

**C.A. de Lange**

**Publications in international journals**

1. A.D. Buckingham, E.E. Burnell, C.A. de Lange, A.J. Rest.  
NMR studies of 3,3,3-trifluoropropyne dissolved in different nematic liquid crystals.  
Mol. Phys. 14, 105 (1968).
2. A.D. Buckingham, E.E. Burnell, C.A. de Lange.  
The determination of nuclear magnetic shielding anisotropies of solutes in liquid-crystal solvents.  
J. Am. Chem. Soc. 90, 2972 (1968).
3. A.D. Buckingham, E.E. Burnell, C.A. de Lange.  
Nuclear magnetic resonance spectra of hydrogen in a nematic phase.  
Chem. Comm. 22, 1408 (1968).
4. A.D. Buckingham, E.E. Burnell, C.A. de Lange.  
NMR studies of dimethylacetylene and perfluorodimethylacetylene in nematic solvents.  
Mol. Phys. 15, 285 (1968).
5. E.E. Burnell, C.A. de Lange.  
NMR studies of pyridazine and pyridine oriented in a nematic phase.  
Mol. Phys. 16, 95 (1969).
6. A.D. Buckingham, E.E. Burnell, C.A. de Lange.  
A nuclear magnetic resonance study of ethylfluoride dissolved in a nematic liquid crystal.  
Mol. Phys. 16, 191 (1969).
7. A.D. Buckingham, E.E. Burnell, C.A. de Lange.  
NMR studies of 1,1-difluoroethylene in nematic solvents.  
Mol. Phys. 16, 299 (1969).
8. A.D. Buckingham, E.E. Burnell, C.A. de Lange.  
NMR studies of 1,4-cyclohexadiene oriented in a nematic solvent.  
Mol. Phys. 16, 521 (1969).
9. A.D. Buckingham, E.E. Burnell, C.A. de Lange.  
A nuclear magnetic resonance study of spiropentane dissolved in a nematic solvent.  
Mol. Phys. 17, 205 (1969).
10. A.D. Buckingham, E.E. Burnell, C.A. de Lange.  
Measurement of the anisotropic shielding of protons in a nematic phase.  
J. Chem. Phys. 54, 3242 (1971).
11. M.S. de Groot, C.A. de Lange, A.A. Monster.  
"Forbidden" transitions in the gas-phase paramagnetic resonance spectra of halogen atoms.  
Chem. Phys. Letters 11, 285 (1971).

12. C.A. de Lange, A.A. Monster.  
"Forbidden" transitions in the gas-phase paramagnetic resonance spectra of rubidium and cesium atoms.  
Chem. Phys. Letters 13, 561 (1972).
13. M.S. de Groot, C.A. de Lange, A.A. Monster.  
"Forbidden" electron resonance transitions in thermally produced halogen atoms.  
J. Magn. Resonance 10, 51 (1973).
14. W. de Kieviet, C.A. de Lange.  
The NMR spectra of ortho, meta and para dicyano benzene in a nematic solvent.  
Chem. Phys. Letters 22, 378 (1973).
15. J. Bulthuis, C.A. de Lange.  
An NMR study of phosphoryl fluoride oriented in a nematic phase.  
J. Magn. Resonance 14, 13 (1974).
16. C.A. de Lange, K.J. Peverelli.  
An NMR study of *p*-dioxene oriented in a nematic phase.  
J. Magn. Resonance 16, 159 (1974).
17. C.A. de Lange.  
An NMR study of trimethyl acetic acid in a nematic phase.  
Chem. Phys. Letters 28, 526 (1974).
18. B.J.M. Neijzen, R.F. Schmitz, G.W. Klumpp, C.A. de Lange.  
*n*- $\pi$  Interactions in homoallylic methyl ethers; a photoelectron spectroscopic study.  
Tetrahedron 31, 873 (1975).
19. G.J. den Otter, C.A. de Lange, J. Bulthuis.  
An NMR investigation of partially oriented CHF<sub>3</sub> and CH<sub>2</sub>F<sub>2</sub> including <sup>13</sup>C satellites.  
J. Magn. Resonance 20, 67 (1975).
20. C.A. de Lange.  
The ring-puckering vibrations of 1,3-dioxolane studied by nematic phase NMR.  
J. Magn. Resonance 21, 37 (1976).
21. D.M. de Leeuw, C.A. de Lange, C. MacLean.  
A double modulation technique for the detection of transient species in photoelectron spectroscopy.  
J. Electron Spectrosc. Relat. Phenom. 9, 185 (1976).
22. G.J. den Otter, J. Bulthuis, C.A. de Lange, C. MacLean.  
<sup>19</sup>F shielding anisotropies of 2,4,6-trifluoronitrobenzene from nematic phase

NMR.

Chem. Phys. Letters 45, 603 (1977).

23. D.M. de Leeuw, R. Mooyman, C.A. de Lange.  
He(I) photoelectron spectroscopy of halogen atoms.  
Chem. Phys. Letters 54, 231 (1978).
24. J.A.B. Lohman, C.A. de Lange, C. MacLean.  
On the importance of environmental effects on the  $^{14}\text{N}$  quadrupole coupling constant in nitrobenzene.  
Chem. Phys. Letters 55, 29 (1978).
25. J. van der Giessen, C.A. de Lange.  
The  $^{19}\text{F}$  shielding anisotropy of p-nitrofluorobenzene from nematic phase NMR.  
Chem. Phys. Letters 56, 121 (1978).
26. B.J.M. Neijzen, C.A. de Lange.  
Photoelectron spectroscopy of mono- and dicyanobenzenes and their perfluoro derivatives.  
J. Electron Spectrosc. Relat. Phenom. 14, 187 (1978).
27. D.M. de Leeuw, R. Mooyman, C.A. de Lange.  
He(I) photoelectron spectroscopy of transient species: the  $\text{SF}_2$  molecule.  
Chem. Phys. 34, 287 (1978).
28. D.M. de Leeuw, R. Mooyman, C.A. de Lange.  
He(I) photoelectron spectroscopy of transient species: the  $\text{SBr}_2$  molecule.  
Chem. Phys. Letters 61, 191 (1979).
29. D.M. de Leeuw, R. Mooyman, C.A. de Lange.  
He(I) photoelectron spectroscopy of transient species: the  $\text{SeX}_2$  molecules (X = F, Cl and Br).  
Chem. Phys. 38, 21 (1979).
30. D.M. de Leeuw, R. Mooyman, C.A. de Lange.  
Ultraviolet photoelectron spectroscopy of unstable species: formic anhydride.  
Chem. Phys. Letters 63, 57 (1979).
31. B.J.M. Neijzen, C.A. de Lange.  
Photoelectron spectroscopy of some thiocyanates, isocyanates and isothiocyanates.  
J. Electron Spectrosc. Relat. Phenom. 18, 179 (1980).
32. E.E. Burnell, C.A. de Lange.  
Effects of interaction between molecular internal motion and reorientation on NMR of anisotropic liquids.  
J. Magn. Resonance 39, 461 (1980).

33. G. Jonkers, C.A. de Lange, J.G. Snijders.  
Effects of relativity in the He(I) photoelectron spectroscopy of the transient species  $\text{TeCl}_2$  and  $\text{TeBr}_2$ .  
Chem. Phys. 50, 11 (1980).
34. H. van Lonkhuyzen, H.G. Muller, C.A. de Lange.  
A microcomputer-controlled modulation technique for the detection of transient species in UV photoelectron spectroscopy.  
J. Electron Spectrosc. Relat. Phenom. 21, 241 (1980).
35. E.E. Burnell, C.A. de Lange.  
On the average orientation of molecules undergoing large-amplitude conformational changes in anisotropic liquids.  
Chem. Phys. Letters 76, 268 (1980).
36. D.M. de Leeuw, C.A. de Lange.  
A photoelectron study of partially autoionizing states of oxygen atoms.  
Chem. Phys. 54, 123 (1980).
37. E.E. Burnell, C.A. de Lange.  
NMR of methane in liquid-crystal solvents.  
Bull. Magn. Resonance 2, 289 (1981).
38. G. Jonkers, R. Mooyman, C.A. de Lange.  
Ultraviolet photoelectron spectroscopy of unstable species: nitrosyl cyanide ( $\text{ONCN}$ ).  
Chem. Phys. 57, 97 (1981).
39. G. Jonkers, R. Mooyman, C.A. de Lange.  
Ultraviolet photoelectron spectroscopy of the unstable molecules  $\text{ClSeCN}$  and  $\text{BrSeCN}$  and the stable  $\text{Se}(\text{CN})_2$ .  
Mol. Phys. 43, 655 (1981).
40. D.M. de Leeuw, C.A. de Lange.  
The sum rule, an assignment tool?  
Chem. Phys. 61, 109 (1981).
41. G. Jonkers, O. Grabandt, R. Mooyman, C.A. de Lange.  
He(I) photoelectron spectroscopy of transient species: fluorothiocyanate ( $\text{FSCN}$ ).  
J. Electron Spectrosc. Relat. Phenom. 26, 147 (1982).
42. E.E. Burnell, C.A. de Lange.  
 $^1\text{H}$  and  $^2\text{H}$  NMR of methanes partially oriented in liquid-crystal phases: separation of rigid and non-rigid molecule effects.  
J. Chem. Phys. 76, 3474 (1982).
43. E.E. Burnell, C.A. de Lange, J.G. Snijders.  
A nuclear magnetic resonance study of  $\text{H}_2$ ,  $\text{HD}$  and  $\text{D}_2$  in nematic solvents.

Phys. Rev. A 25, 2339 (1982).

44. G. Jonkers, C.A. de Lange, L. Noodleman, E.J. Baerends.  
Broken symmetry effects in the He(I) valence photoelectron spectrum of  $\text{Se}(\text{CN})_2$ .  
Mol. Phys. 46, 609 (1982).
45. G. Jonkers, C.A. de Lange, J.G. Snijders.  
Effects of relativity in the He(I) photoelectron spectrum of  $\text{Cl}_4$ .  
Chem. Phys. 69, 109 (1982).
46. G. Jonkers, S.M. van der Kerk, R. Mooyman, C.A. de Lange, J.G. Snijders.  
He(I) photoelectron spectroscopy of tetraiodoethylene ( $\text{C}_2\text{I}_4$ ).  
Chem. Phys. 69, 115 (1982).
47. G. Jonkers, S.M. van der Kerk, C.A. de Lange.  
He(I) photoelectron spectroscopy of transient species: germanium dichloride and germanium dibromide.  
Chem. Phys. 70, 69 (1982).
48. G. Jonkers, S.M. van der Kerk, R. Mooyman, C.A. de Lange.  
UV photoelectron spectroscopy of transient species: germanium difluoride ( $\text{GeF}_2$ ).  
Chem. Phys. Letters 90, 252 (1982).
49. H. van Lonkhuyzen, C.A. de Lange.  
Modulation techniques in UV photoelectron spectroscopy of transient species: the  $\text{O}_2^+(^2\Pi_u) \leftarrow \text{O}_2(^1\Delta_g)$  transition.  
J. Electron Spectrosc. Relat. Phenom. 27, 255 (1982).
50. J.G. Snijders, C.A. de Lange, E.E. Burnell.  
Vibration-rotation coupling in anisotropic environments: NMR of methanes in liquid crystals.  
J. Chem. Phys. 77, 5386 (1982).
51. E.E. Burnell, C.A. de Lange, O.G. Mouritsen.  
Effects of intramolecular motion on the magnetic resonance of anisotropic liquids: the equivalence of kinetic and equilibrium statistical mechanical approaches.  
J. Magn. Resonance 50, 188 (1982).
52. G. Jonkers, S.M. van der Kerk, R. Mooyman, C.A. de Lange, J.G. Snijders.  
UV photoelectron spectroscopy of transient species: germanium diiodide ( $\text{GeI}_2$ ).  
Chem. Phys. Letters 94, 585 (1983).
53. G.N. Patey, E.E. Burnell, J.G. Snijders, C.A. de Lange.  
Molecular solutes in nematic liquid crystals: orientational order and electric

field gradients.

Chem. Phys. Letters 99, 271 (1983).

54. J.G. Snijders, C.A. de Lange, E.E. Burnell.  
Vibration-rotation coupling in anisotropic environments II: quadrupolar couplings of methanes in liquid crystals.  
J. Chem. Phys. 79, 2964 (1983).
55. J.G. Snijders, W.J. van der Meer, E.J. Baerends, C.A. de Lange.  
Hartree-Fock and Hartree-Fock-Slater electric field gradients ( $H_2$ ,  $CH_4$ ) and their symmetry mode derivatives ( $CH_4$ ).  
J. Chem. Phys. 79, 2970 (1983).
56. J.G. Snijders, C.A. de Lange, E.E. Burnell,  
On the orientation mechanism of small molecules in liquid-crystalline environments.  
Invited review article, Israel J. of Chem. 23, 269 (1983).
57. E.J. Baerends, J.G. Snijders, C.A. de Lange, G. Jonkers.  
Application of the Hartree-Fock-Slater method in photoelectron spectroscopy. in: "Local density approximations in quantum chemistry and solid state physics", editors J.P. Dahl and J. Avery, Plenum Publishing Corporation, New York, 1984, p. 415-485.
58. G. Jonkers, W.J. van der Meer, C.A. de Lange, E.J. Baerends, J. Stapersma, G.W. Klumpp.  
A UV photoelectron spectroscopic and Hartree-Fock-Slater MO-LCAO study of tetracyclo[3.3.0.0<sup>2,4</sup>.0<sup>3,6</sup>]oct-7-ene and related strained compounds.  
J. Am. Chem. Soc. 106, 587 (1984).
59. H. van Lonkhuyzen, C.A. de Lange.  
UV photoelectron spectroscopy of OH and OD radicals.  
Mol. Phys. 51, 551 (1984).
60. E.E. Burnell, C.A. de Lange.  
NMR of  $^{15}N^{15}N$  in nematic phases.  
Chem. Phys. Letters 106, 413 (1984).
61. H. van Lonkhuyzen, C.A. de Lange.  
UV photoelectron spectroscopy of vibrationally excited nitrogen.  
Chem. Phys. Letters 107, 420 (1984).
62. P.B. Barker, A.J. van der Est, E.E. Burnell, G.N. Patey, C.A. de Lange, J.G. Snijders.  
NMR of deuterium in liquid crystal mixtures.  
Chem. Phys. Letters 107, 426 (1984).
63. O. Grabandt, H.G. Muller, C.A. de Lange.  
A microcomputer-controlled photoelectron spectrometer for the detection of

short-lived gas phase intermediates.  
Computer Enhanced Spectroscopy 2, 33 (1984).

