinghaus
Nachweis von radikalischen Spezies in brennstoffreichen Flammen mit laserspektroskopischen Verfahren
99. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Würzburg, 01.-03.06.2000, ***poster***

94) E. Fischer Rivera, B. Atakan, K. Kohse-Höinghaus
Abscheidung von Cobaltoxiden aus $Co(acac)_2$ mit CVD-Verfahren
99. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Würzburg, 01.-03.06.2000, ***poster***

95) A. Bülter, A. Brockhinke, J.C. Rolon, K. Kohse-Höinghaus
ps-LIF measurements of minor species concentration in a counterflow diffusion flame interacting with a vortex
28th International Symposium on Combustion, Edinburgh, UK, 30.07.-04.08.2000, ***poster***

96) A. Schocker, A. Brockhinke, S. Spuler, M.A. Linne, K. Kohse-Höinghaus
Cavity ringdown laser absorption spectroscopy measurements in low-pressure propene and methane flames: Quantitative detection of HCO and OH and $^1CH_2$
28th International Symposium on Combustion, Edinburgh, UK, 30.07.-04.08.2000, ***poster***

97) A. Lamprecht, B. Atakan, K. Kohse-Höinghaus
Fuel-rich flame chemistry in low-pressure cyclopentene flames
28th International Symposium on Combustion, Edinburgh, UK, 30.07.-04.08.2000, ***lecture***

98) R. Herbers, K. Kohse-Höinghaus, M.-L. aus dem Moore, R. Jost
teutolab – das Mitmach- und Experimentierlabor an der Universität Bielefeld
17. Fortbildungs- und Vortragstagung der GDCh-Fachgruppe Chemieunterricht, Köln, 07.-09.09.2000, ***lecture***

99) K. Kohse-Höinghaus
Concentration and temperature measurement in fuel-rich flames
Journée Scientifique de l'ONERA Paris, France, 22.11.2000, ***invited lecture***

100) K. Kohse-Höinghaus
Combustion measurements and modelling in chemically complex situations
The 16th Annual Symposium of the Israeli Section of the Combustion Institute, Tel Aviv, Israel, 28.12.00, ***invited plenary lecture***

101) M. Hofstätter, B. Atakan, K. Kohse-Höinghaus
CVD growth of silicon films at high rates
Thirteenth European Conference on Chemical Vapor Deposition (EURO-CVD), Glyfada, Athens, Greece, 26.-31.08.2001, ***poster***

102) E. Fischer Rivera, B. Atakan, K. Kohse-Höinghaus
CVD deposition of cobaltoxide (Co_3O_4) from $Co(acac)_2$
Thirteenth European Conference on Chemical Vapor Deposition (EURO-CVD), Glyfada, Athens, Greece, 26.-31.08.2001, ***poster***

103) B. Atakan, M. Hofstätter, K. Kohse-Höinghaus
Comparison between computational modelling and experiment for a CVD growth process of silicon films
199th Meeting of The Electrochemical Society, Washington, DC, USA, 25.-30.03.2001, ***lecture***

104) A. Brockhinke, K. Kohse-Höinghaus
Energy transfer in combustion diagnostics: experiment and modelling
Faraday Discussion 119: Combustion chemistry: elementary reactions to macroscopic processes, Leeds, UK, 09.-11.07.2001, ***invited plenary lecture***

105) A. Brockhinke, A. Bülter, U. Rahmann, U. Lenhard, K. Kohse-Höinghaus
Energietransfer-Messungen an kleinen Radikalen mittels ps-laserinduzierter Fluoreszenz
100. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Stuttgart, 24.-26.05.2001, ***poster***

106) A. Brockhinke, A. Schocker, K. Kohse-Höinghaus
Detektion radikalischer Spezies in brennstoffreichen Flammen mittels Cavity Ring-Down Spektroskopie
100. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Stuttgart, 24.-26.05.2001, ***poster***

107) H. Böhm, N. Bokermann, P. Gutsche, K. Kohse-Höinghaus
Modellierung von Pentan- und Cyclopenten-Flammen
100. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Stuttgart, 24.-26.05.2001, ***poster***

108) K. Kohse-Höinghaus
Das teutolab: eine chemische Verbindung zwischen Schule und Uni
Conference on "Public Understanding of Science", ZiF Center for Interdisciplinary Research, Bielefeld, 07.-08.06.2001, ***invited lecture***

109) A. Brockhinke, A. Bülter, U. Rahmann, U. Lenhard, K. Kohse-Höinghaus
Experimental and numerical study of energy transffer processes in small radicals
11th Gordon Research Conference on Laser Diagnostics for Combustion Research, Mount Holyoke College, South Hadley, MA, USA, 01.-06.07.2001, ***poster***

110) M. Hofstätter, B. Atakan, K. Kohse-Höinghaus
CVD growth of silicon films at high rates
13th European Conference on Chemical Vapor Deposition, Athens, Greece, 26.-31.08.2001, ***poster***

111) E. Fischer Rivera, B. Atakan, K. Kohse-Höinghaus
CVD deposition of cobalt oxide (Co_3O_4) from $Co(acac)_2$
13th European Conference on Chemical Vapor Deposition, Athens, Greece, 26.-31.08.2001, ***poster***

112) K. Kohse-Höinghaus
Contributions to the investigation of reaction pathways in fuel-rich flames
77th International Discussion Meeting "Formation and Degradation of Hydrocarbons in High-Temperature Reactions", Deutsche Bunsen-Gesellschaft für Physikalische Chemie, Bad Herrenalb, 07.-11.10.2001, ***invited plenary lecture***

113) A. Brockhinke, A. Bülter, U. Rahmann, U. Lenhard, K. Kohse-Höinghaus
Untersuchung zum Energietransfer in kleinen Radikalen mittels ps-laserinduzierter Fluoreszene
101. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Potsdam, 09.-11.05.2002, ***poster***

114) E. Fischer Rivera, T. Haase, B. Atakan, K. Kohse-Höinghaus
Untersuchungen zum Zerfall von $Co(acac)_2$ und zur Abscheidung von katalytisch aktiven Co_3O_4-Schichten aus der Gasphase (CVD)
101. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Potsdam, 09.-11.05.2002, ***poster***

115) A. Schocker, A. Brockhinke, K. Kohse-Höinghaus
Nachweis von radikalischen Spezies in Flammen mittels Cavity Ring-Down Spektroskopie und laserinduzierter Fluoreszenz
101. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Potsdam, 09.-11.05.2002, ***poster***

116) M. Kamphus, T. Kasper, N.-N. Liu, A. Lamprecht, B. Atakan, K. Kohse-Höinghaus
Mass spectrometric investigation of fuel rich flame chemistry
29th International Symposium on Combustion, Sapporo, Japan, 21.-26.07.2002, ***poster***

117) A. Brockhinke, A. Bülter, U. Rahmann, U. Lenhard, K. Kohse-Höinghaus
Study of energy transfer processes as prerequisite for quantitative LIF measurements
29th International Symposium on Combustion, Sapporo, Japan, 21.-26.07.2002, ***poster*)**

118) A. Brandt, J. Möller, K. Kohse-Höinghaus
Das Chemieexperimentierlabor *teutolab* als außerschulischer Lernort. Ergebnisse einer Evaluationsstudie
Jahrestagung der Gesellschaft für Didaktik der Chemie und Physik, Flensburg, 23.-26.09.2002, ***lecture***

119) S. Blittersdorf, N. Bahlawane, K. Kohse-Höinghaus, B. Atakan, J. Müller, D. Neuschütz, J.M. Schneider
CVD-Abscheidung von Aluminiumoxid
GDCh-Vortragstagung der Fachgruppe Festkörperchemie und Materialforschung, Dresden, 24.-26.09.2002, ***poster***

120) N. Bahlawane, S. Blittersdorf, B. Atakan, K. Kohse-Höinghaus, J. Müller
Structural investigation of alumina thin films deposited by chemical vapor deposition
2002 MRS Fall Meeting, Boston, MA, USA, 02.-06.12.2002, ***lecture***

121) N. Bahlawane, B. Atakan, K. Kohse-Höinghaus
Flame spray deposition of aluminum oxide using sol-gel feedstock

2002 MRS Fall Meeting, Boston, MA, USA, 02.-06.12.2002, ***lecture***

122) T. Kasper, M. Kamphus, N.-N. Liu, A. Lamprecht, B. Atkan, K. Kohse-Höinghaus
Mass spectrometric investigation of fuel-rich flame chemistry
Gordon Research Conference on Hydrocarbon Resources, Ventura, CA, USA, 12.-17.01.2003, ***poster, poster award***

123) M. Kamphus, T. Kasper, N.-N. Liu, A. Lamprecht, B. Atakan, K. Kohse-Höinghaus
Mass spectrometric investigation of fuel-rich flames
Workshop "Gas Phase Formation and Destruction of Carbon-Based Nanoparticles", Saint-Jacut-de-la-Mer, France, 28.-30.01.2003, ***lecture***

124) R. Plessow, K. Lotte, D. Diekmann, K. Kohse-Höinghaus, A. Brockhinke
Analysis of conformational dynamics in the NPY signal peptide
2nd International Workshop of the SFB 549 on Signalling from the ECM to the Nucleus in Animals and Plants, ZiF, Bielefeld, 20.-21.02. 2003, ***poster***

125) K.V. Lotte, R. Plessow, A. Brockhinke, K. Kohse-Hoeinghaus
Detection of conformational changes in redox-state sensitive proteins and their mutants using fluorescence spectroscopy
47th Annual Meeting of the Biophysical Society, San Antonio, TX, USA, 01.-05.03.2003, ***poster***

126) B. Atakan, E. Fischer Rivera, K. Kohse-Höinghaus
Chemical vapor deposition of Co_3O_4 on honeycomb substrates for catalytic applications
Fourteenth European Conference (EURO-CVD) and 203rd Meeting of the ECS on Chemical Vapor Deposition, Paris, France, 27.04.-02.05. 2003, ***invited keynote lecture***

127) N. Bahlawane, S. Blittersdorf, K. Kohse-Höinghaus, B. Atakan, J. Müller
Investigation of chemical vapor deposition processes to perform dense α-alumina coating on superalloys
Fourteenth European Conference (EURO-CVD) and 203rd Meeting of the ECS on Chemical Vapor Deposition, Paris, France, 27.04.-02.05. 2003, ***poster***

128) J. Müller, K. Kohse-Höinghaus, B. Atakan, J. M. Schneider
Evaluation of TiN and HfN as interlayers between alumina diffusion barrier coatings and gas turbine blade base material
Fourteenth European Conference (EURO-CVD) and 203rd Meeting of the ECS on Chemical Vapor Deposition, Paris, France, 27.04.-02.05. 2003, ***lecture***

129) Th. Haase, B. Atakan, K. Kohse-Höinghaus, H. Lang
Investigations on silver Chemical Vapour Deposition systems
102. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kiel, 29.-31.05.2003, ***poster***

130) M. Kamphus, T. Kasper, K. Kohse-Höinghaus, B. Atakan
Fuel-rich flame investigations by mass spectrometry
102. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kiel, 29.-31.05.2003, ***poster***

131) A. Brockhinke, A. Bülter, U. Rahmann, U. Lenhard, K. Kohse-Höinghaus
Untersuchung stoßinduzierter Prozesse beim LIF-Nachweis von NO, CH und OH
102. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kiel, 29.-31.05.2003, ***poster***

132) S. Blittersdorf, N. Bahlawane, K. Kohse-Höinghaus, B. Atakan
Untersuchung der CVD-Reaktionen bei der Bildung von α-Al_2O_3 als Diffusionsbarriere auf Superlegierungen
102. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kiel, 29.-31.05.2003, ***lecture***

133) A. Brockhinke, A. Bülter, U. Rahmann, U. Lenhard, K. Kohse-Höinghaus
Energy transfer processes in CH and NO: Experiment and simulation
12th Gordon Research Conference on Laser Diagnostics for Combustion Research, Oxford, UK, 17.-22.08.2003, ***poster***

134) M. Kamphus, K. Kohse-Höinghaus
Detection of PAH with resonance enhanced multi-photon ionization
12th Gordon Research Conference on Laser Diagnostics for Combustion Research, Oxford, UK, 17.-22.08.2003, ***poster***

135) K. Kohse-Höinghaus
Heiße Chemie – Verbrennung und Materialabscheidung aus der Gasphase
GDCh-Jahrestagung Chemie, München, 06.-11.10.2003, ***invited lecture***

136) A. Bülter, U. Lenhard, U. Rahmann, K. Kohse-Höinghaus, A. Brockhinke
LASKIN: Efficient simulation of spectra affected by energy transfer
LACEA 2004, Laser Applications to Chemical and Environmental Analysis, Annapolis, MD, USA, 09.-11.02.2004, ***poster***

137) A. Bülter, U. Lenhard, M. Letzgus, U. Rahmann, K. Kohse-Höinghaus, A. Brockhinke
LASKIN: A tool for the simulation of fluorescence spectra affected by energy transfer
103. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Dresden, 20.-22.05.2004, ***poster***

138) Th. Haase, N. Bahlawane, K. Kohse-Höinghaus, H. Lang
Untersuchungen des CVD-Abscheidungsprozesses dünner Silberschichten
103. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Dresden, 20.-22.05.2004, ***poster***

139) M. Kamphus, K. Kohse-Höinghaus
REMPI-Messungen zur Analyse brennstoffabhängiger Bildungswege kleiner PAH
Untersuchungen des CVD-Abscheidungsprozesses dünner Silberschichten
103. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Dresden, 20.-22.05.2004, ***lecture***