64. H. van Lonkhuyzen, C.A. de Lange.  
High-resolution UV photoelectron spectroscopy of diatomic halogens.  
Chem. Phys. 89, 313 (1984).
65. C.A. de Lange, J.G. Snijders, E.E. Burnell.  
On the orientation of small molecules in anisotropic solvents.  
Invited article in: "Nuclear Magnetic Resonance of Liquid Crystals"; Ed. J.W. Emsley, D. Reidel Publishing Company, Dordrecht, Holland, 1985, p. 181-205.
66. A.J. van der Est, P.B. Barker, E.E. Burnell, C.A. de Lange, J.G. Snijders.  
NMR of methanes in liquid crystal mixtures.  
Mol. Phys. 56, 161 (1985).
67. W.J. van der Meer, H. van Lonkhuyzen, R.J. Butselaar, C.A. de Lange.  
HeI $\alpha$  photoelectron modulation spectroscopy of H<sub>2</sub> and D<sub>2</sub>.  
J. Chem. Phys. 83, 6173 (1985).
68. W.J. van der Meer, R.J. Butselaar, C.A. de Lange.  
Photoionization cross sections of chlorine atoms and molecules at 584 Å.  
Austr. J. Phys. 39, 779 (1986).
69. E.E. Burnell, C.A. de Lange.  
On the determination of chemical shielding anisotropies of solutes in liquid crystal mixtures of opposite diamagnetic anisotropies.  
Chem. Phys. Letters 136, 87 (1987).
70. E.E. Burnell, A.J. van der Est, G.N. Patey, C.A. de Lange, J.G. Snijders.  
NMR of solutes in liquid crystalline solvents: mechanisms of orientational order.  
Bull. Magn. Resonance 9, 4 (1987).
71. B.G. Koenders, K.E. Drabe, C.A. de Lange.  
Photoelectron spectroscopic study of resonant multiphoton ionisation of atomic and molecular bromine.  
Chem. Phys. Letters 138, 1 (1987).
72. W.J. van der Meer, P. van der Meulen, C.A. de Lange.  
HeI $\alpha$  photoionisation cross-section determination of Br atoms.  
Chem. Phys. 115, 109 (1987).
73. B.G. Koenders, D.M. Wieringa, K.E. Drabe, C.A. de Lange.  
A photoelectron spectroscopic study of low-lying Rydberg states in molecular chlorine using multiphoton ionisation.  
Chem. Phys. 118, 113 (1987).



74. B.G. Koenders, G.J. Kuik, K.E. Drabe, C.A. de Lange.  
(2+1) REMPI PES of gerade Rydberg states of molecular bromine in the 68000 to 73400  $\text{cm}^{-1}$  region.  
Chem. Phys. Letters 147, 310 (1988).
75. C.A. de Lange, P. van der Meulen, W.J. van der Meer.  
Absolute photoionisation cross sections of transient species.  
J. Mol. Structure 173, 215 (1988).
76. C.A. de Lange, H.J. Bakker, O. Grabandt.  
Tunneling and shape resonance phenomena in the UV photoelectron spectra of HF and DF.  
J. Mol. Structure 173, 221 (1988).
77. B.G. Koenders, D.M. Wieringa, K.E. Drabe, C.A. de Lange.  
A photoelectron spectroscopic study of molecular chlorine and bromine using three-photon resonant multiphoton ionisation.  
J. Mol. Structure 174, 171 (1988).
78. A.J. van der Est, E.E. Burnell, J.B.S. Barnhoorn, C.A. de Lange, J.G. Snijders.  
Acetylene in nematic liquid crystals: a vibrational analysis of the observed dipolar couplings.  
J. Chem. Phys. 89, 4657 (1988).
79. W.J. van der Meer, P. van der Meulen, C.A. de Lange.  
Absolute HeI $\alpha$  photoionisation cross sections of O atoms and electronically excited  $\text{O}_2(^1\Delta_g)$ .  
Chem. Phys. 126, 385 (1988).
80. B.G. Koenders, D.M. Wieringa, G.J. Kuik, K.E. Drabe, C.A. de Lange.  
(3+1) REMPI-PES of molecular chlorine in the region 73300 to 75300  $\text{cm}^{-1}$ :  $1^1\Sigma_u^+$  and  $3^3\Sigma_u$  states.  
Chem. Phys. 129, 41 (1989).
81. O. Grabandt, C.A. de Lange, R. Mooyman, T. van der Does, F. Bickelhaupt.  
He(I) photoelectron spectroscopy of diisocyanogen (CNNC).  
Chem. Phys. Letters 155, 221 (1989).
82. H.J. Bakker, O. Grabandt, C.A. de Lange.  
Tunneling and shape resonance phenomena in the UV photoelectron spectra of HF and DF.  
Chem. Phys. 132, 243 (1989).
83. O. Grabandt, C.A. de Lange, R. Mooyman.  
HeI photoelectron spectroscopy of InF.  
Chem. Phys. Letters 160, 359 (1989).

84. W.J. van der Meer, M. Volmer, C.A. de Lange.  
Absolute photoionisation cross sections of atomic and molecular fluorine at 584 Å.  
J. Electron Spectrosc. Relat. Phenom. 49, 263 (1989)
85. B.G. Koenders, S.M. Koeckhoven, G.J. Kuik, K.E. Drabe, C.A. de Lange.  
Photoelectron spectroscopic studies of multiphoton processes in molecular chlorine involving the  $2\ ^1\Pi_g$  Rydberg state.  
J. Chem. Phys. 91, 6042 (1989).
86. C.A. de Lange, B.G. Koenders, S.M. Koeckhoven.  
Photoelectron spectroscopy of autoionization and dissociation in molecular chlorine using resonance enhanced multiphoton ionization.  
J. Electron Spectrosc. Relat. Phenom. 51, 363 (1990).
87. O. Grabandt, R. Mooyman, C.A. de Lange.  
He(I) photoelectron spectroscopy of the gallium monohalides.  
Chem. Phys. 143, 227 (1990).
88. E. de Beer, B.G. Koenders, M.P. Koopmans, C.A. de Lange  
Multiphoton ionization processes in HCl studied by photoelectron spectroscopy.  
J. Chem. Soc. Faraday Trans. 86, 2035 (1990).
89. B.G. Koenders, C.A. de Lange.  
Photoelectron spectroscopy of multiphoton processes in molecular chlorine.  
Comments on At. and Mol. Phys. 3, 119 (1990).
90. P. van der Meulen, M.O. Krause, C.A. de Lange, D.W. Mancini.  
A photoelectron spectroscopic study of oxygen atoms near the  $4P^e$  threshold using synchrotron radiation.  
Physica Scripta 41, 837 (1990).
91. P. van der Meulen, M.O. Krause, C.A. de Lange.  
Angle-resolved photoelectron spectroscopy of atomic oxygen.  
Phys. Rev. A 43, 5997 (1991).
92. Esther de Beer, M.P. Koopmans, C.A. de Lange, Yumin Wang, W.A. Chupka.  
(2+1) REMPI-PES of the OH radical.  
J. Chem. Phys. 94, 7634 (1991).
93. E. de Beer, C.A. de Lange, J.A. Stephens, Kwanghsi Wang, V. McKoy.  
Rotationally resolved photoelectron spectroscopy of the  $2\Sigma^-$  Rydberg states of OH: the role of Cooper minima.  
J. Chem. Phys. 95, 714 (1991).
94. O. Grabandt, C.A. de Lange, R. Mooyman, P. Vernooijs.  
He(I) photoelectron spectroscopy of  $\text{SiF}_2\text{Cl}_2$  and  $\text{SiFCl}_3$ .  
Chem. Phys. Letters 184, 221 (1991).

95. E. de Beer, M. Born, C.A. de Lange, N.P.C. Westwood.  
A rotationally resolved REMPI-PES study of the NH radical.  
Chem. Phys. Letters 186, 40 (1991).
96. P. van der Meulen, M.O. Krause, C.D. Caldwell, S.B. Whitfield, C.A. de Lange.  
Autoionisation resonances in atomic chlorine: the  $3s3p^5(^3P^o_{2,1,0})np$  Rydberg series.  
J. Phys. B: At. Mol. Opt. Phys. 24, L573 (1991).
97. P. van der Meulen, C.A. de Lange, M.O. Krause.  
Angle-resolved photoelectron spectrometry of atomic bromine using synchrotron radiation.  
J. Phys. B: At. Mol. Opt. Phys. 25, 97 (1992).
98. O. Grabandt, H.J. Bakker, C.A. de Lange.  
The temperature dependence of the LiH photoelectron spectrum.  
Chem. Phys. Letters 189, 291 (1992).
99. M.O. Krause, S.B. Whitfield, C.D. Caldwell, J.-Z. Wu, P. van der Meulen, C.A. de Lange, R.W.C. Hansen.  
Outer ns, np correlation satellites in the rare gases - a photoelectron spectrometry study with an undulator photon source.  
J. Electron Spectrosc. Relat. Phenom. 58, 79 (1992).
100. S.G. Clement, M.N.R. Ashfold, C.M. Western, E. de Beer, C.A. de Lange, N.P.C. Westwood.  
New singlet Rydberg states of NH (ND) in the energy range 92 000 - 100 000  $\text{cm}^{-1}$  characterised by REMPI - PES.  
J. Chem. Phys. 96, 4963 (1992).
101. P. van der Meulen, E. de Beer, C.A. de Lange, N.P.C. Westwood, M.O. Krause.  
Atomic spectroscopy with laser and synchrotron radiation.  
in: "Synchrotron Radiation and Dynamic Phenomena", Conference Proceedings of the 48th International Meeting of Physical Chemistry, Grenoble, France, 9-13 September 1991, (Editor Alberto Beswick), American Institute of Physics 258, 18 (1992).
102. Kwanghsi Wang, J.A. Stephens, V. McKoy, E. de Beer, C.A. de Lange, N.P.C. Westwood.  
Rotationally resolved photoelectron spectra in resonance enhanced multiphoton ionization of Rydberg states of NH.  
J. Chem. Phys. 97, 211 (1992).
103. P. van der Meulen, M.O. Krause, C.D. Caldwell, S.B. Whitfield, C.A. de Lange.  
Angle-resolved photoelectron spectrometry of atomic chlorine using

- synchrotron radiation.  
Phys. Rev. A 46, 2468 (1992).
104. E. de Beer, C.A. de Lange, N.P.C. Westwood.  
REMPI-PES of *np* and *nf* Rydberg states of atomic nitrogen.  
Phys. Rev. A 46, 5653 (1992).
105. J.B.S. Barnhoorn, C.A. de Lange, E.E. Burnell.  
Zero-electric-field-gradient nematic mixtures for the elucidation of  
orientational mechanisms.  
Liq. Crystals 13, 319 (1993).
106. M.O. Krause, C.D. Caldwell, S.B. Whitfield, C.A. de Lange, P. van der  
Meulen.  
Population of the  $^3P_{2,1,0}$  fine-structure states in the 3s and 3p photoionization  
of atomic chlorine.  
Phys. Rev. A 47, 3015 (1993).
107. M.R. Dobber, W.J. Buma, C.A. de Lange.  
Resonance enhanced multiphoton ionization photoelectron spectroscopy on  
nano- and picosecond timescales of Rydberg states of methyl iodide.  
J. Chem. Phys. 99, 836 (1993).
108. E. de Beer, W.J. Buma, C.A. de Lange.  
Resonance enhanced multiphoton ionization photoelectron spectroscopy and  
pulsed field ionization *via* the  $F\ ^1\Delta_2$  ( $v'=0$ ) and  $f\ ^3\Delta_2$  ( $v'=0$ ) Rydberg states of  
HCl.  
J. Chem. Phys. 99, 3252 (1993).
109. S.M. Koeckhoven, W.J. Buma, C.A. de Lange.  
A (3+1) resonance enhanced multiphoton ionization study of the  $C\ ^1\Sigma^+$  and  $E\ ^1\Pi$   
states of CO: polarization dependence used to probe electronic excitation  
routes and electronic character.  
J. Chem. Phys. 99, 5061 (1993).
110. S.M. Koeckhoven, W.J. Buma, C.A. de Lange.  
Three-photon excitation of autoionizing states of Ar, Kr, and Xe between the  
 $^2P_{3/2}$  and  $^2P_{1/2}$  ionic limits.  
Phys. Rev. A 49, 3322 (1994).
111. N.P.L. Wales, E. de Beer, N.P.C. Westwood, W.J. Buma, C.A. de Lange,  
M.C. van Hemert.  
One- and two-colour two-photon resonance enhanced multiphoton ionization  
spectroscopy of the  $d\ ^1\Sigma^+$  state of NH.  
J. Chem. Phys. 100, 7984 (1994).
112. J.B.S. Barnhoorn, C.A. de Lange.  
An *ab initio* study of molecular hydrogen and its deuterated analogues partially