140) N. Bahlawane, K. Kohse-Höinghaus
Chemical vapor deposition of polycrystalline Co_3O_4 and characterization of its efficiency as catalyst for hydrocarbon cracking
103. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Dresden, 20.-22.05.2004, ***lecture***

141) A. Schocker, M. Kamphus, K. Kohse-Höinghaus, A. Brockhinke
Cavity Ring-down Spektroskopie zur quantitativen Bestimmung des ASE-Anteils von schmalbandigen Lasern
103. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Dresden, 20.-22.05.2004, ***poster***

142) K. Kohse-Höinghaus
Combustion at the focus: laser diagnostics and control
30th International Symposium on Combustion, Chicago, IL, USA, 25.-30.07.2004, ***invited plenary lecture***

143) T. Kasper, M. Letzgus, K. Kohse-Höinghaus, C.A. Taatjes, A. McIlroy, T.A. Cool, J. Wang, M.E. Law, A. Morel, P.R. Westmoreland
Investigation of alcohol flames by mass spectrometry
30th International Symposium on Combustion, Chicago, IL, USA, 25.-30.07.2004, ***poster***

144) A. Schocker, K. Kohse-Höinghaus, A. Brockhinke
Systematic study of fuel-rich propene flames by cavity ring-down spectroscopy
30th International Symposium on Combustion, Chicago, IL, USA, 25.-30.07.2004, ***poster***

145) M. Kamphus, K. Kohse-Höinghaus, M. Braun-Unkhoff, P. Frank
A REMPI mass spectrometric and modeling study of small PAH in premixed fuel-rich low-pressure flames
30th International Symposium on Combustion, Chicago, IL, USA, 25.-30.07.2004, ***poster***

146) A. Brockhinke, A. Bülter, K. Kohse-Höinghaus, U. Lenhard, M. Letzgus
Simulation of spectra affected by energy transfer as prerequisite for quantitative LIF measurements
30th International Symposium on Combustion, Chicago, IL, USA, 25.-30.07.2004, ***poster***

147) K. Kohse-Höinghaus
Investigations of high-temperature gas phase systems
18th International Symposium on Gas Kinetics, Bristol, UK, 07.-12.08.2004, ***invited plenary lecture***

148) K. Kohse-Höinghaus
Zuschauen bei der chemischen Reaktion? Laserdiagnostik mit kurzen Lichtpulsen
123. Versammlung der Gesellschaft Deutscher Naturforscher und Ärzte, Passau, 18.-21.09.2004, ***invited plenary lecture***

149) T.A. Cool, J. Wang, C.A. Taatjes, N. Hansen, S.J. Klippenstein, A. McIlroy, T. Kasper, K. Kohse-Höinghaus, M.E. Law, P.R. Westmoreland
Synchrotron photoionization molecular-beam mass spectrometric characterization of intermediates in rich flames
Gordon Research Conference on Molecular Energy Transfer, Santa Ynez Valley Marriott, Buellton, CA, USA, 09.-14.01.2005, ***poster***

150) A. Schocker, K. Kohse-Höinghaus, A. Brockhinke
Cavity ring-down spectroscopy: A highly sensitive spectroscopic tool for the investigation of high-temperature processes
85th Annual Meeting of the Chemical Society of Japan, Kanagawa University, Yokohama, Japan, 26.-29.03.2005, ***lecture***

151) J. Feldmann, N. Bahlawane, K. Kohse-Höinghaus
Dampfphasen-Abscheidung von $Zn_xCo_{3-x}O_4$-Filmen und Charakterisierung ihrer katalytischen Eigenschaften
104. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Frankfurt/Main, 05.-07.05.2005, ***poster***

152) Th. Haase, N. Bahlawane, K. Kohse-Höinghaus, H. Lang
Untersuchungen zur Auswahl geeigneter Precursoren für die Abscheidung dünner Silberschichten
104. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Frankfurt/Main, 05.-07.05.2005, ***poster***

153) T. Kasper, M. Letzgus, K. Kohse-Höinghaus, C.A. Taatjes, N. Hansen, J. Wang, T.A. Cool, A. Morel, M. Law, P.A. Westmoreland
Massenspektrometrische Untersuchungen an Alkoholflammen
104. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Frankfurt/Main, 05.-07.05.2005, ***poster***

154) M. Letzgus, A. Bülter, U. Lenhard, U. Rahmann, K. Kohse-Höinghaus, A. Brockhinke
Energietransferprozesse in laserangeregten kleinen Molekülen: Modellierung und Experiment
104. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Frankfurt/Main, 05.-07.05.2005, ***lecture***

155) A. Schocker, M. Köhler, K. Kohse-Höinghaus, A. Brockhinke
Systematische Untersuchung brennstoffreicher Propen-Flammen mittels Cavity Ring-down Spektroskopie
104. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Frankfurt/Main, 05.-07.05.2005, ***poster***

156) K. Kohse-Höinghaus
The flame chemistry preceding PAH formation: quantitative detection of intermediate species
Interstellar Reactions: from the Gas phase to Solids, Dresden, 05.-09.06.2005, ***invited plenary lecture***

157) R. Herbers, K. Kohse-Höinghaus
Kontinuität und Nachhaltigkeit am Best Practice-Beispiel teutolab
Expertentagung "Zupackend Lernen. Was will Hands-on-Science?" im Wissenschaftssommer 2005, Berlin, 20.-21.06.2005, ***invited lecture***

158) A. Jakob, P. Djiele, Y. Shen, B. Walfort, T. Haase, K. Kohse-Höinghaus, H. Lang
Precursor development for metal film deposition by the CVD process
13. Tagung Festkörperanalytik, Chemnitz, 25.-28.06.2005, ***poster***

159) B. Atakan, K. Kohse-Höinghaus
Fuel-rich flame chemistry: Experimental studies applying mass spectrometry and laser spectroscopy
5th International Seminar on Flame Structure, Novosibirsk, Russia, 11.-14.07.2005, ***invited lecture***

160) M. Letzgus, A. Bülter, U. Lenhard, U. Rahmann, K.Kohse-Höinghaus, A. Brockhinke
LASKIN: Efficient simulation of spectra affected by energy transfer
13th Gordon Research Conference on Laser Diagnostics for Combustion Research, Mount Holyoke College, South Hadley, MA, USA, 31.07.- 05.08.2005, ***poster***

161) M. Letzgus, S. Rinne, U. Lenhard, A. Bülter, K. Kohse-Höinghaus, A. Brockhinke,
Measurement of picosecond time-resolved LIF spectra of small radicals affected by energy transfer
13th Gordon Research Conference on Laser Diagnostics for Combustion Research, Mount Holyoke College, South Hadley, MA, USA, 31.07.- 05.08.2005, ***poster***

162) M. Köhler, A. Schocker, S. Rinne, K. Kohse-Höinghaus, A. Brockhinke
Systematic studies of low-pressure flames using CRDS and LIF

13th Gordon Research Conference on Laser Diagnostics for Combustion Research, Mount Holyoke College, South Hadley, MA, USA, 31.07.- 05.08.2005, ***poster***

163) J. Feldmann, N. Bahlawane, K. Kohse-Höinghaus
Chemical vapor deposition of $Zn_xCo_{3-x}O_4$ films and their characterisation
EUROCVD-FIFTEEN, Bochum, 04.-09.09.2005, ***poster***

164) Th. Haase, N. Bahlawane, H. Lang, K. Kohse-Höinghaus
Mass spectrometry as criteria for the selection of CVD precursors
EUROCVD-FIFTEEN, Bochum, 04.-09.09.2005, ***poster***

165) N. Bahlawane, K. Kohse-Höinghaus, R. G. Gordon
ALD/CVD processes for the preparation of noble metal free monolithic catalysts
EUROCVD-FIFTEEN, Bochum, 04.-09.09.2005, ***poster***

166) H. Lang, A. Jakob, H. Schmidt, P. Djiele, B. Walfort, T. Haase, N. Bahlawane, K. Kohse-Höinghaus
Phosphane and phosphite silver(I) complexes as CVD precursors
EUROCVD-FIFTEEN, Bochum, 04.-09.09.2005, ***poster***

167) K. Kohse-Höinghaus
Light and fire: laser diagnostics for combustion chemistry
19th Colloquium on High Resolution Molecular Spectroscopy, Salamanca, Spain, 11.-16.09.2005, ***invited plenary lecture***

168) K. Kohse-Höinghaus
Informal science education in the teutolab – was Hänschen nicht lernt, lernt Hans nimmermehr
International Workshop "Science is primary" im Rahmen des EU-Projekts *SciencEduc*, Berlin-Brandenburgische Akademie der Wissenschaften, Berlin, 27.-28.09.2005, ***invited lecture***

169) N. Hansen, C.A. Taatjes, S.J. Klippenstein, J.A. Miller, J. Wang, T.A. Cool, M.E. Law, P.R. Westmoreland, T. Kasper, K. Kohse-Höinghaus, M. Ahmed, D.S. Peterka
Synchrotron photoionization mass spectrometry for investigation of combustion chemistry
Advanced Light Source Users' Meeting, Berkeley, USA, 20.-22.10.2005, ***lecture***

170) N. Hansen, S.J. Klippenstein, C.A. Taatjes, F. Qi, M.E. Law, P.R. Westmoreland, T. Kasper, K. Kohse-Höinghaus, J. Wang, T.A. Cool
Synchrotron photoionization molecular-beam mass spectrometric characterization of hydrocarbon radicals in fuel-rich flames
4th Gordon Research Conference on Photoions, Photoionization and Photodetachment, Santa Ynez Valley Marriott, Buellton, CA, USA, 29.01.-03.02.2006, ***poster; selected as hot topic***

171) K. Kohse-Höinghaus
Zuschauen bei der chemischen Reaktion: Laserdiagnostik mit kurzen Lichtpulsen
495. Sitzung der Klasse für Naturwissenschaften und Medizin, Nordrhein-Westfälische Akademie der Wissenschaften und Künste, Düsseldorf, 01.02.2006, ***invited lecture***

172) P. Oßwald, T. Kasper, K. Kohse-Höinghaus, J. Wang, T. Cool, N. Hansen, C. Taatjes, S. Gon, P. Westmoreland, F. Qi
Combustion of oxygenated fuels – comparison of isomeric fuels
39. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Mainz, 05.-08.03.2006, ***poster, poster award***

173) U. Struckmeier, T. Kasper, P. Oßwald, K. Kohse-Höinghaus, N. Hansen, C. Taatjes, J.

Wang, T. Cool, S. Gon, P. Westmoreland
Ethanol addition to fuel-rich propene flames studied by molecular-beam mass spectrometry
39. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie Mainz, 05.-08.03.2006, ***poster***

174) M. Köhler, S. Rinne, A. Schocker, K. Kohse-Höinghaus, A. Brockhinke
Quantitative trace gas detection in flames close to the soot formation threshold by quasi-simultaneous CRDS and LIF spectroscopy
105. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Erlangen, 25.-27.05.2006, ***poster***

175) M. Letzgus, S. Rinne, A. Brockhinke, K. Kohse-Höinghaus
Mesurement of picosecond time-resolved LIF spectra of C_2 affected by energy transfer
105. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Erlangen, 25.-27.05.2006, ***poster***

176) P. Oßwald, T. Kasper, K. Kohse-Höinghaus, J. Wang, T. Cool, N. Hansen, C. Taatjes, S. Gon, P. Westmoreland, F. Qi
Isomer-selective molecular-beam mass spectrometric investigation of flames burning oxygenated fuels
105. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Erlangen, 25.-27.05.2006, ***poster***

177) F. Reilmann, Th. Haase, N. Bahlawane, K. Kohse-Höinghaus, S. Fahrenholz, S. Schulz
Mass spectrometry as a method for optimization of CVD processes
105. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Erlangen, 25.-27.05.2006, ***poster***

178) C. Schlipf, K. Onwuka, A. Premkumar, J. Feldmann, K. Kohse-Höinghaus, N. Bahlawane
Catalytic fuel reforming over cobalt catalysts
105. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Erlangen, 25.-27.05.2006, ***poster***

179) U. Struckmeier, T. Kasper, P. Oßwald, K. Kohse-Höinghaus, N. Hansen, C. Taatjes, J. Wang, T. Cool, S. Gon, P. Westmoreland
Combustion chemistry of ethanol-blended propene flames
105. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Erlangen, 25.-27.05.2006, ***poster***

180) U. Struckmeier, M. Köhler, N. Bahlawane, K. Kohse-Höinghaus
Deposition of alumina thin films for the protection of thermocouples in flame conditions and test of their performance
105. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Erlangen, 25.-27.05.2006, ***poster***

181) M. Braun-Unkhoff, M. Kamphus, K. Kohse-Höinghaus
Modelling small PAH in premixed fuel-rich propene and cyclopentene low-pressure flames
31st International Symposium on Combustion, Heidelberg, 06.-11.08.2006, ***poster***

182) P. Oßwald, T. Kasper, K. Kohse-Höinghaus, J. Wang, T. A. Cool, N. Hansen, P. R. Westmoreland
Studies of the chemistry of fuel-rich methyl acetate and ethyl formate flames with photoionization mass spectrometry
31st International Symposium on Combustion, Heidelberg, 06.-11.08.2006, ***poster***

183) T. Kasper, P. Oßwald, K. Kohse-Höinghaus, C.A. Taatjes, J. Wang, T.A. Cool, M.E. Law, A. Morel, P.R. Westmoreland
Isomeric propanol flames investigated by mass spectrometry
31st International Symposium on Combustion, Heidelberg, 06.-11.08.2006, ***poster***

184) M. Letzgus, A. Brockhinke, U. Lenhard, A. Bülter, K. Kohse-Höinghaus
Measurement of energy transfer processes in small radicals in combustion environments
31st International Symposium on Combustion, Heidelberg, 06.-11.08.2006, ***poster***

185) M. Letzgus, K. Kohse-Höinghaus, A. Brockhinke
LASKINv2: Simulation of spectra affected by saturation and energy transfer effects
31st International Symposium on Combustion, Heidelberg, 06.-11.08.2006, ***poster***

186) U. Struckmeier, N. Bahlawane, P. Oßwald, T. Kasper, K. Kohse-Höinghaus, T. Cool, N. Hansen
Performance of CVD-made non-catalytic coatings for thermocouples in flame temperature measurements
31st International Symposium on Combustion, Heidelberg, 06.-11.08.2006, ***poster***

187) B. Yang, Y.Y. Li, L.W. Wei, J. Wang, Z.Y. Tian, F. Qi, P. Oßwald, K. Kohse-Höinghaus
Identification of combustion intermediates in butanol flames
31st International Symposium on Combustion, Heidelberg, 06.-11.08.2006, ***poster***

188) M. Köhler, S. Rinne, K. Kohse-Höinghaus, A. Brockhinke
Quantitative CH and C_2 profiles in low-pressure flames: LIF and CRDS measurements compared with model calculations
31st International Symposium on Combustion, Heidelberg, 06.-11.08.2006, ***poster***

189) P. Oßwald, U. Struckmeier, T. Kasper, K. Kohse-Höinghaus, N. Hansen, C. A. Taatjes, J. Wang, T. Cool, S. Gon, P. R. Westmoreland
Experimental study of premixed propene/ethanol fuel blends
31st International Symposium on Combustion, Heidelberg, 06.-11.08.2006, ***poster***

190) N. Bahlawane, A. Premkumar, K. Fehling, K. Kohse-Höinghaus
Gas phase synthesis of metal oxide monolithic catalysts for hydrocarbon deep oxidation
9th International Symposium: Scientific Bases for the Preparation of Heterogeneous Catalysts, Louvain-la-Neuve, Belgium, 10.-14.09.2006, ***poster***

191) N. Hansen, M.E. Law, P. Oßwald, K. Kohse-Höinghaus, J. Wang, T.A. Cool, P.R. Westmoreland
Combustion Chemistry of oxygenated fuels studied by synchrotron photoionization mass spectrometry
Advanced Light Source Users' Meeting, Berkeley, CA, USA, 9.-11.10.2006, ***poster***

192) N. Bahlawane, P. A. Premkumar, K. Onwuka, K. Kohse-Höinghaus, G. Reiss
Self-catalyzed chemical vapor deposition method for the growth of device-quality metal thin films
Materials and Structures for Advanced Micro- and Nanoelectronics, Bruges, Belgium, 04.-07.03.2007, ***poster***

193) L.-C. Salameh, U. Struckmeier, P. Oßwald, K. Kohse-Höinghaus
Massenspektrometrische Untersuchungen von brennstoffreichen Propen/Ethanol-Flammen im Niederdruckbereich
40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, Bremen, 11.-

14.03.2007, ***poster***

194) P. Oßwald, U. Struckmeier, T. Kasper, K. Kohse-Höinghaus, J. Wang, T.A. Cool, N. Hansen, P.R. Westmoreland
Photoionization mass spectrometry of combustion intermediates in methyl acetate and ethyl formate flames
40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, Bremen, 11.-14.03.2007, ***poster***

195) F. Reilmann, L.-C. Salameh, N. Bahlawane, K. Kohse-Höinghaus, S. Fahrenholz, S. Schulz
Mass spectrometric gas phase monitoring of different dual and single-source precursors used in chemical vapour deposition of GaSb
40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, Bremen, 11.-14.03.2007, ***poster***

196) U. Struckmeier, L.-C. Salameh, P. Oßwald, K. Kohse-Höinghaus, J. Wang, T. Cool, N. Hansen, P. Westmoreland
Combustion chemistry of n-butane and iso-butane analyzed by VUV-photoionization mass spectrometry
40. Diskussionstagung der Deutschen Gesellschaft für Massenspektrometrie, Bremen, 11.-14.03.2007, ***poster***

197) K. Kohse-Höinghaus
Schülerlabore: Bildungschance, unfaire Konkurrenz oder vergebene Mühe
Tagung des Stifterverbandes für die Deutsche Wissenschaft Übergang Schule-Hochschule, Bielefeld, 15.-16.03.2007, Bielefeld, ***invited lecture***

198) H. Lang, A. Jakob, T. Haase, K. Kohse-Höinghaus, T. Wächtler, S. Frühauf, S. Schulz, T. Gessner
Novel copper(I) and silver(I) complexes as precursors for chemical vapor deposition and spin-on processes of copper and silver
1st European Conference and Exhibition on integration issues of miniaturized systems, Paris, France, 27.-28.03.2007, ***invited lecture***

199) N. Bahlawane, F. Reilmann, K. Kohse-Höinghaus, S. Fahrenholz, S. Schulz
Mass spectrometric monitoring of the chemical vapor deposition of GaSb using dual and single-source strategies
106. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Graz, Austria, 17.-19.05.2007, ***poster***

200) N. Bahlawane, P.A. Premkumar, K. Onwuka, K. Kohse-Höinghaus
New strategy for the chemical vapor deposition of transition metal films
106. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Graz, Austria, 17.-19.05.2007, ***poster***

201) A. Brockhinke, M. Letzgus, A. Seipel, K. Kohse-Höinghaus
Efficient approaches for a quantitative simulation of chemiluminescence spectra
106. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Graz, Austria, 17.-19.05.2007, ***poster***

202) M. Köhler, P. Nau, K. Kohse-Höinghaus, A. Brockhinke, G. Duxbury, P. Black
Quantenkaskadenlaser für Untersuchungen im IR in der Flammendiagnostik
106. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Graz, Austria, 17.-19.05.2007, ***lecture***

203) M. Letzgus, K. Kohse-Höinghaus, A. Brockhinke
LASKINv2: Full simulation of LIF experiments including collisional processes in ground and excited states
106. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Graz, Austria, 17.-19.05.2007, ***poster***

204) C. Schlipf, I. Ennen, K. Kohse-Höinghaus, N. Bahlawane
Characterization of YSZ thin films prepared by PI-CVD
106. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Graz, Austria, 17.-19.05.2007, ***poster***

205) A. Seipel, M. Letzgus, K. Kohse-Höinghaus, A. Brockhinke
Spectral analysis of chemiluminescence spectra from laminar flames
106. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Graz, Austria, 17.-19.05.2007, ***poster***

206) K. Kohse-Höinghaus
Laser photons, electrons or synchrotron radiation: opportunities for isomer-selective combustion diagnostics
Gordon Research Conference on Laser Diagnostics in Combustion, Oxford, UK, 12.-17.08.2007, ***invited plenary lecture***

207) A. Brockhinke, M. Letzgus, K. Kohse-Höinghaus
LASKINv2: Full simulation of LIF experiments including collisional processes in ground and excited states
Gordon Research Conference on Laser Diagnostics in Combustion, Oxford, UK, 12.-17.08.2007, ***poster***

208) A. Brockhinke, M. Letzgus, A. Seipel, K. Kohse-Höinghaus
Efficient approaches for a quantitative simulation of chemiluminescence spectra
Gordon Research Conference on Laser Diagnostics in Combustion, Oxford, UK, 12.-17.08.2007, ***poster***

209) M. Köhler, K. Kohse-Höinghaus, A. Brockhinke
Investigation of the early stages of soot formation using combined Cavity Ring-down and LIF Spectroscopy
Gordon Research Conference on Laser Diagnostics in Combustion, Oxford, UK, 12.-17.08.2007, ***poster***

210) M. Köhler, P. Nau, K. Kohse-Höinghaus, A. Brockhinke
Improved absorption measurements in flames using a novel 8 µm quantum cascade laser
Gordon Research Conference on Laser Diagnostics in Combustion, Oxford, UK, 12.-17.08.2007, ***poster*)**

211) N. Roth, A. Jakob, U. Siegert, T. Wächtler, S. Schulz, T. Haase, K. Kohse-Höinghaus, T. Gessner, H. Lang
Phosphane copper(I) and silver(I) complexes as first-rate CVD precursors
Sixteenth European Conference on Chemical Vapor Deposition, Den Haag/ Scheveningen, Netherlands, 16.-21.9.2007*,* ***lecture***

212) N. Bahlawane, P.A. Premkumar, K. Onwuka, K. Kohse-Höinghaus
Catalytically enhanced H_2-free CVD of transition metal films using commercially available precursors

Sixteenth European Conference on Chemical Vapor Deposition, Den Haag/ Scheveningen, Netherlands, 16.-21.9.2007, ***lecture***

213) F. Reilmann, L.-C. Salameh, N. Bahlawane, K. Kohse-Höinghaus, S. Fahrenholz, S. Schulz
Gas phase investigation of gallium-, antimony- and gallium antimonide-precursors under CVD conditions
Sixteenth European Conference on Chemical Vapor Deposition, Den Haag/ Scheveningen, Netherlands, 16.-21.9.2007, ***poster***

214) S. Schulz, S. Fahrenholz, D. Schuchmann, A. Kuczkowski, W. Assenmacher, F. Reilmann, N. Bahlawane, K. Kohse-Höinghaus
Single Source Precursor-based HV-MOCVD deposition of binary group 13-antimonide thin films
Sixteenth European Conference on Chemical Vapor Deposition, Den Haag/ Scheveningen, Netherlands, 16.-21.9.2007, ***poster***

215) U. Struckmeier, P. Oßwald, A. Lucassen, K. Kohse-Höinghaus
Mass spectrometric study of highly diluted atmospheric methane flames
41. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Gießen, 02.-05.03.2008, ***poster***

216) A. Lucassen, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, T. Kasper, N. Hansen, T.A. Cool, P.R. Westmoreland
Investigation of combustion chemistry of a laminar morpholine flame by mass spectrometry
41. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Gießen, 02.-05.03.2008, ***poster***

217) P. Oßwald, U. Struckmeier, A. Lucassen, K. Kohse-Höinghaus
In-Situ Massenspektrometrie zur Verbrennungsdiagnostik
41. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Gießen, 02.-05.03.2008, ***poster***

218) F. Reilmann, Z. Tian, X. Hong, F. Qi, N. Bahlawane, K. Kohse-Höinghaus
Massenspektrometrische Prozessgasanalytik von Metallabscheidungen unter Verwendung von Synchrotronstrahlung zur Ionisation
41. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Gießen, 02.-05.03.2008, ***lecture***

219) P. Tchoua Ngamou, V. Vannier, F. Gaillard, N. Bahlawane, K. Kohse-Höinghaus
Chemical vapor deposition of perovskite films [MO_3 (M = Co, Ni, Fe, Cr and Mn)] using the pulsed spray evaporation delivery technique
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***poster***

220) T. Kasper, N. Hansen, J. Wang, B. Yang, T.A. Cool, A. Lucassen, P. Oßwald, K. Kohse-Höinghaus, W. Li, P.R. Westmoreland
MBMS investigation of a laminar tetrahydrofuran flame
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***lecture***

221) M. Köhler, P. Nau, K. Kohse-Höinghaus, A. Brockhinke
Combined Cavity Ring-down Spectroscopy and Laser Induced Fluorescence measurements for quantitative flame diagnostics
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***poster***

222) M. Letzgus, K. Kohse-Höinghaus, A. Brockhinke
Investigation of energy transfer processes in diatomic radicals
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***poster***

223) A. Lucassen, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, T. Kasper, N. Hansen, T.A. Cool
Mass spectrometric analysis of a morpholine flame
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***poster***

224) P. Oßwald, U. Struckmeier, A. Lucassen, K. Kohse-Höinghaus
Lasergestützte in-situ Massenspektrometrie zur Verbrennungsdiagnostik
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***poster***

225) F. Reilmann, Z. Tian, X. Hong, F. Qi, N. Bahlawane, K. Kohse-Höinghaus
Gas phase studies for the CVD of metals involving metal acetylacetonates and alcohols using synchrotron radiation mass spectrometry
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***poster***

226) S. Schwedler, K. Kohse-Höinghaus, R. Brockhinke, A. Brockhinke
Mehrdimensionale statische und zeitaufgelöste Fluoreszenzspektroskopie zur Untersuchung von Proteinen und Farbstoffen
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***poster***

227) A. Seipel, R. Brockhinke, M. Letzgus, K. Kohse-Höinghaus, A. Brockhinke
Applications and fundamentals of chemiluminescence in flames
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***poster***

228) U. Struckmeier, P. Oßwald, A. Lucassen, K. Kohse-Höinghaus
Experimental investigation of highly diluted atmospheric methane flames by molecular beam mass spectrometry
107. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Saarbrücken, 01.-03.05.2008, ***poster***

229) P.R. Westmoreland, T.A. Cool, F.L. Dryer, N. Hansen, T. Kasper, K. Kohse-Höinghaus, M.E. Law, W. Li, P. Oßwald, U. Struckmeier, C.K. Westbrook, B. Yang, J. Wang
Recent results of MBMS for flame characterization and kinetics
Spring Technical Meeting of the Central States Section of the Combustion Institute, Tuscaloosa, AL, USA, 20.-22.04.2008, ***lecture***