- oriented in nematic liquid crystals.  
Mol. Phys. 82, 651 (1994).
113. M.R. Dobber, W.J. Buma, C.A. de Lange.  
(3+1) Resonance enhanced multiphoton ionization photoelectron spectroscopy of *nf* Rydberg states of carbon dioxide.  
J. Chem. Phys. 101, 9303 (1994).
114. R.A. Morgan, P. Puyuelo, J.D. Howe, M.N.R. Ashfold, W.J. Buma, J.B. Milan, C.A. de Lange.  
Resonance enhanced multiphoton ionisation spectroscopy of thiirane.  
J. Chem. Soc. Faraday Trans. 90, 3591 (1994).
115. M.R. Dobber, W.J. Buma, C.A. de Lange.  
Two-colour picosecond time-resolved (2+1') resonance enhanced multiphoton ionization photoelectron spectroscopy on the B <sup>1</sup>E'' and C' <sup>1</sup>A<sub>1</sub>' states of ammonia.  
J. Phys.Chem., invited article, 99, 1671 (1995).
116. S.M. Koeckhoven, W.J. Buma, C.A. de Lange.  
Four-photon excitation of autoionizing states of Ar, Kr, and Xe between the <sup>2</sup>P<sub>3/2</sub> and <sup>2</sup>P<sub>1/2</sub> ionic limits.  
Phys. Rev. A 51, 1097 (1995).
117. S.M. Koeckhoven, W.J. Buma, C.A. de Lange.  
A resonance enhanced multiphoton ionization study of the gerade excited states of Xe<sub>2</sub> with a Xe <sup>1</sup>S<sub>0</sub> + Xe\* 6s[3/2]<sub>1</sub> dissociation limit.  
J. Chem. Phys. 102, 4020 (1995).
118. J.D. Howe, M.N.R. Ashfold, R.A. Morgan, C.M. Western, W.J. Buma, J.B. Milan, C.A. de Lange.  
Observation of the SCl radical by resonance enhanced multiphoton ionisation spectroscopy.  
J. Chem. Soc. Faraday Trans. 91, 773 (1995).
119. C.A. de Lange.  
Rotationally resolved resonance enhanced multiphoton ionization photoelectron spectroscopy of diatomic hydrides.  
Invited review article in: "High Resolution Laser Photoionization and Photoelectron Studies", (Editors I. Powis, T. Baer and C.Y. Ng), John Wiley & Sons Ltd., 1995, p. 195-245.
120. J.B. Milan, W.J. Buma, C.A. de Lange, C.M. Western, M.N.R. Ashfold.  
Two-photon resonance enhanced MPI-PES above the lowest ionization threshold: observation of the [a <sup>1</sup>Δ]5pπ <sup>2</sup>Φ state of the SH (SD) radical.  
Chem. Phys. Letters 239, 326 (1995).
121. R.A. Morgan, P. Puyuelo, J.D. Howe, M.N.R. Ashfold, W.J. Buma, N.P.L.

- Wales, C.A. de Lange.  
Resonance enhanced multiphoton ionisation spectroscopy of methanethiol.  
J. Chem. Soc. Faraday Trans. 91, 2715 (1995).
122. J.B. Milan, W.J. Buma, C.A. de Lange, Kwanghsi Wang, V. McKoy.  
Rotationally resolved photoelectron spectroscopy of the [ $a^1\Delta$ ] $3d\pi^2\Phi$  Rydberg state of the SH radical.  
J. Chem. Phys. 103, 3262 (1995).
123. R.A. Morgan, A.J. Orr-Ewing, M.N.R. Ashfold, W.J. Buma, N.P.L. Wales, C.A. de Lange.  
Resonance enhanced multiphoton ionisation spectroscopy of dimethyl sulfide.  
J. Chem. Soc. Faraday Trans. 91, 3339 (1995).
124. J.B. Milan, W.J. Buma, C.A. de Lange.  
Zero-kinetic-energy pulsed-field ionization spectroscopy of the  $a^1\Delta$  state of  $\text{SH}^+$  ( $\text{SD}^+$ ).  
J. Chem. Phys. 104, 521 (1996).
125. J.B.S. Barnhoorn, C.A. de Lange.  
 $^1\text{H}$ ,  $^{19}\text{F}$  and  $^2\text{H}$  NMR of monofluoromethane and deuterated analogues partially oriented in nematic liquid crystals.  
Mol. Phys. 88, 1 (1996).
126. N.P.L. Wales, W.J. Buma, C.A. de Lange, H. Lefebvre-Brion, Kwanghsi Wang, V. McKoy.  
Zero kinetic energy-pulsed field ionization and resonance enhanced multiphoton ionization photoelectron spectroscopy: ionization dynamics of Rydberg states in HBr.  
J. Chem. Phys. 104, 4911 (1996).
127. R.A. Morgan, M.A. Baldwin, A.J. Orr-Ewing, M.N.R. Ashfold, W.J. Buma, J.B. Milan, C.A. de Lange.  
Resonance enhanced multiphoton ionisation spectroscopy of carbon disulphide.  
J. Chem. Phys. 104, 6117 (1996).
128. R.A. Morgan, M.A. Baldwin, A.J. Orr-Ewing, D. Ascenzi, M.N.R. Ashfold, W.J. Buma, C.R. Scheper, C.A. de Lange.  
Resonance enhanced multiphoton ionisation spectroscopy of carbonyl sulphide.  
J. Chem. Phys. 105, 2141 (1996).
129. N.P.L. Wales, W.J. Buma, C.A. de Lange, H. Lefebvre-Brion.  
Characterization of spin-orbit autoionizing Rydberg states excited *via* one-photon absorption from the  $F^1\Delta_2$  Rydberg state of HBr.  
J. Chem. Phys. 105, 2978 (1996).
130. N.P.L. Wales, W.J. Buma, C.A. de Lange.  
(3+1) Resonance enhanced multiphoton ionization-photoelectron spectroscopy on the E, F, and G Rydberg states of ClO.

Chem. Phys. Letters 259, 213 (1996).

131. N.P.L. Wales, W.J. Buma, C.A. de Lange, H. Lefebvre-Brion.  
Dynamics of high- $n$  Rydberg states employed in zero kinetic energy-pulsed field ionization spectroscopy *via* the  $F\ ^1\Delta_2$ ,  $D\ ^1\Pi_1$ , and  $f\ ^3\Delta_2$  Rydberg states of HCl.  
J. Chem. Phys. 105, 5702 (1996).
132. J.B. Milan, W.J. Buma, C.A. de Lange.  
Two-photon Resonance Enhanced MultiPhoton Ionization PhotoElectron Spectroscopy of the SH (SD) radical below and above the lowest ionization threshold.  
J. Chem. Phys. 105, 6688 (1996).
133. R.A. Morgan, M.A. Baldwin, D. Ascenzi, A.J. Orr-Ewing, M.N.R. Ashfold, W.J. Buma, J.B. Milan, C.R. Scheper, C.A. de Lange.  
Resonance enhanced multiphoton ionisation (REMPI) and REMPI-photoelectron spectroscopy of carbonyl sulphide and carbon disulphide.  
Int. J. Mass Spectr., special issue, invited paper, 159, 1 (1996).
134. S. Woutersen, J.B. Milan, W.J. Buma, C.A. de Lange.  
Resonance-enhanced multiphoton ionization photoelectron spectroscopy of even-parity Rydberg states of atomic sulphur.  
Phys. Rev. A 54, 5126 (1996).
135. S. Woutersen, J.B. Milan, W.J. Buma, C.A. de Lange.  
Resonance-enhanced multiphoton-ionization photoelectron spectroscopy of even-parity autoionizing Rydberg states of atomic sulphur.  
J. Chem. Phys. 106, 6831 (1997).
136. E.E. Burnell, C.A. de Lange, A.L. Segre, D. Capitani, G. Angelini, G. Lilla, J.B.S. Barnhoorn.  
A tritium Nuclear Magnetic Resonance study of  $T_2$ , HT, and DT dissolved in nematic phases.  
Phys. Rev. E 55, 496 (1997).
137. J.B. Milan, W.J. Buma, C.A. de Lange, Kwanghsi Wang, V. McKoy.  
Rotationally resolved multiphoton ionization photoelectron spectroscopy of the  $[a\ ^1\Delta]3d\pi\ ^2\Phi$  and  $[a\ ^1\Delta]5p\pi\ ^2\Phi$  Rydberg states of the SH radical.  
J. Chem. Phys. 107, 2782 (1997).
138. C.A. de Lange.  
Towards rotationally resolved photoelectron spectroscopy.  
Invited contribution in: "Optical, Electric and Magnetic Properties of Molecules. A Review of the Work of A.D. Buckingham", eds. D.C. Clary and B.J. Orr, Elsevier, Amsterdam, 1997, pp. 231-243.
139. S.R. Langford, A.J. Orr-Ewing, R.A. Morgan, C.M. Western, M.N.R. Ashfold, A. Rijkenberg, C.R. Scheper, W.J. Buma, C.A. de Lange.

- The spectroscopy of high Rydberg states of ammonia.  
J. Chem. Phys. 108, 6667 (1998).
140. E.E. Burnell, C.A. de Lange.  
Prediction from molecular shape of solute orientational order in liquid crystals.  
Invited review article, Chem. Rev. 98, 2359-2388 (1998).
141. C.R. Scheper, J. Kuijt, W.J. Buma, C.A. de Lange.  
Resonance enhanced multiphoton ionization photoelectron spectroscopy of  
Rydberg states of N<sub>2</sub>O below the X<sup>2</sup>Π ionization limit.  
J. Chem. Phys. 109, 7844-7850 (1998).
142. C.R. Scheper, W.J. Buma, C.A. de Lange, W.J. van der Zande.  
Photoionization and photodissociation dynamics of H<sub>2</sub> after (3+1) resonance  
enhanced multiphoton ionization *via* the B <sup>1</sup>Σ<sub>u</sub><sup>+</sup> state.  
J. Chem. Phys. 109, 8319-8329 (1998).
143. M.N.R. Ashfold, S.R. Langford, R.A. Morgan, A.J. Orr-Ewing, C.M.  
Western, C.R. Scheper, C.A. de Lange.  
Resonance enhanced multiphoton ionisation (REMPI) and REMPI-  
photoelectron spectroscopy of ammonia.  
The European Physical Journal D 4, 189-197 (1998).
144. C.R. Scheper, W.J. Buma, C.A. de Lange.  
Resonance enhanced multiphoton ionization photoelectron spectroscopy of  
gerade excited Rydberg states of the xenon dimer.  
Invited contribution in Special Issue on "Unstable Molecules", J. Electr.  
Spectr. Relat. Phenom. 97, 147-158 (1998).
145. C.A. de Lange.  
Laser photoelectron spectroscopy: mixed traits of excited states.  
Invited research article, J. Chem. Soc. Faraday Trans. 94, 3409-3419  
(1998).
146. C.A. de Lange.  
Rydberg State Spectroscopy of the SH Radical.  
Invited review article in: "The Role of Rydberg States in Spectroscopy and  
Photochemistry. Low and High Rydberg States", Ed. C. Sandorfy, Kluwer  
Academic Publishers, 1999, p. 457-478.
147. C.R. Scheper, C.A. de Lange, A. de Lange, E. Reinhold, W. Ubachs.  
Dissociation of H<sub>2</sub> in the energy region at the H(n=1) + H(n=3) dissociation  
threshold after (1+1') resonance-enhanced two-photon ionization via the B<sup>1</sup>Σ<sub>u</sub><sup>+</sup>  
state.  
Chem. Phys. Letters 312, 131-138 (1999).
148. M. Müller, J. Squier, C.A. de Lange, G.J. Brakenhoff.  
CARS microscopy with folded BoxCARS phasematching.



- J. Microsc. 197, 150-158 (2000).
149. C.R. Scheper, M.F. Somers, C.A. de Lange.  
On the competition between photoionisation and photodissociation of molecular deuterium after (3+1) resonance-enhanced multiphoton excitation *via* the  $B^1\Sigma_u^+$  state.  
J. Electron Spectrosc. Relat. Phenom., 108, 123-133 (2000).
150. D.H.A. ter Steege, M. Smits, C.A. de Lange, N.P.C. Westwood, J.B. Peel, L. Visscher.  
Resonance-enhanced multiphoton ionisation photoelectron spectroscopy of the ClO radical: the  $C^2\Sigma^-$  state.  
Faraday Discussions 115 (April 2000), 115, 259-269 (2000).
151. A.M. Rijs, E.H.G. Backus, C.A. de Lange, N.P.C. Westwood, M.H.M. Janssen.  
The “magnetic bottle” spectrometer as a versatile tool for laser photoelectron spectroscopy.  
J. Electron Spectrosc. Relat. Phenom., special issue, invited contribution, 112, 151-162 (2000).
152. C.A. de Lange.  
Laser photoelectron spectroscopy: spectroscopy and dynamics of excited states in small and medium-sized molecules.  
Adv. Chem. Phys., invited contribution, 117, 1-126 (2001).
153. C.A. de Lange.  
Laser photoelectron spectroscopy of  $H_2$  and  $D_2$ : competing decay channels in “simple” molecules.  
Int. Rev. Phys. Chem., invited contribution, 20, 1-32 (2001).
154. E.E. Burnell, C.A. de Lange, S. Gaemers.  
Pressure-induced change in orientational order of solutes in liquid crystals.  
Chem. Phys. Letters 337, 248-254 (2001).
155. A.M. Rijs, E.H.G. Backus, C.A. de Lange, M.H.M. Janssen, K. Wang, V. McKoy.  
Rotationally resolved photoelectron spectroscopy of hot  $N_2$  formed in the photofragmentation of  $N_2O$ .  
J. Chem. Phys. 114, 9413-9420 (2001).
156. A.M. Rijs, E.H.G. Backus, C.A. de Lange, M.H.M. Janssen, N.P.C. Westwood, K. Wang, V. McKoy.  
Rotationally resolved photoionization dynamics of hot CO fragmented from OCS.  
J. Chem. Phys. 116, 2776-2782 (2002).
157. Hideki Katayanagi, Yoshiteru Matsumoto, Cornelis A. de Lange, Masaaki Tsubouchi, Toshinori Suzuki.  
One- and two-color photoelectron imaging of the CO molecule *via* the  $B^1\Sigma^+$  state.  
J. Chem. Phys. 119, 3737-3744 (2003).