230) T. Kasper, U. Struckmeier, P. Oßwald, K. Kohse-Höinghaus
Structure of a stoichiometric propanal flame at low pressure
32nd International Symposium on Combustion, Montreal, Canada, 03.-08.08.2008, ***lecture***

231) A. Lucassen, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, T. Kasper, N. Hansen, T.A. Cool, P.R. Westmoreland
Species identification in a laminar premixed low-pressure flame of morpholine as a model substance for oxygenated nitrogen-containing fuels

32nd International Symposium on Combustion, Montreal, Canada, 03.-08.08.2008, ***lecture***

232) N. Hansen, J.A. Miller, T. Kasper, K. Kohse-Höinghaus, P.R. Westmoreland, J. Wang, T.A. Cool
Benzene formation in premixed fuel-rich 1,3-butadiene flames
32nd International Symposium on Combustion, Montreal, Canada, 03.-08.08.2008, ***lecture***

233) C.K. Westbrook, W.J. Pitz, P.R. Westmoreland, F.L. Dryer, M. Chaos, P. Oßwald, K. Kohse-Höinghaus, T.A. Cool, J. Wang, B. Yang, N. Hansen, T. Kasper
A detailed chemical kinetic reaction mechanism for oxidation of four small alkyl esters in laminar premixed flames
32nd International Symposium on Combustion, Montreal, Canada, 03.-08.08.2008, ***lecture***

234) M. Letzgus, K. Kohse-Höinghaus, A. Brockhinke
Experimental and numerical approaches for quantification of energy transfer processes in small radicals
32nd International Symposium on Combustion, Montreal, Canada, 03.-08.08.2008, ***poster***

235) A. Lucassen, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, T. Kasper, N. Hansen, T.A. Cool, P.R. Westmoreland
Investigation of reaction pathways of nitrogen containing fuels
32nd International Symposium on Combustion, Montreal, Canada, 03.-08.08.2008, ***poster***

236) A. Seipel, R. Brockhinke, M. Letzgus, K. Kohse-Höinghaus, A. Brockhinke
Systematic measurements and simulation of chemiluminescence spectra in flames
32nd International Symposium on Combustion, Montreal, Canada, 03.-08.08.2008, ***poster***

237) U. Struckmeier, P. Oßwald, A. Lucassen, K. Kohse-Höinghaus, T. Wada, N. Peters
Investigation of highly diluted methane flames as an approach to low temperature combustion
32nd International Symposium on Combustion, Montreal, Canada, 03.-08.08.2008, ***poster***

238) K. Kohse-Höinghaus
Experimental and numerical methods to study the flame structure
6th International Seminar on Flame Structure, Brussel, Belgium, 14.-17.9.2008, ***invited lecture***

239) F. Reilmann, N. Bahlawane, K. Kohse-Höinghaus
Understanding CVD processes using EI-RTOF mass spectrometric in situ monitoring
42. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Konstanz, 08.-11.03.2009, ***poster***

240) K. Kohse-Höinghaus
Chemical vapor deposition: dirty chemistry or clean materials?
Conference "From the witches cauldrons in materials science", Goslar, 30.04.2009, ***lecture***

241) N. Hansen, J.A. Miller, P.R. Westmoreland, T. Kasper, K. Kohse-Höinghaus, J. Wang, T.A. Cool
Isomer-specific combustion chemistry in allene and propyne flames
6th U.S. National Combustion Meeting, Ann Arbor, MI, USA, 17.-20.5.2009, ***lecture***

242) P.R. Westmoreland, W. Li, N. Hansen, T. Kasper, T. Cool, A. Lucassen, K. Kohse-Höinghaus
Advances in understanding ethyne chemistry from 45 years of MBMS flame research
6th U.S. National Combustion Meeting, Ann Arbor, MI, USA, 17.-20.5.2009, ***lecture***

243) B. Yang, J. Wang, T.A. Cool, T. Kasper, N. Hansen, K. Kohse-Höinghaus, P.R. Westmoreland
MBMS study of low-pressure premixed $C_5H_{10}O_2$ ethyl and methyl ester flames
6th U.S. National Combustion Meeting, Ann Arbor, MI, USA, 17.-20.5.2009, ***lecture***

244) W. Li, M.E. Law, P.R. Westmoreland, T. Kasper, N. Hansen, J. Wang, T.A. Cool, K. Kohse-Höinghaus
Photoionization MBMS analysis and modeling of a fuel-rich cyclohexane flame
6th U.S. National Combustion Meeting, Ann Arbor, MI, USA, 17.-20.5.2009, ***lecture***

245) A. Lucassen, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, T. Kasper, N. Hansen, N. Labbe, P.R. Westmoreland, T.A. Cool
Investigation of fuel structure effects on the combustion chemistry of nitrogen containing fuels
108. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Köln, 21.-23.05.2009, ***poster***

246) P. Nau, M. Köhler, B. Flottmann, K. Kohse-Höinghaus, A. Brockhinke
Quantitative detection of minor species in flames by CRD- and LIF-spectroscopy
108. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Köln, 21.-23.05.2009, ***poster***

247) P. Tchoua Ngamou, N. Bahlawane, K. Kohse-Höinghaus
Electric and catalytic properties of $LaCoO_3$ ultrathin films prepared by Chemical Vapour Deposition
108. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Köln, 21.-23.05.2009, ***poster***

248) A. Seipel, R. Brockhinke, K. Kohse-Höinghaus, A. Brockhinke
Flame chemiluminescence as a sensor to monitor combustion chemistry
108. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Köln, 21.-23.05.2009, ***poster***

249) U. Struckmeier, N. Bahlawane, P. Oßwald, A. Lucassen, K. Kohse-Höinghaus
Flow reactor studies of methane combustion at atmospheric pressure
108. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Köln, 21.-23.05.2009, ***poster***

250) V. Vannier, P. Tchoua Ngamou, N. Bahlawane, K. Kohse-Höinghaus
Structural and physicochemical properties of iron doped spinel cobalt oxide prepared by PSE-CVD
108. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Köln, 21.-23.05.2009, ***poster***

251) K. Kohse-Höinghaus
Combustion chemistry diagnostics
30th Annual Combustion Research Conference, Warrenton, VA, USA, 26.-29.05.2009, ***invited keynote lecture***

252) A. Brockhinke, P. Nau, M. Köhler, K. Kohse-Höinghaus
Analysis of reaction mechanisms in flames using combined CRD- and LIF-spectroscopy
64th International Symposium on Molecular Spectroscopy (Mini-Symposium: Cavity enhanced spectroscopy), The Ohio State University, USA, 22.-26.06.2009, ***invited lecture***

253) K. Kohse-Höinghaus

Investigating intermediate species chemistry in combustion
30th International Symposium on Free Radicals, Savonlinna, Finland, 25.7.-30.7.2009, ***invited lecture***

254) P. Nau, A. Brockhinke, K. Kohse-Höinghaus
Investigations of fuel nitrogen conversion in laminar flat flames by combined CRD- and LIF-Spectroscopy
Gordon Research Conference on Laser Diagnostics in Combustion, Waterville Valley, NH, USA, 16.-21.08.2009, ***poster***

255) A. Lucassen, P. Oßwald, U. Struckmeier, N. Labbe, T. Kasper, K. Kohse-Hoeinghaus, N. Hansen, W. Li, P.R. Westmoreland, B. Yang, J. Wang, T.A. Cool
Molecular-beam mass spectrometry for flame structure analysis of nitrogen-containing model substances with various structural motifs
18th International Mass Spectrometry Conference, Bremen, 30.08.-04.09.2009, ***poster***

256) F. Reilmann, N. Bahlawane, F. Qi, K. Kohse-Höinghaus
Understanding the decomposition process of $[SbEt_2GatBu_2]_2$ from *in situ* EI- and PI-RTOF mass spectrometric analysis
18th International Mass Spectrometry Conference, Bremen, 30.08.-04.09.2009, ***poster***

257) U. Struckmeier, P. Oßwald, L. Böhling, M. Heusing, K. Kohse-Höinghaus
Sampling probe influences in flame sampling time-of-flight molecular-beam mass spectrometry
18th International Mass Spectrometry Conference, Bremen, 30.08.-04.09.2009, ***lecture***

258) N. Bahlawane, P. Tchoua Ngamou, K. Kohse-Höinghaus
Functional complex oxides: interplay between the structure, electrical properties and surface reactivity
216th Meeting of The Electrochemical Society, Vienna, Austria, 04.-09.10.2009, ***poster***

259) K. Kohse-Höinghaus
Radical reactions in combustion
ACU IV Symposium des SFB 450 (TU Berlin), Berlin, 08.-10.10.2009, ***invited lecture***

260) K. Kohse-Höinghaus
Diagnostics and combustion chemistry
Aerospace Thematic Workshop: Fundamentals of Aerodynamic Flow and Combustion Control by Plasmas, Les Houches, France, 11.-16.10.2009, ***invited lecture***

261) N. Labbe, P.R. Westmoreland, A. Lucassen, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, T. Kasper, N. Hansen, T.A. Cool
Mechanism development for combustion of morpholine
AIChE Annual Meeting, Nashville, TN, USA, 08.-13.11.2009, ***poster & lecture***

262) W. Li, N. Labbe, P.R. Westmoreland, B. Yang, J. Wang, T.A. Cool, T. Kasper, N. Hansen, K. Kohse-Höinghaus
Inferring fuel-rich toluene flame chemistry from photo-ionization MBMS analysis and modeling
AIChE Annual Meeting, Nashville, TN, USA, 08.-13.11.2009, ***lecture***

263) F. Herrmann, U. Struckmeier, K. Kohse-Höinghaus
Studies of low-temperature combustion in a flow reactor at atmospheric pressure
43. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Halle, 07.-10.03.2010, ***poster***

264) K. Moshammer, C. Dreyer, U. Struckmeier, A. Lucassen, K. Kohse-Höinghaus, T. Wada, N. Peters
Low-temperature combustion – a way to reduce emissions? Investigation of a highly diluted methane flame by molecular beam mass spectrometry
43. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie Halle, 07.-10.03.2010, ***poster***

265) A. Lucassen, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, T. Kasper, N. Hansen, N. Labbe, P.R. Westmoreland, T.A. Cool
Analyzing complex combustion chemistry of nitrogenated compounds with TOF-mass-spectrometry
43. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie Halle, 07.-10.03.2010, ***lecture***

266) F. Herrmann, U. Struckmeier, K. Kohse-Höinghaus
Flow reactor studies of low-temperature combustion at atmospheric pressure
109. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Bielefeld, 13.-15.05.2010, ***poster***

267) A. Lucassen, P. Oßwald, U. Struckmeier, K. Kohse-Höinghaus, T. Kasper, N. Hansen, N. Labbe, P.R. Westmoreland, T.A. Cool
Fuel nitrogen conversion in model biofuels
109. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Bielefeld, 13.-15.05.2010, ***poster***

268) P. Nau, K. Kohse-Höinghaus, A. Brockhinke
Highly sensitive cavity ring-down spectroscopy (CRDS) for investigations on fuel nitrogen conversion in laminar flat flames
109. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Bielefeld, 13.-15.05.2010, ***poster***

269) K. Moshammer, C. Dreyer, U. Struckmeier, A. Lucassen, Kohse-Höinghaus, T. Wada, N. Peters
Zero-emission combustion? Investigation of low-temperature methane flames by molecular beam mass spectrometry
109. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Bielefeld, 13.-15.05.2010, ***poster***

270) N. Bahlawane, P.H. Tchoua Ngamou, K. Kohse-Höinghaus
Reactivity and electrical charge transport in doped spinel and perovskite thin and ultrathin films
109. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Bielefeld, 13.-15.05.2010, ***lecture***

271) A. Seipel, T. Kathrotia, U. Riedel, R. Brockhinke, K. Kohse-Höinghaus, A. Brockhinke
Spectrally- and spatially-resolved measurement of chemiluminescence emissions in one-dimensional flames
109. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Bielefeld, 13.-15.05.2010, ***lecture***

272) N. Hansen, T. Kasper, B. Yang, T.A. Cool, W. Li, P.R. Westmoreland, P. Oßwald, K. Kohse-Höinghaus
Fuel-structure dependence of benzene formation processes in premixed flames fueled by C_6H_{12} isomers

33rd International Symposium on Combustion, Bejing, China, 01.-06.08.2010, ***lecture***

273) Z. Wang, A. Lucassen, L. Zhang, J. Yang, K. Kohse-Höinghaus, F. Qi
Experimental and theoretical studies on decomposition of pyrrolidine
33rd International Symposium on Combustion, Bejing, China, 01.-06.08.2010, ***lecture***

274) A. Seipel, R. Brockhinke, K. Kohse-Höinghaus, A. Brockhinke
Monitoring combustion chemistry via chemiluminescence
33rd International Symposium on Combustion, Bejing, China, 01.-06.08.2010, ***poster***

275) W. Li, M.E. Law, P.R. Westmoreland, T. Kasper, N. Hansen, J. Wang, T.A. Cool, K. Kohse-Höinghaus
Competing paths for benzene formation in cyclohexane premixed flat flames
33rd International Symposium on Combustion, Bejing, China, 01.-06.08.2010, ***poster***