158. Masaaki Tsubouchi, Cornelis A. de Lange, Toshinori Suzuki.  
Femtosecond time-resolved charged particle imaging studies of the ultraviolet photodissociation of the NO dimer.  
J. Chem. Phys. 119, 11728-11739 (2003).
159. NMR of Ordered Liquids.  
Editors: E.E. Burnell, C.A. de Lange.  
Kluwer Academic Publishers, Dordrecht, The Netherlands (2003).
160. C.A. de Lange, E.E. Burnell.  
Basics of NMR of molecules in uniaxial anisotropic environments.  
In: NMR of Ordered Liquids (Eds. E.E. Burnell, C.A. de Lange), ISBN 1-4020-1343-4, p. 5-26, Kluwer Academic Publishers, Dordrecht, The Netherlands (2003).
161. M. Bloom, E.E. Burnell, C.A. de Lange.  
Density matrix methods in NMR.  
In: NMR of Ordered Liquids (Eds. E.E. Burnell, C.A. de Lange), p. 27-44, Kluwer Academic Publishers, Dordrecht, The Netherlands (2003).
162. E.E. Burnell, C.A. de Lange.  
Solutes as probes of simplified models of orientational order.  
In: NMR of Ordered Liquids (Eds. E.E. Burnell, C.A. de Lange), p. 221-240, Kluwer Academic Publishers, Dordrecht, The Netherlands (2003).
163. Marc Smits, C.A. de Lange, Susanne Ullrich, T. Schultz, M. Schmitt, Jonathan G. Underwood, James P. Shaffer, D.M. Rayner, Albert Stolow.  
Stable kilohertz-rate molecular beam laser ablation sources.  
Rev. Sci. Instrum. 74, 4812-4817 (2003).  
This paper was selected for the November 1, 2003 issue of Virtual Journal of Biological Physics Research.
164. E. Witkowicz, H. Linnartz, C.A. de Lange, W. Ubachs, A. Sfounis, M. Massaouti, M. Velegrakis.  
Mass spectrometric and laser spectroscopic characterization of a supersonic planar plasma expansion.  
Int. J. of Mass Spectrometry 232, 25-29 (2004).
165. J. Philip, J.P. Sprengers, C.A. de Lange, W. Ubachs, E. Reinhold.  
Highly accurate transition frequencies in the H<sub>2</sub> Werner and Lyman absorption bands.  
Can. J. Chem., invited contribution, Herzberg issue, 82, 713-722 (2004).
166. Anouk M. Rijs, Ellen H.G. Backus, Cornelis A. de Lange.  
Photoionization dynamics in CS fragmented from CS<sub>2</sub> studied by high-resolution photoelectron spectroscopy.  
Can. J. Chem., invited contribution, Herzberg issue, 82, 744-749 (2004).
167. J. Philip, J.P. Sprengers, P. Cacciani, C.A. de Lange, W. Ubachs.

- Frequency-mixing scheme for the production of tunable narrow band XUV radiation (91-95 nm).  
Appl. Phys. B 78, 737-743 (2004).
168. Marc Smits, C.A. de Lange, Adrian Pegoraro, D.M. Rayner, Albert Stolow.  
Femtosecond infrared strong field ionisation of metal clusters produced by kHz ablation.  
In: "Femtochemistry and Femtobiology; Ultrafast Events in Molecular Science",  
Proceedings of the Femtochemistry VI conference, Paris 2003 (Eds. Monique M. Martin  
and James T. Hynes), p. 61 - 65, Elsevier, 2004.
169. M. Smits, C.A. de Lange, A. Stolow, D.M. Rayner.  
Dynamic polarization in the strong field ionization of small metal clusters.  
Phys. Rev. Letters 93 (20) 203402 (2004).
170. M. Smits, C.A. de Lange, A. Stolow, D.M. Rayner  
Absolute ionization rates of multi-electron atoms in strong infrared laser fields.  
Phys. Rev. Letters 93 (21) 213003 (2004).
171. Masaaki Tsubouchi, Cornelis A. de Lange, Toshinori Suzuki  
Ultrafast-dissociation processes in the NO dimer studied with time-resolved  
photoelectron imaging.  
J. Electron Spectrosc. Relat. Phenom., special issue, invited contribution, 142, 193-  
205 (2005).
172. E.E. Burnell, C.A. de Lange  
NMR as a tool in the investigation of fundamental problems in ordered liquids.  
Invited contribution, Solid State NMR 28, 73-90 (2005).
173. E.E. Burnell, C.A. de Lange, J.B.S. Barnhoorn, I. Aben, P.F. Levelt  
Molecules with large-amplitude torsional motion partially oriented in a nematic liquid:  
ethane and isotopomers.  
J. Phys. Chem. A 109, 11027-11036 (2005).
174. U. Hollenstein, E. Reinhold, C.A. de Lange, W. Ubachs  
High resolution XUV laser spectroscopic study of the  $B\ ^1\Sigma_{(u)}^+ (v' = 0 - 2) \leftarrow X\ ^1\Sigma_{(g)}^+ (v'' = 0)$  Lyman bands in  $H_2$  and HD.  
J. Phys. B. 39, L195-L201 (2006).
175. M.O. Vieitez, T.I. Ivanov, J.P. Sprengers, C.A. de Lange, W. Ubachs, B.R. Lewis, G.  
Stark  
Quantum-interference effects in the  $o^1\Pi_u(v=1) \sim b^1\Pi_u(v=9)$  Rydberg-valence complex of  
molecular nitrogen.  
Mol. Phys., special issue, 105, 1543-1557 (2007).
176. W.L. Meerts, C.A. de Lange, A.C.J. Weber, E.E. Burnell.  
A simple two-step automatic assignment procedure for complicated NMR spectra of  
solutes in liquid crystals using genetic algorithms.  
Chem. Phys. Letters 441, 342-346 (2007).

177. T. I. Ivanov, M.O. Vieitez, C.A. de Lange, W. Ubachs.  
Frequency calibration of  $B^1\Sigma_u^+ - X^1\Sigma_g^+ (6,0)$  Lyman transitions in  $H_2$  for comparison with quasar data.  
J. Phys. B: At. Mol. Opt. Phys. 41, 035702 (2008).
178. M.O. Vieitez, T. I. Ivanov, W. Ubachs, B.R. Lewis, C.A. de Lange.  
On the complexity of the absorption spectrum of molecular nitrogen.  
Invited contribution, J. Mol. Liquids, 141, 110-117 (2008).
179. T.I. Ivanov, M. Roudjane, M.O. Vieitez, C.A. de Lange, W.-Ü L. Tchang-Brillet, W. Ubachs.  
HD as a probe for detecting mass variation on a cosmological time scale.  
Phys. Rev. Letters 100, 093007 (2008).
180. M.O. Vieitez, T.I. Ivanov, C.A. de Lange, W. Ubachs, A.N. Heays, B.R. Lewis, G. Stark.  
Interactions of the  $3p\pi_u c^1\Pi_u (v=2)$  Rydberg-complex member in isotopic  $N_2$ .  
J. Chem. Phys. 128, 134313 (2008).
181. M. Roudjane, T.I. Ivanov, M.O. Vieitez, C.A. de Lange, W.-Ü L. Tchang-Brillet, W. Ubachs.  
Extreme ultraviolet laser calibration of  $D_2$  Lyman and Werner transitions.  
Mol. Phys., special issue, 106, 1193-1197 (2008).
182. T.I. Ivanov, E.J. Salumbides, M.O. Vieitez, P.C. Cacciani, C.A. de Lange, W. Ubachs  
Extreme-ultraviolet laser metrology of OI transitions.  
Mon. Not. R. Astron. Soc. 389, L4-L7 (2008).
183. M.O. Vieitez, T.I. Ivanov, E. Reinhold, C.A. de Lange, W. Ubachs  
Observation of a Rydberg series in  $H^+H^-$ : A heavy Bohr atom.  
Phys. Rev. Letters, 101, 163001 (2008).
184. W.L. Meerts, C.A. de Lange, A.C.J. Weber, E.E. Burnell  
Evolutionary Algorithms to Solve Complicated NMR Spectra  
J. Chem. Phys. 130, 044504 (2009).
185. A. Vredenburg, W.G. Roeterdink, C.A. de Lange, M.H.M. Janssen  
Revealing femtosecond multiphoton induced multichannel molecular ionization and fragmentation dynamics by photoelectron-photoion coincidence imaging  
Chem. Phys. Letters 478, 20-27 (2009).
186. M.O. Vieitez, T. Ivanov, E. Reinhold, C.A. de Lange, W. Ubachs  
Een zwaar Bohratoom.  
Ned. Tijdschr. v. Natuurkunde 75, 36-38 (2009).
187. M.O. Vieitez, T.I. Ivanov, E. Reinhold, C.A. de Lange, W. Ubachs  
Spectroscopic observation and characterization of  $H^+H^-$  heavy Rydberg states.  
J. Phys. Chem. A, invited contribution, Robert W. Field Festschrift, 113, 13237-13245 (2009).

188. E.E. Burnell, C.A. de Lange, W.L. Meerts  
Novel Strategies for solving highly complex NMR spectra of solutes in liquid crystals.  
In: Nuclear Magnetic Resonance Spectroscopy of Liquid Crystals (editor R. Y. Dong), World Scientific Review, Volume 9, Chapter 1, pages 1 - 35 (2009).
189. E. Elliott Burnell, Cornelis A. de Lange, Donatella Capitani, Giancarlo Angelini, Ornella Ursini  
<sup>3</sup>H NMR of the tritiated isotopologues of methane in nematic liquid-crystal solvents.  
Chem. Phys. Letters 486, 21-26 (2010).
190. Cornelis A. de Lange, W. Leo Meerts, Adrian C.J. Weber, E. Elliott Burnell  
Scope and limitations of accurate structure determination of solutes dissolved in liquid crystals.  
J. Phys. Chem. A, 114, 5878–5887 (2010).
191. Adrian C.J. Weber, Cornelis A. de Lange, W. Leo Meerts, E. Elliott Burnell  
The Butane Condensed Matter Conformational Problem.  
Chem. Phys. Letters 496, 257–262 (2010).
192. T. I. Ivanov, C. A. de Lange, W. Ubachs  
Spectral identification of diffuse resonances in H<sub>2</sub> above the  $n = 2$  dissociation limit.  
J. Chem. Phys. 134, 054309 (2011).
193. E. Elliott Burnell, Adrian C.J. Weber, Cornelis A. de Lange, W. Leo Meerts, Ronald Y. Dong  
Nuclear magnetic resonance study of alkane conformational statistics.  
J. Chem. Phys. 135, 234506 (2011); doi:10.1063/1.3665139
194. Adrian C.J. Weber, Antonio Pizzirusso, Luca Muccioli, Claudio Zannoni, W. Leo Meerts, Cornelis A. de Lange, E. Elliott Burnell  
Efficient analysis of highly complex Nuclear Magnetic Resonance spectra of flexible solutes in ordered liquids by using Molecular Dynamics.  
J. Chem. Phys. 136, 174506 (2012); doi:10.1063/1.4705271
195. Analysis of Complex High-Resolution NMR Spectra by Sophisticated Evolutionary Strategies.  
W. Leo Meerts, Cornelis A. de Lange, Adrian C.W. Weber, E. Elliott Burnell  
eMagRes, **2013**, 2, 437–450. DOI10.1002/9780470034590.emrstm1309
196. E. Elliott Burnell, Adrian C.J. Weber, Ronald Y. Dong, W. Leo Meerts, Cornelis A. de Lange  
A model-free temperature-dependent conformational study of *n*-pentane in nematic liquid crystals.  
J. Chem. Phys. 142, 024904 (2015); doi: 10.1063/1.4904822
197. Adrian C.J. Weber, E. Elliott Burnell, W. Leo Meerts, Cornelis A. de Lange, Ronald Y. Dong, Luca Muccioli, Antonio Pizzirusso, Claudio Zannoni  
Molecular dynamics and <sup>1</sup>H NMR of *n*-hexane in liquid crystals.  
J. Chem. Phys. Communication 143, 011103 (2015); doi: 10.1063/1.4923253

198. E.E. Burnell, C.A. de Lange  
Molecular hydrogens dissolved in liquid crystals.  
*eMagRes*, **2016**, *1*, 901–912. DOI 10.1002/9780470034590.emrstm1477.
199. E. E. Burnell, C.A. de Lange, W.L. Meerts  
Molecular gears.  
J. Chem. Phys. Communication **145**, 091101 (2016); doi: [10.1063/1.4962221](https://doi.org/10.1063/1.4962221)
- 200 E. E. Burnell, C.A. de Lange, R.Y. Dong, W.L. Meerts, A.C.J. Weber  
Evolutionary algorithms and NMR of oriented molecules.  
Special issue in memory of Prof. Alex D. Bain: Concepts Magn Reson Part A.  
2016;45A:e21415. <https://doi.org/10.1002/cmr.a.21415>
- 201 E.E. Burnell, C.A. de Lange  
NMR of orientationally ordered short-chain hydrocarbons.  
Invited contribution, *Liquid Crystals* **45**, 1953-1963 (2018),  
[doi.org/10.1080/02678292.2018.1481540](https://doi.org/10.1080/02678292.2018.1481540)
- 202 E.E. Burnell, C.A. de Lange, R.Y. Dong  
Ring inversion in cyclohexane: a textbook example.  
Invited contribution, *Liquid Crystals* **47**, 1965-1974 (2020),  
[doi.org/10.1080/02678292.2019.1629501](https://doi.org/10.1080/02678292.2019.1629501)

**C.A. de Lange**

**Summary of seminars and posters**

1. Chemical shift anisotropies from NMR studies of oriented molecules.  
6. Kolloquium über Kernresonanz Spektroskopie, Aachen, West-Duitsland, 24-29 maart 1969.
2. Vloeibare kristallen en hoge resolutie NMR.  
Van der Waals Laboratorium, Universiteit van Amsterdam, Amsterdam, 13 maart 1970.
3. Verboden overgangen in het elektron-resonantie spektrum van halogeen atomen.  
Fysisch Colloquium R.U. Leiden, Leiden, 30 november 1971.
- 4.. "Verboden" overgangen in het EPR spektra van alkali atomen in de gasfase.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 14-15 februari 1972.
5. Elektronenresonantie aan gasfase radicalen.  
NNV vergadering, Delft, 25 februari 1972.
6. Elektron resonantie aan gasfase radicalen.  
Anorganisch Chemisch Laboratorium, Universiteit van Amsterdam, Amsterdam, 22 maart 1973.
7. Katalytische oxydatie bestudeerd met gasfase elektron resonantie.  
Koninklijke / Shell-Laboratorium, Amsterdam, 29 november 1973.
8. Beperkingen bij strukturbepaling met behulp van NMR in vloeibare kristallen.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 4-5 februari 1974.
9. Liquid crystal NMR of  $\text{POF}_3$ .  
European conference on experimental techniques in NMR, Canterbury, Engeland, 8-10 april 1974.
10. Verslag van de Canterbury conferentie "Experimental techniques in NMR".  
Discussiegroep Magnetische Resonantie, Geleen, 26 april 1974.
11. Het detekteren van kortlevende molekuulfragmenten met behulp van PES.  
Najaarsconferentie NNV sectie Atomaire Botsingsfysica, Lunteren, 13-14 oktober 1975.
12. Photoelectron spectroscopy on short-lived species.  
Massachusetts Institute of Technology, Cambridge, U.S.A., 28 maart 1977.
13. Photoelectron spectroscopy on short-lived species.  
National Bureau of Standards, Boulder, U.S.A., 23 april 1977.
14. Scope and limitations of the study of solutes in liquid crystal solvents.  
University of California, Berkeley, U.S.A., 6 mei 1977.
15. Photoelectron spectroscopy of transient species.



- University of British Columbia, Vancouver, Canada, 21 juni 1977.
16. NMR of solutes in nematic solvents.  
University of British Columbia, Vancouver, Canada, 22 juni 1977.
  17. G. Jonkers, D.M. de Leeuw, C.A. de Lange.  
Poster, getiteld: Fotoelektron spektroskopie aan kortlevende species.  
Voorjaarsvergadering NNV, Eindhoven, 18-19 april 1979.
  18. De somregel, een hulpmiddel bij de interpretatie van PE spektra.  
6e XPS / UPS mini-konferentie, R.U. Utrecht, Utrecht, 11 mei 1979.
  19. Effects of interaction between molecular internal motion and reorientation on NMR of anisotropic liquids.  
4th European Experimental NMR Conference, Autrans, Frankrijk, 26-29 juni 1979.
  20. E.E. Burnell, C.A. de Lange.  
Poster, getiteld: Effects of interaction between molecular internal motion and reorientation on NMR of anisotropic liquids.  
4th European Experimental NMR Conference, Autrans, Frankrijk, 26-29 juni 1979.
  21. Fotoelektron spektroskopie aan kortlevende intermediären.  
Symposium "Elektronenspektroskopie in de gasfase", Sektie Anorganische en Fysische Chemie KNCV, Vrije Universiteit, Amsterdam, 26 oktober 1979.
  22. Fotoelektron spektroskopie aan kortlevende molekulen in de gasfase.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 4-5 februari 1980.
  23. G. Jonkers, H.G. Muller, C.A. de Lange.  
Poster, getiteld: Gasfase fotoelektron spektra van  $\text{TeCl}_2$  en  $\text{TeBr}_2$ .  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 4-5 februari 1980. Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 7-8 februari 1980.
  24. H. van Lonkhuyzen, H.G. Muller, C.A. de Lange.  
Poster, getiteld: Modulatiemethoden voor fotoelektron spektroskopie aan transients.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 4-5 februari 1980  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 7-8 februari 1980.
  25. Inleiding van spektroskopische posters.  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 7-8 februari 1980.
  26. Photoelectron spectroscopy of transient species.  
University of British Columbia, Vancouver, Canada, 3 juni 1980.
  27. On the interaction between molecular internal motion and reorientation on NMR of anisotropic liquids.

- University of British Columbia, Vancouver, Canada, 25 juli 1980.
28. E.E. Burnell, C.A. de Lange.  
Poster, getiteld: NMR of methane in liquid-crystal solvents.  
ISMAR-AMPERE International Conference on Magnetic Resonance, Delft, 25-29 augustus 1980.
  29. J.G. Snijders, G. Jonkers, C.A. de Lange.  
Poster, getiteld: Relativistic effects in the PES of tellurides.  
Sannibal Symposium, Palm Beach, Florida, U.S.A., 12 maart 1981.
  30. UV photoelectron spektroskopie aan instabiele verbindingen in de gasfase.  
8e XPS / UPS mini-konferentie, R.U. Groningen, Groningen, 8 mei 1981.
  31. Photoelectron spectroscopy of transient species.  
University of British Columbia, Vancouver, Canada, 11 juni 1981.
  32. Photoelectron spectroscopy of short-lived small gas-phase molecules. Memorial  
University of Newfoundland, St. John's, Newfoundland, Canada, 31 juli 1981.
  33. Verrassende resultaten bij de NMR aan kleine molekulen opgelost in vloeibare  
kristallen.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 1-2 februari 1982.
  34. G. Jonkers, S.M. van der Kerk, R. Mooyman, C.A. de Lange.  
Poster, getiteld: He(I) fotoelektron spektroskopie aan koolstoftetraiodide ( $\text{CI}_4$ ) en  
ethyleentetraiodide ( $\text{C}_2\text{I}_4$ ).  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 1-2 februari 1982.  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren,  
4-5 februari 1982.
  35. Kernmagnetische resonantie aan kleine molekulen in anisotrope potentialen.  
Fysisch Laboratorium R.U. Leiden, Leiden, 27 mei 1982.
  36. Photoelectron spectroscopy of short-lived species: divalent group IV A and VI A  
compounds.  
University of British Columbia, Vancouver, Canada, 24 juni 1982.
  37. Photoelectron spectroscopy of short-lived species: divalent group IV A and VI A  
compounds.  
Argonne National Laboratory, Argonne, Illinois, U.S.A., 15 juli 1982.
  38. He(I) PES aan kortlevende divalente groep IV A en groep VI A verbindingen.  
9e XPS / UPS mini-konferentie, Universiteit van Amsterdam, Amsterdam, 30 augustus  
1982.
  39. Photoelectron spectroscopy of reactive systems.  
Second European Workshop on Molecular Spectroscopy and Photon-Induced  
Dynamics (invited lecture), De Eemhof, 30 september 1982.

40. Fotoelektron spektroskopie en HFS berekeningen aan divalente groep IV A en VI A verbindingen.  
Voordracht ter gelegenheid van de bijeenkomst voor werkgroepleiders Theoretische Chemie, Vrije Universiteit, Amsterdam, 27 oktober 1982.
41. H. van Lonkhuyzen, R. Mooyman, C.A. de Lange.  
Poster, getiteld: Fotoelektron spektroskopie aan kortlevende gasfase intermediairen met gasontladingstechnieken.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 31 januari - 1 februari 1983.  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 3-4 februari 1983.
42. Nieuwe PES-pectieven in Photo-Electron Spektroskopie aan instabiele molekulen.  
Fysisch Chemisch Laboratorium, Universiteit van Amsterdam, Amsterdam, 24 maart 1983.
43. PESpectives in PES of unstable species.  
Department of Chemistry, University of Southampton, Southampton, Engeland, 27 mei 1983.
44. G. Jonkers, H. van Lonkhuyzen, C.A. de Lange.  
Poster, getiteld: Lock and modulation techniques in PES of transient species. European Workshop on UV Molecular Photoelectron Spectroscopy, Rimini, Italië, 7-9 juni 1983.
45. G. Jonkers, C.A. de Lange, J.G. Snijders.  
Poster, getiteld: Relativistic effects in the PE spectra of small molecules. European Workshop on UV Molecular Photoelectron Spectroscopy, Rimini, Italië, 7-9 juni 1983.
46. PES-pectives in PES.  
Department of Chemistry, University of British Columbia, Vancouver, Canada, 14 juli 1983.
47. On the orientation of small molecules in anisotropic solvents.  
Invited lecture, NATO Advanced Study Institute "The NMR of Liquid Crystals", San Miniato, Italië, 26 juli - 7 augustus 1983.
48. Vibration-rotation interaction: quadrupolar couplings in the methanes.  
Invited lecture, NATO Advanced Study Institute "The NMR of Liquid Crystals", San Miniato, Italië, 26 juli - 7 augustus 1983.
49. Fotoelektron spektroskopie aan kortlevende molekulen in de gasfase: het OH radikaal.  
Fysisch Colloquium, Natuurkundig Laboratorium V.U., Amsterdam, 31 oktober 1983.
50. Fotoelektron en Optische Spektroskopie van tweeatomige molekulen.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 30-31 januari 1984.

51. Fotoelektron spektroskopie aan OH en OD radicalen.  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 2-3 februari 1984.
52. PES aan reaktieve en kortlevende twee-atomige molekulen.  
10e XPS/UPS mini-konferentie, FOM-Instituut voor Atoom- en Molekulfysika, Amsterdam, 13 april 1984.
53. P.B. Barker, A.J. van der Est, E.E. Burnell, G.N. Patey, C.A. de Lange, J.G. Snijders.  
Poster, getiteld: Deuterium NMR spectra of  $D_2$  in mixtures of nematic liquid crystals.  
7th European Experimental NMR conference, Altavilla Milicia (Palermo), Italië, 29 mei - 1 juni 1984.
54. Small molecules in anisotropic potentials.  
University of British Columbia, Vancouver, Canada, 4 juli 1984.
55. Small molecules in anisotropic potentials. Part II: quadrupolar couplings.  
University of British Columbia, Vancouver, Canada, 11 juli 1984.
56. H. van Lonkhuyzen, C.A. de Lange.  
Poster, getiteld: High-resolution UV photoelectron spectroscopy of  $F_2^+$  and  $Cl_2^+$ .  
Gordon Research Conference on Electron Spectroscopy, Wolfeboro, New Hampshire, U.S.A., 16 - 20 juli 1984.
57. Fotoelektron spektroskopie aan vrije radicalen.  
Fysisch Laboratorium, Katholieke Universiteit Nijmegen, Nijmegen, 14 november 1984.
58. Vibration-rotation interaction of small molecules in anisotropic solvents.  
Oulu University, Department of Physics, Oulu, Finland, 28 november 1984.
59. UV photoelectron spectroscopy of transient species.  
Oulu University, Department of Physics, Oulu, Finland, 29 november 1984.
60. Vibration-rotation interaction of small molecules in anisotropic solvent.  
Helsinki University, Department of Chemistry, Helsinki, Finland, 3 december 1984.
61. UV photoelectron spectroscopy of short-lived molecules in the gas phase.  
Helsinki University, Department of Chemistry, Helsinki, Finland, 3 december 1984.
62. Vibration-rotation interaction in small molecules dissolved in nematic liquid crystals.  
Institute of Physics, Jagellonian University, Krakow, Polen, 29 januari 1985.
63. On the orientation mechanisms of small molecules dissolved in nematic liquid crystals.  
Institute of Nuclear Physics, Krakow -Bronowice, Polen, 31 januari 1985.

64. UV photoelectron spectroscopy of short-lived molecules.  
Invited lecture, Polish Physical Society, Krakow, Polen, 31 januari 1985.
65. NMR aan kleine molekulen in anisotrope oplosmiddelen.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 4 februari 1985.
66. H. van Lonkhuyzen, C.A. de Lange.  
Poster, getiteld: UV fotoelektron spektroskopie aan vibratieaangeslagen stikstof molekulen.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 4-5 februari 1985.
67. O. Grabandt, R. Mooyman, C.A. de Lange.  
Poster, getiteld: UV fotoelektron spektroskopie aan gallium monohalides.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 4-5 februari 1985.
68. W.J. van der Meer, R.J. Butselaar, H. van Lonkhuyzen, C.A. de Lange.  
Poster, getiteld: Modulatieëxperimenten in UV fotoelektron spektroskopie aan H<sub>2</sub> en D<sub>2</sub>.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 4-5 februari 1985.
69. W.J. van der Meer, R.J. Butselaar, H. van Lonkhuyzen, C.A. de Lange.  
Poster, getiteld: UV photoelectron modulation spectroscopy of H<sub>2</sub> and D<sub>2</sub>  
-molecular photoionization cross sections at 584 Å  
-vibrationally excited molecules.  
Second European Conference on Atomic and Molecular Physic, Vrije Universiteit, Amsterdam, 15-19 april 1985.
70. O. Grabandt, R. Mooyman, C.A. de Lange.  
Poster, getiteld: He(Ia) photoelectron spectroscopy of gallium monohalides.  
Second European Conference on Atomic and Molecular Physics, Vrije Universiteit, Amsterdam, 15-19 april 1985.
71. W.J. van der Meer, R.J. Butselaar, H. van Lonkhuyzen, C.A. de Lange.  
Poster, getiteld: UV photoelectron modulation spectroscopy of H<sub>2</sub> and D<sub>2</sub>  
-molecular photoionization cross sections at 584 Å  
-vibrationally excited molecules.  
Third European Workshop on Molecular Spectroscopy and Photon-Induced Dynamics, Seillac, Frankrijk, 20-23 mei 1985.
72. O. Grabandt, R. Mooyman, C.A. de Lange.  
Poster, getiteld: He(Ia) photoelectron spectroscopy of gallium monohalides.  
Third European Workshop on Molecular Spectroscopy and Photon-Induced Dynamics, Seillac, Frankrijk, 20-23 mei 1985.
73. E.E. Burnell, P.B. Barker, A.J. van der Est, G.N. Patey, C.A. de Lange, J.G. Snijders.  
Poster, getiteld: Intermolecular forces and absolute orientation in liquid crystals.  
NMR mini-symposium, Vancouver, Canada, 27 mei 1985.