276) P. Oßwald, H. Güldenberg, K. Kohse-Höinghaus, B. Yang, T. Yuan, F. Qi
Combustion chemistry of the four butanol isomers – a detailed experimental investigation of their premixed, low pressure flames
1st Annual COST Action CM0901 Meeting, Nancy, France, 15.-17.09.2010, ***poster***

277) A. Seipel, M. Heusing, R. Brockhinke, K. Kohse-Höinghaus, A. Brockhinke
Chemiluminescence emissions in one-dimensional flames: Spectrally- and spatially-resolved measurements
International Discussion Meeting: Combustion Diagnostics – Key to Unterstanding Fundamental Flame Processes, Seeheim, 04.-05.11.2010, ***poster***

278) M. Letzgus, A. Brockhinke, K. Kohse-Höinghaus
Numerical approaches for spectral simulation of small radicals
International Discussion Meeting: Combustion Diagnostics – Key to Unterstanding Fundamental Flame Processes, Seeheim, 04.-05.11.2010, ***poster***

279) K. Kohse-Höinghaus
Biofuel combustion chemistry: pathways towards a new pollutant balance
Saudi-Arabian Section of the Combustion Institute, Inaugurational Meeting, KAUST, Thuwal, Saudi-Arabia, 16.01.2011, ***invited lecture***

280) F. Herrmann, U. Struckmeier, K. Kohse-Höinghaus, B. Jochim, N. Peters, H. Pitsch
Experimental and modeling flow reactor studies of the low-temperature combustion of methane
44. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Dortmund, 27.02.-02.03.2011, ***poster***

281) A. Lucassen, P. Oßwald, N. Labbe, K. Kohse-Höinghaus, P.R. Westmoreland
Combustion behavior of nitrogen containing model biofuels
44. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Dortmund, 27.02.-02.03.2011, ***poster***

282) M. Schenk, P. Oßwald, A. Lucassen, K. Moshammer, F. Herrmann, K. Kohse-Höinghaus
Investigation of combustion chemistry by the powerful combination of molecular beam mass spectrometry and chromatography
44. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Dortmund, 27.02.-02.03.2011, ***poster***

283) B. Yang, T.A. Cool, C.K. Westbrook, N. Hansen, K. Kohse-Höinghaus
The effect of carbon-carbon double bonds of the combustion chemistry of fatty acid esters

7th U.S. National Combustion Meeting, Georgia Institute of Technology, Atlanta, GA, USA, 20.-23.03.2011, ***lecture***

284) W. Li, M.E. Law, P.R. Westmoreland, T. Kasper, N. Hansen, K. Kohse-Höinghaus
Multiple benzene-formation paths in a fuel-rich cyclohexane flame
7th U.S. National Combustion Meeting, Georgia Institute of Technology, Atlanta, GA, USA, 20.-23.03.2011, ***lecture***

285) N. Labbe, A. Lucassen, P.R. Westmoreland, K. Kohse-Höinghaus
Mechanistic insights into nitrogen fate in a morpholine flat flame
7th U.S. National Combustion Meeting, Georgia Institute of Technology, Atlanta, GA, USA, 20.-23.03.2011, ***lecture***

286) S.M. Sarathy, C.K. Westbrook, M. Mehl, W.J. Pitz, K. Yasunaga, H.J. Curran, T. Tsujimura, P. Oßwald, K. Kohse-Höinghaus
The combustion chemistry of butanol isomers
7th U.S. National Combustion Meeting, Georgia Institute of Technology, Atlanta, GA, USA, 20.-23.03.2011, ***lecture***

287) R. Noske, M. Heusing, A. Seipel, K. Kohse-Höinghaus, A. Brockhinke
Using chemiluminescence to monitor and control instationary combustion
110. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Berlin, 02.-04.06.2011, ***poster***

288) K. Moshammer, K. Zhang, F. Herrmann, A. Lucassen, P. Oßwald, M. Schenk, K. Kohse-Höinghaus
Low-temperature combustion – a strategy for cleaner combustion?
110. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Berlin, 02.-04.06.2011, ***poster***

289) A. Lucassen, K. Moshammer, P. Oßwald, M. Schenk, F. Herrmann, K. Kohse-Höinghaus
Analyzing the pollution potential of modern biofuels with TOF mass spectrometry
110. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Berlin, 02.-04.06.2011, ***poster***

290) K. Kohse-Höinghaus
Verbrennungsforschung für die Zukunft - Neue Treibstoffe für Auto und Co.
Ringvorlesung zum Jahr der Chemie 2011, Akademie der Wissenschaften und Georg-August-Universität Göttingen, 07.06.2011, ***invited lecture***

291) K. Kohse-Höinghaus
Teaching Science
36th International Conference on Improving University Teaching, Bielefeld, 19.-22.07.2011, ***invited plenary lecture***

292) P. Nau, A. Lackner, A. Brockhinke, K. Kohse-Höinghaus
Mid-infrared Cavity Ring-down Spectroscopy in flames
Gordon Research Conference on Laser Diagnostics in Combustion, Waterville Valley, NH, USA, 14.-19.08.2011, ***poster***

293) P. Nau, K. Kohse-Höinghaus, A. Brockhinke
MIR absorption spectroscopy in laminar flames with a quantum cascade laser
Gordon Research Conference on Laser Diagnostics in Combustion, Waterville Valley, NH, USA, 14.-19.08.2011, ***poster***

294) K. Kohse-Höinghaus
Needs for combustion measurements
Workshop on Techniques for High-Pressure Combustion, Argonne National Laboratory, IL, USA, 29.08.-01.09.2011, ***invited lecture***

295) K. Kohse-Höinghaus
Verbrennung von Biokraftstoffen
GDCh-Wissenschaftsforum Chemie 2011, Bremen, 04.-07.09.2011, ***invited lecture***

296) P. Oßwald, M. Schenk, K. Kohse-Höinghaus
Combustion of butene isomers – a detailed experimental investigation of their premixed, flat flames
2nd Annual COST Action CM0901 Meeting, Zaragoza, Spain, 07.-09.09.2011, ***lecture***

297) K. Kohse-Höinghaus
Combustion diagnostics meeting new challenges
International Workshop on Frontiers in Synchrotron Tools for Studies of Combustion and Energy Conversion, Shanghai, China, 14.-18.10.2011, ***invited lecture***

298) K. Kohse-Höinghaus
Combustion from a chemist's perspective
CECOST 14th Annual Seminar, Lund, Sweden, 17.-18.11.2011, ***invited lecture***

299) K. Kohse-Höinghaus
Chemistry and combustion – new challenges for an old science
43rd KOSCO Symposium, Gyeongju, Korea, 01.-02.12.2011, ***invited lecture***

300) K. Moshammer, K. Zhang, P. Oßwald, K. Kohse-Höinghaus
Investigation of highly diluted dimethyl ether flames by mass spectrometry
Joint Conference of the Polish Mass Spectrometry Society and German Mass Spectrometry SocietyPoznan, Poland, 04.-07.03.2012, ***poster***

301) P. Mountapmbeme Kouotou, Z.-Y. Tian, K. Kohse-Höinghaus
Synthesis of Co_3O_4 spinel by PSE-CVD and its application in catalytic combustion of *n*-butanol
111. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Leipzig, 17.-19.05.2012, ***poster***

302) Z.-Y. Tian, N. Bahlawane, V. Vannier, K. Kohse-Höinghaus
Catalytic behavior of cobalt-manganese oxides prepared by pulsed-spray evaporation chemical vapor deposition
111. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Leipzig, 17.-19.05.2012, ***lecture***

303) K. Kohse-Höinghaus
The role of advanced diagnostics in combustion chemistry research
1st International Workshop on Flame Chemistry, Warsaw, Poland, 28.-29.07.2012, ***invited plenary lecture***

304) F. Herrmann, P. Oßwald, K. Kohse-Höinghaus
Mass spectrometric investigation of the low-temperature dimethyl ether oxidation in an atmospheric-pressure laminar flow reactor
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***lecture***

305) K. Zhang, K. Moshammer, P. Oßwald, K. Kohse-Höinghaus
Experimental investigation of partially premixed, highly-diluted dimethyl ether flames at low temperatures
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***lecture***

306) Z.-Y. Tian, N. Bahlawane, V. Vannier, K. Kohse-Höinghaus
Structure sensitivity of propene oxidation over Co-Mn spinels
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***lecture***

307) A. Lucassen, Z. Wang, L. Zhang, F. Zhang, W. Yuan, Y. Wang, F. Qi, K. Kohse-Höinghaus
An experimental and theoretical study of pyrrolidine pyrolysis at low pressure
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***lecture***

308) N.J. Labbe, V. Seshadri, T. Kasper, N. Hansen, P. Oßwald, K. Kohse-Höinghaus, P.R. Westmoreland
Flame chemistry of tetrahydropyran as a model heteroatomic biofuel
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***lecture***

309) B. Yang, C.K. Westbrook, T.A. Cool, N. Hansen, K. Kohse-Höinghaus
Photoionization mass spectrometry and modeling study of premixes flames of three unsaturated $C_5H_8O_2$ esters
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***lecture***

310) J. Weng, L. Jia, Y. Wang, S. Sun, X. Tang, Z. Zhou, K. Kohse-Höinghaus, F. Qi
Pyrolysis study of poplar biomass by tunable synchrotron vacuum ultraviolet photoionization mass spectrometry
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***lecture***

311) P. Mountapmbeme Kouotou, Z.-Y. Tian, U. Mundloch, K. Kohse-Höinghaus
Catalytic combustion of CO and propene over Co_3O_4 spinel prepared by chemical vapor deposition
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

312) Z.-Y. Tian, T. Chafik, M. Assebban, S. Harti, N. Bahlawane, P. Mountapmbeme Kouotou, K. Kohse-Höinghaus
Catalytic activity of natural clay toward the combustion of biofuel
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

313) C. Togbé, D. Liu, L.-S. Tran, D. Felsmann, P. Oßwald, K. Kohse-Höinghaus
Experimental study of laminar premixed 2,5-dimethylfuran/oxygen/argon flame - Formation of pollutants
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

314) D. Liu, C. Togbé, L.-S. Tran, D. Felsmann, P. Oßwald, K. Kohse-Höinghaus
Combustion chemistry study of furan in laminar premixed low-pressure flames using molecular-beam mass spectrometry
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

315) F. Herrmann, P. Oßwald, K. Kohse-Höinghaus, Z. Wang, Z. Cheng, W. Yuan, Y. Wang, F. Qi
Investigation of dimethyl ether as an alternative cleaner fuel
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

316) F. Herrmann, B. Jochim, P. Oßwald, L. Cai, K. Kohse-Höinghaus, N. Peters, H. Pitsch

Comparison of experimental and numerical flow-reactor studies in the low-temperature regime for dimethyl ether and ethanol
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

317) K. Moshammer, D. Mayer, K. Zhang, P. Oßwald, H. Pitsch, K. Kohse-Höinghaus
Low-temperature flames of dimethyl ether under highly diluted atmospheric-pressure conditions
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

318) L.-S. Tran, C. Togbé, D. Liu, D. Felsmann, P. Oßwald, P.-A. Glaude, F. Battin-Leclerc, K. Kohse-Höinghaus
Study of the structure of laminar premixed flames of methyl furan/oxygen/argon using molecular-beam mass spectrometry
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

319) M. Schenk, S. Lieb, H. Vieker, A. Beyer, A. Gölzhäuser, H. Wang, K. Kohse-Höinghaus
Probing nascent soot in burned stabilized ethylene flames: a comparison of several microscopic techniques
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

320) K. Moshammer, H.K. Chakravarty, R.X. Fernandes, N. Hansen, K. Kohse-Höinghaus
Investigation of the combustion chemistry of 2-methyltetrahydrofuran
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

321) M. Schenk, L. Leon, P. Oßwald, K. Moshammer, K. Kohse-Höinghaus, T. Zeuch, L. Seidel, F. Mauss
Investigation of the detailed combustion chemistry of the butene isomers
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

322) L. Leon, L. Seidel, F. Mauss, T. Zeuch, P. Oßwald, M. Schenk, K. Kohse-Höinghaus
A detailed chemical reaction mechanism for fuel mixtures and oxygenated species extended to C_4 chemistry
34th International Symposium on Combustion, Warsaw, Poland, 29.07.-03.08.2012, ***poster***

323) C. Togbé, D. Liu, L.-S. Tran, D. Felsmann, P. Oßwald, P.-A. Glaude, F. Battin-Leclerc, K. Kohse-Höinghaus
Combustion chemistry study of furan family in laminar premixed low-pressure flames using molecular beam mass spectrometry
3rd Annual COST Action CM0901Meeting, Sofia, Bulgaria, 05.-07.09.2012, ***lecture***

324) L. Leon, L. Seidel, F. Mauss, T. Zeuch, M. Schenk, P. Oßwald, K. Kohse-Höinghaus
A comprehensive chemical reaction mechanism for C_1-C_4 fuel mixtures including oxygenated species
3rd Annual COST Action CM0901 Meeting, Sofia, Bulgaria, 05.-07.09.2012, ***lecture***

325) L.-S. Tran, C. Togbé, D. Liu, D. Felsmann, P. Oßwald, P.-A. Glaude, F. Battin-Leclerc, K. Kohse-Höinghaus
Study of the combustion chemistry of methyl furan in laminar premixed flames using molecular-beam mass spectrometry
3rd Annual COST Action CM0901 Meeting, Sofia, Bulgaria, 05.-07.09.2012, ***poster***