74. E.E. Burnell, P.B. Barker, A.J. van der Est, G.N. Patey, C.A. de Lange, J.G. Snijders.  
Invited poster, getiteld: Intermolecular forces and absolute orientation in liquid crystals.  
Gordon Research Conference on Magnetic Resonance, Wolfeboro, New Hampshire, U.S.A., 17-21 juni 1985.
75. E.E. Burnell, P.B. Barker, A.J. van der Est, G.N. Patey, C.A. de Lange, J.G. Snijders.  
Poster, getiteld: Intermolecular forces and order parameters.  
Gordon Research Conference on Liquid Crystals, Wolfeboro, New Hampshire, U.S.A., 24-28 juni 1985.
76. UV-fotoelektron modulatie spektroskopie aan H<sub>2</sub> en D<sub>2</sub>.  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 28-29 oktober 1985.
77. NMR aan kleine molekulen opgelost in anisotrope oplosmiddelen.  
NMR Discussiegroep, Analytische Sektie KNCV, Koninklijke / Shell Laboratorium Amsterdam, 13 december 1985.
78. UV photoelectron spectroscopy of reactive and transient species.  
Invited lecture, Fourth Australian Conference on Atomic and Molecular Physics and Quantum Chemistry, Hobart, Tasmania, Australië, 28-31 januari 1986.
79. W.J. van der Meer, R.J. Butselaar, C.A. de Lange.  
Poster, getiteld: HeI photoionization cross sections of reactive and transient species.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 3-4 februari 1986.
80. J.B.S. Barnhoorn, A.J. van der Est, J.G. Snijders, C.A. de Lange, E.E. Burnell.  
Poster getiteld: Oriëntering in mengsels van vloeibare kristallen.  
SON-werkgemeenschap voor Quantumtheoretische Chemie, Lunteren, 3-4 februari 1986.
81. Photoionization cross section determinations of Cl atoms and Cl<sub>2</sub> molecules at 584 Å.  
Invited lecture, Specialist Workshop on Excited and Ionized States of Atoms and Molecules, Strathgordon, Tasmania, Australië, 3-7 februari 1986.
82. Photoelectron spectroscopy of reactive species and short-lived intermediates.  
Department of Chemistry, University of New South Wales, Sydney, Australië, 11 februari 1986.
83. UV photoelectron spectroscopy of small reactive and transient molecules.  
Department of Chemistry, University of Sydney, Sydney, Australië, 12 februari 1986.
84. Photoelectron spectroscopy of short-lived intermediates.  
Oak Ridge National Laboratory, Oak Ridge, Tennessee, U.S.A. 16 juni 1986.
85. W.J. van der Meer, P. van der Meulen, C.A. de Lange

- Poster, getiteld: Absolute photoionisation cross section determination of transients; an application to Cl and Br atoms at 584 Å.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 2-3 februari 1987.
86. B.G. Koenders, K.E. Drabe, M. Oostwal, D.M. Wieringa, C.A. de Lange  
Resonante multifotonionisatie van Cl<sub>2</sub>.  
SON-werkgemeenschap voor Molekuulspektroskopie, Lunteren, 2-3 februari 1987.
87. B.G. Koenders, K.E. Drabe, M.G. Oostwal, D.M. Wieringa, C.A. de Lange.  
Poster, getiteld: Resonant multiphoton ionisation of atomic and molecular bromine.  
4th European Workshop on Molecular Spectroscopy and Photon-Induced Dynamics,  
Oxford, Engeland, 13-16 april 1987.
88. W.J. van der Meer, P. van der Meulen, C.A. de Lange.  
Poster, getiteld: Absolute photoionisation cross section determination of transients; an application to Cl and Br atoms at 584 Å.  
4th European Workshop on Molecular Spectroscopy and Photon-Induced Dynamics,  
Oxford, Engeland, 13-16 april 1987.
89. Electron spectroscopy of reactive and short-lived species.  
FOM-Instituut voor Atoom- en Molecuulfysica, Amsterdam, 1 juni 1987.
90. REMPI-PES of molecular chlorine.  
University of British Columbia, Vancouver, Canada, 7 juli 1987.
91. B.G. Koenders, K.E. Drabe, M.G. Oostwal, D.M. Wieringa, C.A. de Lange  
Poster, getiteld: Photoelectron spectroscopic study of resonant multiphoton ionisation of chlorine.  
4th International Conference on Multiphoton Processes, Boulder, Colorado, U.S.A.,  
13-17 juli 1987.
92. Electron spectroscopy of reactive and short-lived species.  
National Oceanic and Atmospheric Administration, Boulder, Colorado, U.S.A., 21 juli 1987.
93. UV photoelectron spectroscopy of small molecules.  
Invited lecture, XVIIIth European Congress on Molecular Spectroscopy, UvA,  
Amsterdam, 30 augustus - 4 september 1987.
94. W.J. van der Meer, P. van der Meulen, C.A. de Lange.  
Poster, getiteld: Absolute photoionisation cross section determination of transients; an application to Cl and Br atoms.  
XVIIIth European Congress on Molecular Spectroscopy, UvA, Amsterdam, 30 augustus - 4 september 1987.
95. H.J. Bakker, O. Grabandt, C.A. de Lange.  
Poster, getiteld: Interpretation of the PES continuous band shape in the lowest  $2\hat{A}^+$  state of the hydrogen halides.

- XVIIIth European Congress on Molecular Spectroscopy, UvA, Amsterdam, 30 augustus - 4 september 1987.
96. B.G. Koenders, K.E. Drabe, M.G. Oostwal, D.M. Wieringa, C.A. de Lange.  
Poster getiteld: Photoelectron spectroscopic study of resonant multiphoton ionisation of chlorine and bromine.  
XVIIIth European Congress on Molecular Spectroscopy, UvA, Amsterdam, 30 augustus - 4 september 1987.
  97. Met fotonen in de aanslag.  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 9-10 november 1987.
  98. P. van der Meulen, W.J. van der Meer, C.A. de Lange.  
Poster getiteld: Absolute fotoionisatie cross secties van atomen en instabiele moleculen.  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 9-10 november 1987.
  99. Multifotonionisatie van atomair chloor.  
IMF/LAICA Symposium Laseronderzoek, UvA, Amsterdam, 10 december 1987.
  100. Tunneling en shape resonantie verschijnselen in de UV fotoelectron spectra van HF en DF.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 1-2 februari 1988.
  101. J.B.S. Barnhoorn, A.J. van der Est, E.E. Burnell, C.A. de Lange, J.G. Snijders.  
Poster getiteld: NMR of acetylene in nematic liquid crystals: effects of rotation-vibration interaction.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 1-2 februari 1988.
  102. B.G. Koenders, K.E. Drabe, G.J. Kuik, C.A. de Lange.  
Poster getiteld: Rydberg states of molecular bromine studied by 2+1 REMPI-PES.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 1-2 februari 1988.
  103. H.J. Bakker, C.A. de Lange, O. Grabandt.  
Poster getiteld: Interpretation of the PES continuous bandshape in the lowest  $2\Sigma^+$  state of HF and DF.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 1-2 februari 1988.
  104. De fysische principes en eigenschappen van de laser.  
Studiedag Belgisch Instituut voor Regeltechniek en Automatisering, Antwerpen, België, 4 mei 1988.
  105. Photoelectron spectroscopic study of low-lying Rydberg states of  $\text{Cl}_2$  and  $\text{Br}_2$  using multiphotonionisation.  
Invited lecture, Gordon Research Conference on Multiphoton Processes, New London, New Hampshire, U.S.A., 13-17 juni 1988.



106. B.G. Koenders, G.J. Kuik, K.E. Drabe, C.A. de Lange.  
Poster getiteld: Photoelectron spectroscopic study of low-lying Rydberg states of  $\text{Cl}_2$  and  $\text{Br}_2$  using multiphoton ionisation.  
Gordon Research Conference on Multiphoton Processes, New London, New Hampshire, U.S.A., 13-17 juni 1988.
107. REMPI-PES of molecular chlorine.  
College of William and Mary, Department of Physics, Williamsburg, Virginia, U.S.A., 20 juni 1988.
108. REMPI-PES of molecular chlorine.  
Oak Ridge National Laboratory, Oak Ridge, Tennessee, U.S.A., 22 juni 1988.
109. UV photoelectron spectroscopy of transient species.  
Invited lecture, Gordon Research Conference on Electron Spectroscopy, Wolfeboro, New Hampshire, U.S.A., 18-22 juli 1988.
110. De lichtzijde van de scheikunde.  
Oratie, Universiteit van Amsterdam, Amsterdam, 3 oktober 1988.
111. Multifotonionisatie.  
KNCV Sectie Anorganische en Fysische Chemie, themadag "Lasers in de chemie", Amsterdam, 28 oktober 1988.
112. E.A.A. Aben, P. Levelt, W. Ubachs, W. Hogervorst, C.A. de Lange.  
Poster getiteld: Resonant versterkte CARS in  $\text{I}_2$ .  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 10-11 november 1988.
113. B.G. Koenders, S.M. Koeckhoven, K.E. Drabe, C.A. de Lange.  
Poster getiteld: Gerade Rydberg toestanden in  $\text{Cl}_2$ : spectroscopie en fotoionisatiedynamica.  
Konferentie NNV Sektie Atomaire Botsingsfysika en Spektroskopie, Lunteren, 10-11 november 1988.
114. Multiphoton ionization electron spectroscopy of molecular chlorine.  
Department of Chemistry, University of Southampton, Southampton, England, 24 januari 1989.
115. Fotoionisatie van zuurstofatomen met behulp van synchrotronstraling.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 30-31 januari 1989.
116. B.G. Koenders, S.M. Koeckhoven, K.E. Drabe, C.A. de Lange.  
Poster getiteld: The  $^1\text{P}_g$  Rydberg ion pair state of molecular chlorine studied with REMPI-PES : spectroscopy and ionisation mechanisms.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 30-31 januari 1989.
117. O. Grabandt, R. Mooyman, H. Bakker, P. van der Meulen, C.A. de Lange.

- Poster getiteld: HeI photoelectron spectroscopy of small reactive molecules.  
5th European Workshop on Molecular Spectroscopy and Photon-Induced Dynamics,  
Wégimont, België, 8 - 11 mei 1989.
118. B.G. Koenders, S.M. Koeckhoven, K.E. Drabe, C.A. de Lange.  
Poster getiteld: Photoelectron spectroscopic studies of multiphoton processes in  
molecular chlorine.  
5th European Workshop on Molecular Spectroscopy and Photon-Induced Dynamics,  
Wégimont, België, 8 - 11 mei 1989.
119. P. van der Meulen, M.O. Krause, C.A. de Lange.  
Poster getiteld: Photoelectron spectroscopy of oxygen atoms using synchrotron  
radiation.  
20th Annual meeting of the Division of Atomic, Molecular and Optical Physics of the  
American Physical Society, Windsor, Canada, 17 - 19 mei 1989.
120. Photoelectron spectroscopic studies of multiphoton processes in molecular chlorine.  
Fourth International Conference on Electron Spectroscopy, Honolulu, U.S.A., 10-14  
juli 1989.
121. Multiphoton ionisation electron spectroscopy of molecular chlorine.  
Invited lecture, Faraday Division, High resolution spectroscopy and molecular beams  
groups, University of Nottingham, Nottingham, Engeland, 17-19 december 1989.
122. Multifoton ionisatie electron spectroscopie.  
SON-werkgemeenschap voor Molecuulspektroskopie, Lunteren, 29-30 januari 1990.
123. E. de Beer, B.G. Koenders, S.M. Koeckhoven, M.P. Koopmans, C.A. de Lange  
Poster getiteld: A REMPI-PES study of the competition between autoionization and  
dissociation in HCl and Cl<sub>2</sub> .  
SON-werkgemeenschap voor Molecuulspektroskopie, Lunteren, 29-30 januari 1990.
124. Multiphoton ionization electron spectroscopy.  
Institute of Physics, Jagellonian University, Krakow, Polen, 10 april 1990.
125. B.G. Koenders, E. de Beer, C.A. de Lange  
Poster getiteld: Photoelectron spectroscopic studies of multiphoton ionization  
processes in Cl<sub>2</sub> , HCl and OH.  
Gordon Research Conference on Multiphoton Processes, New London, New  
Hampshire, U.S.A., 11-15 juni 1990.
126. Peter van der Meulen, Kees A. de Lange, Manfred O. Krause  
Poster getiteld: Angular resolved photoelectron spectroscopy of atomic oxygen.  
Gordon Research Conference on Electron Spectroscopy, Wolfeboro, New Hampshire,  
U.S.A., 16-20 juli 1990.
127. Multiphoton ionization electron spectroscopy of small molecules.  
Invited lecture, 73rd Canadian Chemical Conference, Symposium "Unusual  
structure and bonding: non-metals", Halifax, Nova Scotia, Canada, 15-21 juli 1990.