326) K. Kohse-Höinghaus
Physikalische Chemie: Diagnostik am Puls chemischer Veränderung
Wilhelm-Jost-Gedächtnisvorlesung 2012 der Akademie der Wissenschaften Göttingen und der Deutschen Bunsen-Gesellschaft, Berlin, 31.10.12, Leipzig, 01.11.12, Darmstadt, 06.11.12,

Marburg, 14.11.12, Göttingen, 22.11.12, ***award lectures***

327) K. Kohse-Höinghaus
Forschungsergebnisse: Gedankengebäude mit Verfallsdatum?
Leopoldina-Workshop *Nachhaltigkeit in der Wissenschaft*, Berlin, 12.11.2012, ***invited lecture***

328) K. Kohse-Höinghaus
(Bio)-fuel combustion: chemical challenges
Festveranstaltung zur Verleihung des Clara-Immerwahr-Preises 2013, TU Berlin, Berlin, 11.02.2013*,* ***invited keynote lecture***

329) K. Kohse-Höinghaus
Combustion Chemistry
AAAS Annual Meeting, Boston, MA, USA, 14.-18.02.2013, ***invited lecture***

330) D. Felsmann, K. Moshammer, M. Schenk, K. Kohse-Höinghaus
Towards understanding combustion – flame chemistry analysis with advanced molecular-beam mass spectrometry
46. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Berlin, 10.-13.03.2013, ***poster***

331) Z.D. Wang, F. Herrmann, K. Kohse-Höinghaus
Experimental investigation of the low-temperature oxidation of dimethyl ether using molecular-beam mass spectrometry
46. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie, Berlin, 10.-13.03.2013, ***poster***

332) L.-S. Tran, C. Togbé, D. Liu, D. Felsmann, P. Oßwald, P.-A. Glaude, B. Sirjean, R. Fournet, F. Battin-Leclerc, K. Kohse-Höinghaus
Soot precursor formation in the combustion of furans
COST Action CM0901 Joint Working Group Meeting "Soot and PAHs", Sorrento, Italy, 10.-12.04.2013, ***lecture***

333) K. Moshammer, D. Mayer, H. Pitsch, K. Kohse-Höinghaus
Experimental investigations and kinetic modelling of highly-diluted low-temperature flames
112. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Karlsruhe, 09.-11.05.2013, ***poster***

334) J. Koppmann, A. Brockhinke, K. Kohse-Höinghaus
Contributions to combustion chemistry research
8th US National Combustion Meeting, Salt Lake City, UT, USA, 19.-22.05.2013, ***invited plenary lecture***

335) L.-S. Tran, C. Togbé, D. Liu, D. Felsmann, P. Oßwald, P.-A. Glaude, B. Sirjean, R. Fournet, F. Battin-Leclerc, K. Kohse-Höinghaus
Experimental and modeling study of combustion chemistry of furan family in laminar premixed low-pressure flames
2nd COST Action CM0901Topical Workshop: Kinetic studies using laminar flames, Lund, Sweden, 25.06.2013, ***lecture***

336) K. Kohse-Höinghaus
Clean combustion: Challenges and research opportunities for chemists
6th European Combustion Meeting, Lund, Sweden, 25.-28.06.2013, ***invited plenary lecture***

337) Z. Wang, L. Ye, L. Zhang, F. Zhang, J. Yang, H. Jin, Y. Li, K. Kohse-Höinghaus, F. Qi
An experimental and kinetic modeling study on premixed methylcyclohexane flames at low pressure
6th European Combustion Meeting, Lund, Sweden, 25.-28.06.2013, ***poster***

338) M.L. Fischer, E. Goos, P. Oßwald, M. Köhler, K. Moshammer, K. Kohse-Höinghaus, U. Riedel
Kinetic modeling study of the oxidation of larger methylated hydrocarbons
14th International Conference on Numerical Combustion, San Antonio, TX, USA, 08.-10.08.2013, ***lecture***

339) K. Kohse-Höinghaus
Combustion chemistry diagnostics
Gordon Research Seminar on Laser Diagnostics in Combustion, Waterville Valley, NH, USA, 10.-11.08.2013, ***invited keynote lecture***

340) K. Kohse-Höinghaus
Clean combustion – a chemist's view
8th Mediterranean Combustion Symposium, Izmir, Turkey, 08.-13.09.2013, ***invited plenary lecture***

341) L. Seidel, K. Moshammer, X. Wang, T. Zeuch, F. Mauss, K. Kohse-Höinghaus
Kinetic modelling and experimental study of a fuel rich, premixed n-heptane flame
4th Annual COST Action CM0901 Meeting, Perugia, Italy, 16.-18.09.2013, ***lecture***

342) K. Kohse-Höinghaus
Clean(er) combustion needs reliable species information
Workshop VUV FELs in Molecular, Cluster and Surface Science: A Future Frontier for Energy Research, Dalian, China, 22.-27.09.2013, ***invited lecture***

343) K. Kohse-Höinghaus
Developments in combustion chemistry diagnostics
International Workshop on Frontiers of Combustion Chemistry, Huangshan, China, 26.-29.09.2013, ***invited plenary lecture***

344) Z.-Y. Tian, P. Mountampbeme Kouotou, K. Kohse-Höinghaus
Catalytic combustion of propene over transition metal oxides
International Workshop on Frontiers of Combustion Chemistry, Huangshan, China, 26.-29.09.2013, ***lecture***

345) K. Kohse-Höinghaus
Könnten das Sie sein?
Tageskongress der Gesellschaft Deutscher Naturforscher und Ärzte "Frauen in Naturwissenschaft, Medizin und Technik", Berlin, 25.10.2013, ***invited lecture***

346) H. Vieker, A. Beyer, Z.-Y. Tian, P. Mountapmbeme Kouotou, A. El Kasmi, K. Kohse-Höinghaus, A. Gölzhäuser
HIM of CVD-grown films: transition metals and catalytically active transition metal oxides
AVS 60th International Symposium & Exhibition, Long Beach, CA, USA, 27.10.-01.11.2013, ***lecture***

347) M. Schenk, S. Lieb, H. Vieker, A. Beyer, A. Gölzhäuser, H. Wang, K. Kohse-Höinghaus
Imaging nascent soot particles: Tiniest soot particles are not structurally homogeneous
AVS 60th International Symposium & Exhibition, Long Beach, CA, USA, 27.10.-01.11.2013,

poster

348) K. Kohse-Höinghaus
Exzellenz – geplant, verdient, erworben?
Conference "Exzellenz in der Wissenschaft – Österreich im internationalen Vergleich", Österreichischer Wissenschaftsrat, Vienna, Austria, 07.-08.11.2013, ***invited lecture***

349) K. Kohse-Höinghaus
Wissenschaftlicher Erfolg – vom Plan zur Erkenntnis?
5. Interdisziplinäres Forum "Inhalte und Grenzen der Planbarkeit" der Nordrhein-Westfälischen Akademie der Wissenschaften und der Künste, Düsseldorf, 29.11.2013, ***invited lecture***

350) K. Kohse-Höinghaus
Combustion: Important science for the future
51st Japanese Symposium on Combustion, Tokio, Japan, 04.-06.12.2013, ***invited lecture***

351) K. Kohse-Höinghaus
(Bio)fuel and future
49th Winter Seminar "Biophysical Chemistry, Molecular Biology and Cybernetics of Cell Functions", Klosters, Switzerland, 11.-25.01.2014, ***invited lecture***

352) M. Schenk, S. Lieb, H.Vieker, A. Beyer, A. Gölzhäuser, H. Wang, K. Kohse-Höinghaus
Probing structural aspects of <10 nm-sized young soot
113. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Hamburg, 29.-31.05.2014, ***poster, poster award***

353) K. Kohse-Höinghaus
Combustion chemistry
14th French School of Combustion, Les Hauts de Bruyères, Chaumont-sur-Tharonne, France, 02.-07.05.2014, ***invited lecture***

354) S.M. Sarathy, P. Oßwald, N. Hansen, K. Kohse-Höinghaus
Alcohol combustion chemistry
2nd International Conference of the Cluster of Excellence "Tailor-Made Fuels from Biomass", Aachen, 16.-18.06.2014, ***lecture***

355) K. Kohse-Höinghaus
Optical diagnostics in combustion and beyond
Award presentation ceremony "SAOT Young Researcher Award", Friedrich-Alexander Universität Erlangen-Nürnberg, Nürnberg, 10.07.2014, ***invited lecture***

356) K. Kohse-Höinghaus
Combustion experiments for kinetic mechanism development
23rd International Symposium on Gas Kinetics and Related Phenomena, Szeged, Hungary, 20.-25.07.2014, ***invited lecture***

357) D. Felsmann, K. Moshammer, J. Krüger, A. Lackner, A. Brockhinke, T. Kasper, T. Bierkandt, E. Akyildiz, N. Hansen, A. Lucassen, P. Oßwald, M. Köhler, G.A. Garcia, L. Nahon, P. Hemberger, A. Bodi, T. Gerber, K. Kohse-Höinghaus
Electron ionization, photoionization and photoelectron/photoion coincidence spectroscopy in mass-spectrometric investigations of a low-pressure ethylene/oxygen flame
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***lecture***

358) V. Gururajan, F.N. Egolfopoulos, K. Kohse-Höinghaus

Direct numerical simulations of probe effects in low-pressure flame sampling
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***lecture***

359) M. Schenk, S. Lieb, H. Vieker, A. Beyer, A. Gölzhäuser, H. Wang, K. Kohse-Höinghaus
Morphology of nascent soot in ethylene flames
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***lecture***

360) M. Schenk, N. Hansen, H. Vieker, A. Beyer, A. Gölzhäuser, K. Kohse-Höinghaus
PAH formation and soot morphology in flames of C_4 fuels
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***lecture***

361) Z.-Y. Tian, P. Mountapmbeme Kouotou, A. El Kasmi, P.H. Tchoua Ngamou, K. Kohse-Höinghaus, H. Vieker, A. Beyer, A. Gölzhäuser
Low-temperature deep oxidation of olefins and DME over cobalt ferrite
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***lecture***

362) L.S. Tran, B. Sirjean, P.A. Glaude, K. Kohse-Höinghaus, F. Battin-Leclerc
Influence of substituted furans on the formation of polycyclic aromatic hydrocarbons in flames
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***lecture***

363) X. Yang, D. Felsmann, N. Kurimoto, J. Krüger, T. Wada, T. Tan, E.A. Carter, K. Kohse-Höinghaus, Y. Ju
Kinetic studies of methyl acetate pyrolysis and oxidation in a flow reactor and a low-pressure flat flame using molecular-beam mass spectrometry
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***lecture***

364) D. Felsmann, C. Hemken, K. Moshammer, K. Kohse-Höinghaus
Low-temperature combustion chemistry – detailed speciation experiments
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***poster***

365) J. Krüger, K. Kohse-Höinghaus, A. Brockhinke
The role of CO_2* on chemiluminescence sensors for active control
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***poster***

366) D. Mayer, K. Moshammer, L. Cai, H. Pitsch, K. Kohse-Höinghaus
A numerical study of highly-diluted, burner stabilized dimethyl ether flames
35th International Symposium on Combustion, San Francisco, CA, USA, 03.-08.08.2014, ***poster***

367) L. Seidel, K. Moshammer, X. Wang, T. Zeuch, F. Mauss, K. Kohse-Höinghaus
Combined kinetic modelling and experimental study of a fuel rich, premixed n-heptane flame
8th International Seminar on Flame Structure, Berlin, 21.-24.09.2014, ***lecture***

368) M. Schenk, S. Lieb, H. Vieker, A. Beyer, A. Gölzhäuser, H. Wang, K. Kohse-Höinghaus
Probing structural aspects of <10nm-sized young soot
AVS 61st International Symposium & Exhibition, Baltimore, MD, USA, 09.-14.11.2014, ***poster***

369) K. Kohse-Höinghaus
Combustion chemistry research – a prerequisite for emission control
28th Annual Symposium of the Israeli Section of the Combustion Institute, Tel Aviv, Israel, 18.12.2014, ***invited keynote lecture***

370) K. Moshammer, A.W. Jasper, D.M. Popolan-Vaida, A. Lucassen, P. Diévart, H. Selim, A.J. Eskola, C.A. Taatjes, S.M. Sarathy, Y. Ju, P. Dagaut, K. Kohse-Höinghaus, N. Hansen
Advanced insights in low-temperature oxidation of dimethyl ether – a theoretical and experimental

approach
9th US National Combustion Meeting, Cincinnati, OH, USA, 17.-20.05.2015, ***lecture***

371) L. Seidel, K. Moshammer, C. Klauer, T. Zeuch, K. Kohse-Höinghaus, F. Mauss
Comprehensive kinetic modeling and experimental study of a fuel-rich, premixed *n*-heptane flame
3rd Topical COST SMARTCATs Workshop: Taming uncertainty in combustion chemistry: experiments and models, Budapest, Hungary, 30.03.2015, ***lecture***

372) L. Ruwe, M. Schenk, D. Emmrich, H. Vieker, A. Beyer, A. Gölzhäuser, K. Kohse-Höinghaus
Structural details of combustion-generated soot particles
114. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Bochum, 14.-16.05.2015, ***poster***

373) A. Lucassen, K. Moshammer, C. Togbé, K. Kohse-Höinghaus, N. Hansen
Is 2-methylfuran a clean biofuel?
114. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Bochum, 14.-16.05.2015, ***lecture***