128. The nuclear spin's view of intermolecular potentials in liquid crystals.  
Invited lecture, 13th International Liquid Crystal Conference, Vancouver, British Columbia, Canada, 22-27 juli 1990.
129. E. de Beer, M.P. Koopmans, C.A. de Lange, Yumin Wang, W.A. Chupka  
Poster getiteld: REMPI-PES of the OH radical.  
5th International Conference on Multiphoton Processes, Parijs, Frankrijk, 24-28 september 1990.
130. The nuclear spin's view of intermolecular potentials in liquid crystals.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 28-29 januari 1991.
131. E. de Beer, M.P. Koopmans, C.A. de Lange, Yumin Wang, W.A. Chupka  
Poster getiteld: REMPI-PES of the OH radical.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 28-29 januari 1991.
132. Peter van der Meulen, Kees A. de Lange, Manfred O. Krause  
Poster getiteld: Angular resolved photoelectron spectroscopy of atomic oxygen.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 28-29 januari 1991.
133. P. van der Meulen, M.O. Krause, C.A. de Lange  
Poster getiteld: Angle-resolved photoelectron spectroscopy of atomic bromine using synchrotron radiation.  
1991 Annual meeting of the Division of Atomic, Molecular and Optical Physics of the American Physical Society (DAMOP 91), Washington, DC, U.S.A., 22-24 april 1991.
134. Multiphoton ionisation of short-lived radicals.  
Natuurkundig Laboratorium, Katholieke Universiteit Nijmegen, Nijmegen, 14 mei 1991.
135. Multiphoton ionisation photoelectron spectroscopy of short-lived radicals.  
Department of Chemistry, Macquarie University  
Sydney, Australië, 5 juli 1991.
136. C.A. de Lange, E. de Beer, N.P.C. Westwood  
Poster getiteld: Rotationally resolved (2+1) REMPI - PES of the OH and NH radicals.  
17th International Conference on the Physics of Electronic and Atomic Collisions (ICPEAC XVII), Brisbane, Australië, 10-16 juli 1991.
137. Spectroscopy of short-lived open-shell gas-phase species using laser and synchrotron radiation.  
Invited lecture, 48th International Meeting of Physical Chemistry on "Synchrotron Radiation and Dynamic Phenomena", Grenoble, Frankrijk, 9-13 september 1991.
138. Esther de Beer, N.P.C. Westwood, C.A. de Lange.  
Poster getiteld: REMPI-PES of OH and NH radicals and metastable N atoms.

- European Research Conference 1991 Series, Very high resolution spectroscopy with photoelectrons; ZEKE-spectroscopy, Kreuth, Duitsland, 28-31 oktober 1991.
139. Esther de Beer, N.P.C. Westwood, C.A. de Lange  
Poster getiteld: REMPI-PES of OH and NH radicals and metastable N atoms.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 27-28 januari 1992.
  140. P. van der Meulen, M.O. Krause, C.A. de Lange  
Poster getiteld: Angle-resolved photoelectron spectroscopy of atomic bromine using synchrotron radiation.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 27-28 januari 1992.
  141. M.O. Krause, C.D. Caldwell, S.B. Whitfield, P. van der Meulen, C.A. de Lange  
Poster getiteld: ESSR study of the chlorine atom through the 3p Cooper minimum.  
1992 Annual meeting of the Division of Atomic, Molecular and Optical Physics of the American Physical Society (DAMOP 92), Chicago, U.S.A., 20-22 mei 1992.
  142. M.R. Dobber, W.J. Buma, C.A. de Lange  
Poster getiteld: One- and two-colour REMPI-PES studies of CH(D)<sub>3</sub>I using nano- and pico-second lasers.  
Gordon Research Conference on Multiphoton Processes, New London, New Hampshire, U.S.A., 8-12 juni 1992.
  143. E. de Beer, N.P.C. Westwood, C.A. de Lange  
Poster getiteld: Rotationally resolved photoelectron spectroscopy of OH and NH radicals.  
Gordon Research Conference on Multiphoton Processes, New London, New Hampshire, U.S.A., 8-12 juni 1992.
  144. When a radical sees the light...  
Invited lecture, Gordon Research Conference on Multiphoton Processes, New London, New Hampshire, U.S.A., 8-12 juni 1992.
  145. The prediction of solute orientation in liquid crystals.  
ISMAR 92, Vancouver, B.C., Canada, 19-24 juli 1992.
  146. P. van der Meulen, M.O. Krause, C.D. Caldwell, S.B. Whitfield, C.A. de Lange  
Poster getiteld: Autoionization resonances in atomic chlorine: the  $3s3p^5(^3P^o_{2,1,0}, ^1P^o_1)np$  Rydberg series.  
Tenth International Conference on Vacuum Ultraviolet Radiation Physics (VUV 10), Parijs, Frankrijk, 27-31 juli 1992.
  147. P. van der Meulen, M.O. Krause, C.D. Caldwell, S.B. Whitfield, C.A. de Lange  
Poster getiteld: Autoionization resonances in atomic chlorine: the  $3s3p^5(^3P^o_{2,1,0}, ^1P^o_1)np$  Rydberg series.  
Nationale Synchrotron Dag, RUG, Groningen, 4 november 1992.
  148. P. van der Meulen, M.O. Krause, C.D. Caldwell, S.B. Whitfield, C.A. de Lange

- Poster getiteld: Autoionization resonances in atomic chlorine: the  $3s3p^5(^3P^o_{2,1,0}, ^1P^o_1)np$  Rydberg series.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 1-2 februari 1993.
149. E. de Beer, W.J. Buma, C.A. de Lange  
Poster getiteld: REMPI-PES and Pulsed Field Ionization spectroscopy of Rydberg states of HCl.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 1-2 februari 1993.
150. S.M. Koeckhoven, W.J. Buma, C.A. de Lange  
Poster getiteld: A (3+1) REMPI study of the  $A^1\Pi$ ,  $C^1\Sigma^+$  and  $E^1\Pi$  states of CO: interferences between electronic excitation routes.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 1-2 februari 1993.
151. E. de Beer, W.J. Buma, C.A. de Lange  
Poster getiteld: Resonance enhanced multiphoton ionization photoelectron spectroscopy and pulsed field ionization *via* the  $F^1\Delta_2$  ( $v'=0$ ) and  $f^3\Delta_2$  ( $v'=0$ ) Rydberg states of HCl.  
Fifteenth International Symposium on Molecular Beams, Berlijn, Duitsland, 16-21 mei 1993.
152. Rotationally resolved resonance enhanced multiphoton ionization photoelectron spectroscopy of OH and NH.  
Invited lecture, Twenty-second International Symposium on Free Radicals, Doorwerth, Nederland, 6-10 september 1993.
153. W.J. Buma, E. de Beer, C.A. de Lange  
Poster getiteld: Resonance enhanced multiphoton ionization photoelectron spectroscopy and pulsed field ionization *via* the  $F^1\Delta_2$  ( $v'=0$ ) and  $f^3\Delta_2$  ( $v'=0$ ) Rydberg states of HCl.  
Very high resolution spectroscopy with photoelectrons; excited state spectroscopy and dynamics, Giens, Frankrijk, 18-23 september 1993.
154. M.R. Dobber, W.J. Buma, C.A. de Lange  
Poster getiteld: Resonance enhanced multiphoton ionization photoelectron spectroscopy on nano- and picosecond time scales of methyl iodide Rydberg states.  
Very high resolution spectroscopy with photoelectrons; excited state spectroscopy and dynamics, Giens, Frankrijk, 18-23 september 1993.
155. N.P.L. Wales, M.R. Dobber, W.J. Buma, C.A. de Lange  
Poster getiteld: Two-colour time-resolved (2+1') REMPI-PES on the  $B(^1E'')$  and  $C(^1A_1')$  states of ammonia.  
Very high resolution spectroscopy with photoelectrons; excited state spectroscopy and dynamics, Giens, Frankrijk, 18-23 september 1993.
156. J.B. Milan, W.J. Buma, C.A. de Lange  
Poster getiteld: Two- and three-photon resonant REMPI-PES studies of  $H_2S$ .

Very high resolution spectroscopy with photoelectrons; excited state spectroscopy and dynamics, Giens, Frankrijk, 18-23 september 1993.

157. S.M. Koeckhoven, W.J. Buma, C.A. de Lange  
Poster getiteld: A (3+1) resonance enhanced multiphoton ionization study of the C  $^1\Sigma^+$  and E  $^1\Pi$  states of CO: polarization dependence used to probe electronic excitation routes and electronic character.  
Very high resolution spectroscopy with photoelectrons; excited state spectroscopy and dynamics, Giens, Frankrijk, 18-23 september 1993.
158. S.M. Koeckhoven, W.J. Buma, C.A. de Lange.  
Poster getiteld: Nonresonant three- and four-photon excitation of autoionizing states of Ar, Kr, and Xe.  
Very high resolution spectroscopy with photoelectrons; excited state spectroscopy and dynamics, Giens, Frankrijk, 18-23 september 1993.
159. W.J. Buma, E. de Beer, C.A. de Lange.  
Poster getiteld: Resonance enhanced multiphoton ionization photoelectron spectroscopy and pulsed field ionization *via* the F  $^1\Delta_2$  ( $v'=0$ ) and f  $^3\Delta_2$  ( $v'=0$ ) Rydberg states of HCl.  
Rydberg Symposium, Yale University, New Haven, CT, USA, 12-14 oktober 1993.
160. Resonance enhanced multiphoton ionization photoelectron spectroscopy of the d  $^1\Sigma^+$  state of the NH radical.  
First European Conference on Unstable Species, Les Houches, Frankrijk, 16-20 januari 1994.
161. N.P.L. Wales, E. de Beer, N.P.C. Westwood, W.J. Buma, C.A. de Lange, M.C. van Hemert.  
Poster getiteld: One- and two-colour REMPI spectroscopy *via* the d  $^1\Sigma^+$  state of NH: competition between one-photon ionization and two-photon dissociative excitation.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 31 januari - 1 februari 1994.
162. M.R. Dobber, N.P.L. Wales, W.J. Buma, C.A. de Lange.  
Poster getiteld: Two-colour ps time-resolved (2+1') REMPI-PES on the B( $^1E''$ ) and C'( $^1A_1'$ ) states of ammonia.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 31 januari - 1 februari 1994.
163. S.M. Koeckhoven, W.J. Buma, C.A. de Lange  
Poster getiteld: Three- and four-photon excitation of autoionizing states of Ar, Kr, and Xe.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 31 januari - 1 februari 1994.
164. J.B. Milan, W.J. Buma, C.A. de Lange  
Poster getiteld: Three-photon resonant REMPI-PES studies on Rydberg states of H<sub>2</sub>S.

- SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 31 januari - 1 februari 1994.
165. J.B. Milan, W.J. Buma, C.A. de Lange  
Poster getiteld: Rotationally resolved two-photon excitation of long-lived SH (SD) Rydberg states above the lowest ionization limit.  
SON-werkgemeenschap voor Molecuulspectroscopie, Lunteren, 31 januari - 1 februari 1994.
166. Laser photoelectron spectroscopy: the light side of chemistry.  
Ames lecture, University of Edinburgh, Department of Chemistry, Edinburgh, Scotland, 27 april 1994.
167. NMR as a tool in the investigation of orientational order in liquid crystals.  
Invited lecture, Second Zakopane NMR Summer School, Zakopane, Polen, 30 mei - 4 juni 1994.
168. The prediction of solute orientation in liquid crystals.  
Invited lecture, Second Zakopane NMR Summer School, Zakopane, Polen, 30 mei - 4 juni 1994.
169. M.R. Dobber, W.J. Buma, C.A. de Lange.  
Poster getiteld: Two-colour picosecond time-resolved (2+1') REMPI-PES on the B(<sup>1</sup>E'') and C'(<sup>1</sup>A<sub>1</sub>') states of ammonia.  
Gordon Research Conference on Multiphoton Processes, New London, NH, USA, 12 - 17 juni 1994.
170. M.R. Dobber, W.J. Buma, C.A. de Lange.  
Poster getiteld: (3+1) Resonance enhanced multiphoton ionization photoelectron spectroscopy on *nf* Rydberg states of carbon dioxide.  
Gordon Research Conference on Multiphoton Processes, New London, NH, USA, 12 - 17 juni 1994.
171. S.M. Koeckhoven, W.J. Buma, C.A. de Lange  
Poster getiteld: Three- and four-photon excitation of autoionizing states of Ar, Kr, and Xe.  
Gordon Research Conference on Multiphoton Processes, New London, NH, USA, 12 - 17 juni 1994.
172. J.B. Milan, W.J. Buma, C.A. de Lange  
Poster getiteld: Rotationally resolved two-photon excitation of long-lived SH (SD) Rydberg states above the lowest ionization limit.  
Gordon Research Conference on Multiphoton Processes, New London, NH, USA, 12 - 17 juni 1994.
173. Laser photoelectron spectroscopy: light on radicals.  
Graduierten-Kolleg 'Laser- und Teilchen-Spektroskopie', University of Kaiserslautern, Department of Physics, Kaiserslautern, Duitsland, 7 juli 1994.