374) K. Kohse-Höinghaus
Challenges in alternative fuels
International Combustion Institute Summer School, São Paulo, Brazil, 8.-12.06.2015, ***invited keynote lecture***

375) K. Kohse-Höinghaus
Biofuel combustion chemistry – diagnostic advances and challenges
3rd TMFB International Conference, Aachen, 23.-25.06.2015, ***invited lecture***

376) K. Kohse-Höinghaus
Some like it hot – Combustion and the Future
Giulio Natta Award, Politecnico di Milano, Italy, 06.11.2015, ***award lecture (Lectio Magistralis)***

377) J. Pieper, M. Zeng, L.-S. Tran, I. Graf, K. Kohse-Höinghaus
Structural effects of the biofuel isomers diethyl ether and *n*-butanol on the flame chemistry of premixed *n*-butane flames
KAUST Future Fuels Workshop, Thuwal, Saudi Arabia, 07.-09.03.2016, ***poster***

378) C. Hemken, U. Burke, I. Graf, L. Ruwe, S. Park, S.M. Sarathy, K.A. Heufer, K. Kohse-Höinghaus
Experimental and kinetic study of the combustion of 2-butanone – a potential new biofuel
KAUST Future Fuels Workshop, Thuwal, Saudi Arabia, 07.-09.03.2016, ***poster***

379) C. Hemken, U. Burke, K.A. Heufer, I. Graf, L. Ruwe, K. Kohse-Höinghaus
2-Butanone as an advanced biofuel – assessment of potential combustion emissions
115. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Rostock, 05.-07.05.2016, ***poster***

380) J. Pieper, M. Zeng, L.-S. Tran, I. Graf, K. Kohse-Höinghaus
Influence of the biofuel isomers diethyl ether and *n*-butanol on pollutant formation in premixed *n*-butane flames
115. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Rostock, 05.-07.05.2016, ***poster***

381) L. Ruwe, K. Kohse-Höinghaus

Fuel-structure dependence of soot precursor formation processes in non-premixed laminar opposed-flow diffusion flames
115. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Rostock, 05.-07.05.2016, ***poster***

382) D. Felsmann, H. Zhao, Q. Wang, I. Graf, T. Tan, X. Yang, E.A. Carter, Y. Ju, K. Kohse-Höinghaus
Contributions to improving small ester combustion chemistry: theory, model and experiments
36th International Symposium on Combustion, Seoul, Korea, 31.07.-05.08.2016, ***lecture***

383) C. Hemken, U. Burke, I. Graf, L. Ruwe, S. Park, S.M. Sarathy, K.A. Heufer, K. Kohse-Höinghaus
A laminar flame investigation of 2-butanone, and the combustion-related intermediates formed through its oxidation
36th International Symposium on Combustion, Seoul, Korea, 31.07.-05.08.2016, ***lecture***

384) L.-S. Tran, J. Pieper, H.-H. Carstensen, H. Zhao, I. Graf, Y. Ju, F. Qi, K. Kohse-Höinghaus
Experimental and kinetic modeling study of diethyl ether flames
36th International Symposium on Combustion, Seoul, Korea, 31.07.-05.08.2016, ***lecture***

385) J. Pieper, L.-S. Tran, M. Zeng, Y. Li, F. Qi, K. Kohse-Höinghaus
Chemistry of C4-fuel combinations: reaction pathways in *n*-butane flames upon addition of the biofuel isomers diethyl ether or *n*-butanol
36th International Symposium on Combustion, Seoul, Korea, 31.07.-05.08.2016, ***poster***

386) J. Pieper, D. Felsmann, A. Lucassen, J. Krüger, G.A. Garcia, L. Nahon, A. Brockhinke, K. Kohse-Höinghaus
Fixed-photon-energy double-imaging photoelectron/photoion coincidence (i^2PEPICO) spectroscopy for combustion analysis
36th International Symposium on Combustion, Seoul, Korea, 31.07.-05.08.2016, ***poster***

387) L. Ruwe, K. Moshammer, N. Hansen, K. Kohse-Höinghaus
Fuel-structure dependence of hydrocarbon consumption and growth processes in flames fueled by C5-fuels
36th International Symposium on Combustion, Seoul, Korea, 31.07.-05.08.2016, ***poster***

388) K. Kohse-Höinghaus, Andreas Brockhinke
Photons, electrons, and ions: Detective work in combustion chemistry research
OSA Meeting *Light, Energy and the Environment*, Leipzig, 14.-17.11.2016, ***invited lecture***

389) D. Emmrich, M. Salamanca, L. Ruwe, H. Vieker, A. Beyer, K. Kohse-Höinghaus, A. Gölzhäuser
Metrology on nascent soot particles from flames by Helium Ion Microscopy
DPG-Frühjahrstagung, Dresden, 19.-24.03.2017, ***lecture***

390) L. Ruwe, L. Leon, K. Moshammer, L. Seidel, N. Hansen, F. Mauss, K. Kohse-Höinghaus
Experimental and modeling study in a premixed 2-methyl-2-butene flame
8th European Combustion Meeting, Dubrovnik, Croatia, 18.-21.04.2017, ***poster***

391) K. Moshammer, N. Hansen, L. Ruwe, K. Kohse-Höinghaus
Combustion chemistry of *n*-pentane – an extensive experimental study
8th European Combustion Meeting, Dubrovnik, Croatia, 18.-21.04.2017, ***poster***

392) Z. Wang, B. Chen, K. Moshammer, D.M. Popolan-Vaida, S. Sioud, V.S. Bhavani Shankar,

D. Vuilleumier, T. Tao, L. Ruwe, E. Bräuer, N. Hansen, P. Dagaut, K. Kohse-Höinghaus, M.A. Raji, S.M. Sarathy
Detection oxygenated intermediates from the low-temperature oxidation of *n*-heptane in a stirred reactor and motored engine
8th European Combustion Meeting, Dubrovnik, Croatia, 18.-21.04.2017, ***poster***

393) H. Hansen, J. Wullenkord, D.A. Obenchain, K. Kohse-Höinghaus, J.-U. Grabow
Fourier transform microwave spectroscopic studies of dimethyl ether and ethylene flames
10th U.S. National Combustion Meeting, College Park, MD, USA, 23.-26.04.2017, ***lecture***

394) C. Hemken, U. Burke, J. Pieper, R. Büttgen, K.A. Heufer, K. Kohse-Höinghaus
Effect of the carbonyl group in the oxidation of small methyl ketones
116. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kaiserslautern, 25.-27.05.2017, ***lecture***

395) M. Salamanca, L. Ruwe, K. Kohse-Höinghaus
Effects of unsaturated methyl esters on soot precursors
116. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kaiserslautern, 25.-27.05.2017, ***poster***

396) S. Schmitt, J. Pieper, J. Krüger, G.A. Garcia, L. Nahon, W. Eisfeld, A. Brockhinke, K. Kohse-Höinghaus
Double-imaging flixed-photon-energy photoelectron/photoion coincidence (i^2PEPICO) spectroscopy for combustion analysis
116. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kaiserslautern, 25.-27.05.2017, ***poster***

397) J. Wullenkord, M. Zeng, I. Graf, K. Kohse-Höinghaus
Influence of small ether addition on combustion-related intermediates and flame structure in premixed *n*-heptane flames
116. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kaiserslautern, 25.-27.05.2017, ***poster***

398) L. Ruwe, L. Leon, K. Moshammer, L. Seidel, N. Hansen, F. Mauss, K. Kohse-Höinghaus
Experimental and modeling investigation on fuel-structure-dependent reaction pathways in C_5-flames
116. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kaiserslautern, 25.-27.05.2017, ***poster***

399) D.A. Obenchain, J. Wullenkord, K. Kohse-Höinghaus, J.-U. Grabow, N. Hansen
Fourier transform microwave spectroscopic studies of dimethyl ether and ethylene flames
116. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Kaiserslautern, 25.-27.05.2017, ***lecture***

400) D.A. Obenchain, J. Wullenkord, K. Kohse-Höinghaus, J.-U. Grabow, N. Hansen
Fourier transform microwave spectroscopic studies of dimethyl ether and ethylene flames
International Symposium on Molecular Spectroscopy, Champaign-Urbana, IL, USA, 19.-23.06.2017, ***lecture***

401) C. Betrancourt, F. Liu, P. Desgroux, X. Mercier, A. Faccinetto, M. Salamanca, L. Ruwe, K. Kohse-Höinghaus, D. Emmrich, A. Beyer, A. Gölzhäuser, T. Tritscher
Comparison of LII, HIM and 1nm-SMPS measurements of incipient soot particle sizes in flat premixed *n*-butane sooting and nucleation flames
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*,

Bielefeld, 21.-23.06.2017, ***poster***

402) H. Jin, E. Bräuer, J. Pieper, L. Ruwe, C. Hemken, L.-S. Tran, K. Kohse-Höinghaus
Chemical interaction of dual-fuel mixtures in low-temperature oxidation, comparing *n*-pentane/dimethyl ether and *n*-pentane/ethanol
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*, Bielefeld, 21.-23.06.2017, ***poster***

403) J. Pieper, S. Schmitt, J. Krüger, G.A. Garcia, L. Nahon, W. Eisfeld, A. Brockhinke, K. Kohse-Höinghaus
Isomer selective combustion analysis by double-imaging fixed-photon-energy photoelectron/photoion coincidence (i^2PEPICO) spectroscopy
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*, Bielefeld, 21.-23.06.2017, ***poster***

404) L. Ruwe, K. Moshammer, N. Hansen, K. Kohse-Höinghaus
Influence of the fuel structure on the combustion chemistry of C_5-fuels
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*, Bielefeld, 21.-23.06.2017, ***poster***

405) M. Salamanca, L. Ruwe, K. Kohse-Höinghaus
Effects of the unsaturation degree in methyl esters on the combustion process
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*, Bielefeld, 21.-23.06.2017, ***poster***

406) S. Schmitt, I. Graf, B. Lehrheuer, M. Wick, J. Andert, K. Kohse-Höinghaus
Influence of water addition on the combustion chemistry of *iso*-octane investigating laminar premixed flames
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*, Bielefeld, 21.-23.06.2017, ***poster***

407) L.-S. Tran, O. Herbinet, Y. Li, M. Zeng, F. Battin-Leclerc, K. Kohse-Höinghaus, F. Qi
Study of the high-pressure low-temperature oxidation chemistry of *n*-pentane, diethyl ether, and their mixture
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*, Bielefeld, 21.-23.06.2017, ***poster***

408) Z. Wang, D.M. Popolan-Vaida, B. Chen, K. Moshammer, S. Mohamed, H. Wang, S. Sioud, M.A. Raji, K. Kohse-Höinghaus, N. Hansen, P. Dagaut, S.R. Leone, S.M. Sarathy
Direct observation of multi-functional peroxides in gas-phase oxidation of organic compounds
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*, Bielefeld, 21.-23.06.2017, ***poster***

409) J. Wullenkord, M. Zeng, I. Graf, K. Kohse-Höinghaus
Investigations on fuel-structure-dependent effects of small ether addition in premixed *n*-heptane and *iso*-octane flames
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*, Bielefeld, 21.-23.06.2017, ***poster***

410) N. Hansen, J. Wullenkord, D.A. Obenchain, K. Kohse-Höinghaus, J.-U. Grabow, R.S. Tranter, K. Moshammer, J.B. Randazzo, J.P.A. Lockhart, A.L. Kastengren
New tools for flame diagnostics: Microwaves and X-rays
International Bunsen Discussion Meeting *Chemistry and Diagnostics for Clean Combustion*, Bielefeld, 21.-23.06.2017, ***lecture***

411) R. Büttgen, U. Burke, H. Minwegen, C. Hemken, K. Kohse-Höinghaus, K.A. Heufer
Detailed investigation of the oxidation kinetics of 2- and 3-pentanone
5th International Conference of the Cluster of Excellence "Tailor-Made Fuels from Biomass", Aachen, 20.-22.06.2017, ***poster***

412) L. Ruwe, C. Hemken, K. Kohse-Höinghaus, K. Moshammer, N. Hansen
Detailed chemistry investigations for conventional and alternative fuels
Symposium for Combustion Control, Aachen, 28.-29.06.2017, ***poster***

413) K. Kohse-Höinghaus
Combustion chemistry developments between experiments, modeling, and theory
26th International Colloquium on the Dynamics of Explosions and Dynamic Systems, Boston, MA, USA, 29.07.-04.08.2017, ***invited plenary lecture***

414) D. Emmrich, M. Salamanca, L. Ruwe, H. Vieker, A. Beyer, K. Kohse-Höinghaus, A. Gölzhäuser
Analysis of nascent soot particles from flames by Helium Ion Microscopy
Workshop on Focused Ion Beams, Berlin, 06.-07.11.2017, ***lecture***

415) Z. Wang, B. Chen, K. Moshammer, D.M. Popolan-Vaida, S. Sioud, V.S. Bhavani Shankar, D. Vuilleumier, T. Tao, L. Ruwe, E. Bräuer, N. Hansen, P. Dagaut, K. Kohse-Höinghaus, M.A. Raji, S.M. Sarathy
n-Heptane cool flame chemistry: unraveling intermediate species measured in a stirred reactor and motored engine
11th Asia-Pacific Conference on Combustion, Sydney, Australia, 10.-14.12.2017, ***lecture***

416) L.-S. Tran, O. Herbinet, Y. Li, E. Bräuer, M. Zeng, F. Qi, K. Kohse-Höinghaus, F. Battin-Leclerc
Low-temperature oxidation of dibuthyl ether: reactivity and fuel-specific products
Journées Biomasse, Villeneuve d'Ascq, France, 07.-08.11.2017, ***poster***

417) K. Kohse-Höinghaus
Clean air? Combustion of Biofuels and mixtures
Clean Combustion Energy Research Day, Tsinghua University, Beijing, China, 28.02.2018, ***invited lecture***

418) A. Beyer, D. Emmrich, M. Salamanca, L. Ruwe, H. Vieker, K. Kohse-Höinghaus, A. Gölzhäuser
Characterization of soot particles by Helium Ion Microscopy
DPG-Frühjahrstagung und EPS-CMD27, Berlin, 11.-16.03.2018, ***lecture***

419) L.-S. Tran, O. Herbinet, Y. Li, F. Qi, K. Kohse-Höinghaus, F. Battin-Leclerc
Comparative study of the high-pressure low-temperature oxidation of linear five-heavy-atom fuels: diethyl ether vs. *n*-pentane and their mixture
Workshop on Gas-Phase Reaction Kinetics of Biofuels Oxygenated Molecules, Milano, Italy, 23.-24.04.2018, ***lecture***

420) L. Ruwe, L. Cai, K. Moshammer, N. Hansen, H. Pitsch, K. Kohse-Höinghaus
Towards formation of small aromatic compounds: Mass spectrometric investigation of fuel-specific decomposition and growth pathways in selected alkane and alkene flames
117. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Hannover, 10.-12.05.2018, ***lecture***

421) J. Wullenkord, M. Salamanca, M. Zeng, L.-S. Tran, I. Graf, S. Schmitt, L. Ruwe, K. Kohse-Höinghaus
Molecular-beam mass spectrometric study of fuel-structure-dependent species formation in laminar premixed low-pressure flames
117. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Hannover, 10.-12.05.2018, ***lecture***

422) S. Schmitt, I. Graf, M. Wick, B. Lehrheuer, J. Andert, K. Kohse-Höinghaus
Investigation on the effect of water addition in iso-octane combustion
117. Hauptversammlung der Deutschen Bunsen-Gesellschaft für Physikalische Chemie, Hannover, 10.-12.05.2018, ***poster***

423) K. Kohse-Höinghaus
Advances and developments in combustion chemistry and diagnostics
25th International Symposium on Chemical Reaction Engineering, Florence, Italy, 20.-23.05.2018, ***invited plenary lecture***

424) J. Wullenkord, M. Zeng, M. Salamanca, I. Graf, S. Schmitt, L. Ruwe, K. Kohse-Höinghaus
Experimental investigation of fuel-specific species formation in blended premixed flames
Joint Meeting of the German and Italian Sections of the Combustion Institute, Sorrento, Italy, 23.-26.05.2018, ***lecture***

425) L.-S. Tran, O. Herbinet, Y. Li, F. Qi, K. Kohse-Höinghaus, F. Battin-Leclerc
High-pressure low-temperature oxidation of diethyl ether compared to *n*-pentane and their mixture
25th International Symposium on Gas Kinetics & Related Phenomena, Lille, France, 22.-26.07.2018, ***poster***

426) J. Pieper, C. Hemken, R. Büttgen, I. Graf, N. Hansen, K.A. Heufer, K. Kohse-Höinghaus
A high-temperature study of 2-pentanone oxidation: experiment and kinetic modeling
37th International Symposium on Combustion, Dublin, Ireland, 29.07.-03.08.2018, ***lecture***

427) M. Salamanca, J. Wullenkord, I. Graf, S. Schmitt, L. Ruwe, K. Kohse-Höinghaus
Experimental investigation of the joint combustion behavior of two small methyl esters with three C_2–C_4 hydrocarbon base fuels in laminar premixed low-pressure flames
37th International Symposium on Combustion, Dublin, Ireland, 29.07.-03.08.2018, ***lecture***

428) L.-S. Tran, O. Herbinet, Y. Li, J. Wullenkord, M. Zeng, E. Bräuer, F. Qi, K. Kohse-Höinghaus, F. Battin-Leclerc
Low-temperature gas-phase oxidation of diethyl ether: fuel reactivity and fuel-specific products
37th International Symposium on Combustion, Dublin, Ireland, 29.07.-03.08.2018, ***lecture***

429) L. Ruwe, L. Cai, K. Moshammer, N. Hansen, H. Pitsch, K. Kohse-Höinghaus
How does the fuel structure influence the combustion chemistry? An experimental and kinetic modeling study on C_5 fuels
37th International Symposium on Combustion, Dublin, Ireland, 29.07.-03.08.2018, ***poster***

430) S. Schmitt, M. Wick, I. Graf, B. Lehrheuer, J. Andert, K. Kohse-Höinghaus, S. Pischinger
Effects of water addition on the combustion processes in premixed flames, a laminar flow reactor and HCCI engine
37th International Symposium on Combustion, Dublin, Ireland, 29.07.-03.08.2018, ***poster***

431) J. Wullenkord, M. Baroncelli, D. Felsmann, L. Cai, H. Pitsch, K. Kohse-Höinghaus
Investigation on the influence of small ether addition on *n*-heptane combustion in counterflow diffusion flames

37th International Symposium on Combustion, Dublin, Ireland, 29.07.-03.08.2018, ***poster***

432) A. Beyer, D. Emmrich, M. Salamanca, L. Ruwe, H. Vieker, K. Kohse-Höinghaus, A. Gölzhäuser
Characterization of Soot Particles by Helium Ion Microscopy
AVS 65th International Symposium & Exhibition, 12.-26.10.2018, Long Beach, CA, USA, ***lecture***

433) K. Kohse-Höinghaus
Will responsible energy strategies include combustion?
Symposium of the European Academy of Science: *Integrity and Responsibility on Science: Navigating through Conflicting Social and Epistemic Demand*s, Bielefeld, 18.-20.10.2018, ***invited lecture***

434) K. Kohse-Höinghuas
Burning issues and bright concepts
Crocco Lecture, Princeton University, Princeton, NY, USA, 29.-30.11. 2018, ***award lecture***

435) K. Kohse-Höinghaus
Combustion-related answers from and questions for photon tools
PTPC2019: *Photon Tools for Physical Chemistry*, Beatenberg, Switzerland, 08.-11.01.2019, ***invited lecture***

436) K. Kohse-Höinghaus
What could and should we measure in combustion chemistry diagnostics?
GKIAC 2019: International Workshop on Gas-Phase Kinetics in Interstellar, Atmospheric and Combustion Chemistry, Hefei, China, 06.-09.03.2019, ***invited lecture***

437) M. Wick, T. Ottenwälder, C. Wouters, B. Lehrheuer, S. Pischinger, S. Schmitt, K. Kohse-Höinghaus, N. Hansen, J. Andert
Detailed analysis of the influence of direct water injection on HC emissions in HCCI-engines
Symposium for Combustion Control, Aachen, 05.-06.06.2019, ***poster***

438) K. Kohse-Höinghaus
Future combustion research and technology: Related diagnostic needs and challenges
Gordon Research Conference on Laser Diagnostics in Energy and Combustion Science, Les Diablerets, Switzerland, 23.-28.06.2019, ***invited plenary lecture***

439) S. Schmitt, M. Wick, C. Wouters, I. Graf, J. Andert, N. Hansen, K. Kohse-Höinghaus, S. Pischinger
Detaillierte Untersuchungen zu den Einflüssen von Wasseraddition bei der Verbrennung von iso-Oktan im Hinblick auf homogenisierte Kompressionsbrennverfahren
29. Deutscher Flammentag, Bochum, 17.-18.09.2019, ***lecture***

440) S. Schwarz, W.H. Yuan, L. Ruwe, H. Gossler, L. Maier, F. Qi, K. Kohse-Höinghaus, O. Deutschmann
Kinetische Analyse homogener Gasphasenreaktionen in Abgasnachbehandlungssystemen von Verbrennungsmotoren
29. Deutscher Flammentag, Bochum, 17.-18.09.2019, ***lecture***

441) Katharina Kohse-Höinghaus
Perspectives of combustion chemistry research
RESOLV Excellence Center Symposium, Bochum, 08.-09.01.2020, ***invited lecture***

442) Katharina Kohse-Höinghaus
Combustion perspectives: Some contributions from physical chemistry
715. Heraeus Seminar: Fuels, Processes, and Combustion Physics, Bad Honnef, 08.-12.03.2020, ***invited lecture***

443) Katharina Kohse-Höinghaus
Combustion perspectives – is combustion obsolete?
Carbon Conversion Workshop, Bochum, 10.-11.09. 2020, ***invited (online) lecture***

444) Katharina Kohse-Höinghaus
Some like it hot – combustion at crossroads
Bunsen Award Ceremony Online-Conference, 10.11.2020 ***award lecture***

445) L. Ruwe, L. Cai, J. Wullenkord, S.C. Schmitt, D. Felsmann, M. Baroncelli, B. Chen, K. Moshammer, N. Hansen, H. Pitsch, K. Kohse-Höinghaus
Low- and high-temperature study of *n*-heptane combustion chemistry
38th International Symposium on Combustion, Adelaide, Australia, 24.-29.01.2021, ***online lecture***

446) S.M. Fritz, P. Mishra, J. Wullenkord, P.G. Fugazzi, K. Kohse-Höinghaus, T.S. Zwier, N. Hansen
Detecting combustion intermediates via broadband chirped-pulse microwave spectroscopy
38th International Symposium on Combustion, Adelaide, Australia, 24.-29.01.2021, ***online lecture***

447) W. Yuan, L. Ruwe, S. Schwarz, C. Cao, J. Yang, O. Deutschmann, K. Kohse-Höinghaus, F. Qi
Insights into the interaction kinetics between propene and NO_x at moderate temperatures with experimental and modeling methods
38th International Symposium on Combustion, Adelaide, Australia, 24.-29.01.2021, ***online lecture***

448) K. Kohse-Höinghaus
Combustion in the future: The importance of chemistry
38th International Symposium on Combustion, Adelaide, Australia, 24.-29.01.2021, ***invited (online) keynote lecture***

449) K. Kohse-Höinghaus
Women in Science and Engineering – exotic or normality?
KAUST WISE Conference, Thuwal, Saudi Arabia, 08.-09.03.2021, ***invited (online) lecture***

450) K. Kohse-Höinghaus
Combustion – a hot topic
The 3rd International Discussion Meeting on Chemistry and Technology of Combustion Application, Beijing, China, 04.-05.06.2021, ***invited (online) keynote lecture***

451) K. Kohse-Höinghaus
Chemical Kinetics in Combustion
International Combustion Institute Virtual Summer School on Near-Wall Reactive Flows, 07.-10.06.2021, ***invited (online) lecture***

452) S. Schmitt, S. Goßler, L. Maier, O. Deutschmann, K. Kohse-Höinghaus,
Experimental study on the heterogeneous conversion of NO_x and NH_3 catalyzed by a vanadia-based SCR catalyst at highly diluted conditions,
30. Deutscher Flammentag, Hannover, 28.-29.09.2021, ***(online) lecture***

453) N. Gaiser, T. Bierkandt, H. Zhang, S. Schmitt, P. Oßwald, J. Zinsmeister, P. Hemberger, S.

Shaqiri, T. Kasper, K. Kohse-Höinghaus, M. Köhler, M. Aigner,
Systematic study on laminar low-pressure oxymethylene ether (OME_{0-4}) flames using molecular beam mass spectrometry and synchrotron photoionization
30. Deutscher Flammentag, Hannover, 28.-29.09.2021, ***(online) lecture***

454) L. Ruwe, S. Schmitt, D. Zhu, B. Shu, K. Kohse-Höinghaus, A. Lucassen,
Investigation of NH_3-H_2 mixtures in a plug-flow reactor
28th International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS), Naples, Italy, 19.-24.06.2022, ***poster***

455) K. Kohse-Höinghaus
Combustion and chemistry – some burning issues
Lectures on Theoretical and Computational Chemistry,
Hefei, China, 06.01.2023, ***invited (online) lecture***

456) K. Kohse-Höinghaus
Pathways in Combustion
WIMER – Women in Metrology and Energy Research Lecture,
PTB Braunschweig, 08.03.2023, ***invited (online) lecture***

457) K. Kohse-Höinghaus
Combustion chemistry research towards a low-carbon environment
Yun-Ji Lecture, 70th Anniversary of Nanjing University of Science and Technology
Nanjing, China, 29.03.2023, ***invited (online) lecture***

458) K. Kohse-Höinghaus,
Thoughts on Excellence
CENIDE Conference 2023,
Bergisch Gladbach, 02.-04.05.2023, ***invited keynote lecture***

459)
Combustion and Chemistry towards a low-carbon future,
Belgium Section of the Combustion Institute, Biannual Technical Meeting, Brussels, Belgium, 03.-05.04.2024, ***invited keynote lecture***

460) K. Kohse-Höinghaus,
Verbrennung und Nachhaltigkeit
Seniorexperten Chemie der GDCh, Jahrestreffen, Magdeburg, 06.-08.05.2024, ***invited lecture***

461)
K. Kohse-Höinghaus
Perspectives for diagnostics in combustion,
23rd European Conference on Non-Linear Optical Spectroscopy (ECONOS) Meudon, France, 27.-30.04.2025, ***invited lecture***

In addition, I have held about 300 lectures upon invitation of national and international universities and institutions as well as moderated and participated in numerous panel discussions.