174. Laser photoelectron spectroscopy: the light side of chemistry.  
University of British Columbia, Department of Chemistry, Vancouver, B.C., Canada,  
25 november 1994.
175. Laser photoelectron spectroscopy: light on the matter.  
California Institute of Technology, Department of Chemical Physics, Pasadena, CA,  
USA, 6 december 1994.
176. Intricacies of molecular orientation in liquid crystalline phases.  
Invited lecture, Third Zakopane NMR Summer School, Zakopane, Polen, 29 mei - 2  
juni 1995.
177. Laser photoelectron spectroscopy: chemistry with a light touch.  
Invited lecture, Eighth European Workshop on Molecular Spectroscopy and  
Photon-Induced Dynamics, Oxford, Engeland, 3-7 september 1995.
178. N.P.L. Wales, W.J. Buma, C.A. de Lange, R. Irrgang, M. Spieweck, M.  
Drescher, F. Gierschner, U. Heinzmann, H. Lefebvre-Brion.  
Poster getiteld: Spin-orbit and rotational autoionization in HBr.  
Eighth European Workshop on Molecular Spectroscopy and Photon-Induced  
Dynamics, Oxford, Engeland, 3-7 september 1995.
179. Radicals in the spotlight.  
Invited lecture, Very high resolution spectroscopy with photoelectrons; radicals,  
clusters and excited states, Lenggries, Duitsland, 23-28 september 1995.
180. N.P.L. Wales, W.J. Buma, C.A. de Lange, H. Lefebvre-Brion.  
Poster getiteld: ZEKE-PFI and spin-orbit autoionization: a study on HBr.  
Very high resolution spectroscopy with photoelectrons; radicals,  
clusters and excited states, Lenggries, Duitsland, 23-28 september 1995.
181. J.B. Milan, W.J. Buma, C.A. de Lange.  
Poster getiteld: Two-photon resonance enhanced MPI-PES below and above the  
lowest ionization threshold of the SH (SD) radicals.  
Very high resolution spectroscopy with photoelectrons; radicals,  
clusters and excited states, Lenggries, Duitsland, 23-28 september 1995.  
N.B. Deze poster werd gekozen tot één van de drie beste posters gepresenteerd op  
deze conferentie.
182. S. Woutersen, J.B. Milan, W.J. Buma, C.A. de Lange  
Poster getiteld: Resonance enhanced multiphoton ionization photoelectron  
spectroscopy of bound and autoionizing  $np$  and  $nf$  Rydberg states of atomic  
sulphur.  
Very high resolution spectroscopy with photoelectrons; radicals, clusters and excited  
states, Lenggries, Duitsland, 23-28 september 1995.
183. S.M. Koeckhoven, W.J. Buma, C.A. de Lange  
Poster getiteld: Resonance enhanced multiphoton ionization (REMPI) spectroscopy  
on gerade excited states of the xenon dimer.



- Very high resolution spectroscopy with photoelectrons; radicals, clusters and excited states, Lenggries, Duitsland, 23-28 september 1995.
184. Laser photoelectron spectroscopy of free radicals.  
Algemeen Natuurkunde Colloquium, Katholieke Universiteit Nijmegen, Nijmegen, 5 december 1995.
  185. Rydberg states in diatomic molecules.  
Workshop on "Rydberg states in atoms and molecules", Vrije Universiteit, Amsterdam, 19 januari 1996.
  186. Laser photoelectron spectroscopy of free radicals.  
SON werkgemeenschap voor Spectroscopie en Theorie, Lunteren, 29-30 januari 1996.
  187. N.P.L. Wales, W.J. Buma, C.A. de Lange, H. Lefebvre-Brion  
Poster getiteld: ZEKE-PFI and spin-orbit autoionization: a study on HBr.  
SON werkgemeenschap voor Spectroscopie en Theorie, Lunteren, 29-30 januari 1996.
  188. J.B. Milan, W.J. Buma, C.A. de Lange  
Poster getiteld: REMPI-PES and ZEKE-PFI spectroscopy on the SH (SD) radical.  
SON werkgemeenschap voor Spectroscopie en Theorie, Lunteren, 29-30 januari 1996.
  189. High resolution photoelectron spectroscopy of atmospherically relevant species.  
Workshop Toepassingen XUV-FEL, Amsterdam, 7 maart 1996.
  190. Laser photoelectron spectroscopy with high resolution in the time and frequency domain.  
American Chemical Society Spring Meeting, State-to-state scattering studies in the production and reactivity of molecular photoions, New Orleans, USA, 25-29 maart 1996.
  191. Multiphoton ionization electron spectroscopy of free radicals.  
Gordon Research Conference on Multiphoton Processes, New London, NH, USA, 9-14 juni 1996.
  192. J.B. Milan, S. Woutersen, W.J. Buma, C.A. de Lange  
Poster getiteld: Resonance enhanced multiphoton ionization photoelectron spectroscopy of bound and autoionizing  $np$  and  $nf$  Rydberg states of atomic sulphur.  
Gordon Research Conference on Multiphoton Processes, New London, NH, USA, 9-14 juni 1996.
  193. J.B. Milan, W.J. Buma, C.A. de Lange  
Poster getiteld: Two-photon resonance enhanced MPI-PES below and above the lowest ionization threshold of the SH (SD) radicals.  
Gordon Research Conference on Multiphoton Processes, New London, NH, USA, 9-14 juni 1996.
  194. N.P.L. Wales, W.J. Buma, C.A. de Lange, H. Lefebvre-Brion.

- Poster getiteld: Characterization of spin-orbit autoionizing Rydberg states excited *via* one-photon absorption from the F  $^1\Delta_2$  Rydberg state of HBr.  
Gordon Research Conference on Multiphoton Processes, New London, NH, USA, 9-14 juni 1996.
195. N.P.L.Wales, W.J. Buma, C.A. de Lange, H. Lefebvre-Brion.  
Poster getiteld: Dynamics of high Rydberg states employed in zero kinetic energy-pulsed field ionization spectroscopy *via* the F  $^1\Delta_2$ , D  $^1\Pi_1$ , and f  $^3\Delta_2$  Rydberg states of HCl.  
Gordon Research Conference on Multiphoton Processes, New London, NH, USA, 9-14 juni 1996.  
Deze poster werd geselecteerd en gehonoreerd met de CSK Optronics industriële prijs.
196. Laser photoelectron spectroscopy: new light on chemistry.  
National Research Council of Canada, Ottawa, 17 juni 1996.
197. Laser photoelectron spectroscopy: light on chemistry.  
Vakgroep Gecondenseerde Materie, Faculteit Scheikunde RUU, Utrecht, 20 september 1996.
198. Laser photoelectron spectroscopy: new light on radicals.  
Institute of Electronic Structure and Laser (IESL), Institute for Research and Technology-Hellas (FORTH), Heraklion, Crete, Greece, 3 oktober 1996.
199. Autoionization dynamics of high-lying Rydberg states.  
International Workshop on Photoionisation Dynamics, Rydberg States and Large Amplitude Motion, University of York, UK, 3-5 november 1996.
200. C.R. Scheper, W.J. Buma, C.A. de Lange, W.J. van der Zande.  
Poster getiteld: Dissociation dynamics of H<sub>2</sub>: excited atom distributions.  
21e Conferentie van de NNV sectie Atoomfysica en Quantumelektronica, Lunteren, 7-8 november 1996.
201. C.R. Scheper, N.P.L.Wales, W.J. Buma, C.A. de Lange.  
Poster getiteld: REMPI-PES and ZEKE-PFI on low-lying gerade excited states of the xenon dimer.  
21e Conferentie van de NNV sectie Atoomfysica en Quantumelektronica, Lunteren, 7-8 november 1996.
202. Laser photoelectron spectroscopy: new light on radicals.  
Department of Chemistry, University of Southampton, UK, Southampton, 3 januari 1997.
203. C.R. Scheper, W.J. Buma, C.A. de Lange, W.J. van der Zande  
Poster getiteld: Dissociation dynamics of H<sub>2</sub>: excited atom distributions.  
Son werkgemeenschap voor Spectroscopie en Theorie, Lunteren, 27-28 januari 1997.

204. C.R. Scheper, N.P.L. Wales, W.J. Buma, C.A. de Lange  
Poster getiteld: REMPI-PES and ZEKE-PFI on low-lying gerade states of the xenon dimer.  
Son werkgemeenschap voor Spectroscopie en Theorie, Lunteren, 27-28 januari 1997.
205. Laser photoelectron spectroscopy: new light on chemistry.  
Macquarie University, Department of Chemistry, Sydney, Australia, 26 mei 1997.
206. Laser photoelectron spectroscopy: new light on chemistry.  
La Trobe University, Department of Chemistry, Melbourne, Australia, 29 mei 1997.
207. C.R. Scheper, W.J. Buma, C.A. de Lange, W.J. van der Zande  
Poster getiteld: Dissociation dynamics of H<sub>2</sub>: excited atom distributions.  
Trends in molecular physics 1,  
Les Houches, Frankrijk, 22-27 juni 1997.
208. Autoionization dynamics of Rydberg states.  
176. WE-Heraeus-Seminar,  
New theoretical concepts in ZEKE spectroscopy, Kreuth, Duitsland, 5-8 juli 1997.
209. Radicals with a light touch.  
Optical, electric and magnetic properties of molecules, Cambridge, Engeland, 10-13 juli 1997.
210. E.E. Burnell, C.A. de Lange  
Poster getiteld: Hydrogens in liquid crystals: the inside story.  
Optical, electric and magnetic properties of molecules, Cambridge, Engeland, 10-13 juli 1997.
211. C.R. Scheper, N.P.L. Wales, W.J. Buma, C.A. de Lange  
Poster getiteld: REMPI-PES and ZEKE-PFI on low-lying gerade excited states of the xenon dimer.  
Very high resolution spectroscopy with photoelectrons, Emmetten, Zwitserland, 20-25 september 1997.
212. C.R. Scheper, J. Kuyt, W.J. Buma, C.A. de Lange  
Poster getiteld: (3+1) REMPI-PES on Rydberg states of N<sub>2</sub>O.  
Very high resolution spectroscopy with photoelectrons, Emmetten, Zwitserland, 20-25 september 1997.
213. C.R. Scheper, A. Rijkenberg, W.J. Buma, C.A. de Lange, S.R. Langford, A.J. Orr-Ewing, R.A. Morgan, C.M. Western, M.N.R. Ashfold  
Poster getiteld: (2+1) Resonance enhanced multiphoton ionization spectroscopy of ammonia.  
Very high resolution spectroscopy with photoelectrons, Emmetten, Zwitserland, 20-25 september 1997.
214. C.R. Scheper, W.J. Buma, C.A. de Lange, W.J. van der Zande  
Poster getiteld: Dissociation dynamics of H<sub>2</sub>: excited atom distributions.

Very high resolution spectroscopy with photoelectrons, Emmetten, Zwitserland, 20-25 september 1997.

215. Laser photoelectron spectroscopy of ammonia.  
9th European Workshop on Molecular Spectroscopy and Photon Induced Dynamics, Toulouse, Frankrijk, 7-11 november 1997.
216. C.R. Scheper, N.P.L. Wales, W.J. Buma, C.A. de Lange  
Poster getiteld: REMPI-PES and ZEKE-PFI on low-lying gerade excited states of the xenon dimer.  
9th European Workshop on Molecular Spectroscopy and Photon Induced Dynamics, Toulouse, Frankrijk, 7-11 november 1997.
217. C.R. Scheper, J. Kuyt, W.J. Buma, C.A. de Lange  
Poster getiteld: (3+1) REMPI-PES on Rydberg states of N<sub>2</sub>O.  
9th European Workshop on Molecular Spectroscopy and Photon Induced Dynamics, Toulouse, Frankrijk, 7-11 november 1997.
218. C.R. Scheper, A. Rijkenberg, W.J. Buma, C.A. de Lange, S.R. Langford, A.J. Orr-Ewing, R.A. Morgan, C.M. Western, M.N.R. Ashfold.  
Poster getiteld: (2+1) Resonance enhanced multiphoton ionization spectroscopy of ammonia.  
9th European Workshop on Molecular Spectroscopy and Photon Induced Dynamics, Toulouse, Frankrijk, 7-11 november 1997.
219. C.R. Scheper, W.J. Buma, C.A. de Lange, W.J. van der Zande.  
Poster getiteld: Dissociation dynamics of H<sub>2</sub>: excited atom distributions.  
9th European Workshop on Molecular Spectroscopy and Photon Induced Dynamics, Toulouse, Frankrijk, 7-11 november 1997.
220. Laser photoelectron spectroscopy: light on radicals.  
Department of Chemistry, University of Waterloo, Waterloo, Ontario, Canada, 3 april 1998.
221. Laser photoelectron spectroscopy: light on radicals.  
Department of Chemistry, Purdue University, West Lafayette, Indiana, Canada, 8 april 1998.
222. Laser photoelectron spectroscopy: light on radicals.  
Department of Chemistry, Purdue University, West Lafayette, Indiana, USA, 8 april 1998.
223. Science below sea level.  
TMR meeting, CNRS, Gif-sur-Yvette, Frankrijk, 4 mei 1998.
224. Photoionization and non-adiabatic processes in small molecules.  
Workshop on Non-adiabatic Processes,  
National Research Council of Canada, Ottawa, Canada, 19 mei 1998.

225. Laser photoelectron spectroscopy: light on radicals.  
National Research Council of Canada, Ottawa, Canada, 21 mei 1998.
226. Laser photoelectron spectroscopy: light on radicals.  
Dipartimento di Chimica Fisica e Inorganica, Facoltà di Chimica Industriale,  
Università di Bologna, Bologna, Italië, 28 mei 1998.
227. Tinkering with tritons.  
Ampere VI NMR School,  
Zakopane, Polen, 31 mei - 5 juni 1998.
228. C.A. de Lange, C.R. Scheper, W.J. Buma, W.J. van der Zande.  
Poster getiteld: Dissociation dynamics of H<sub>2</sub>: excited atom distributions.  
Gordon Research Conference on Multiphoton Processes,  
Tilton, New Hampshire, USA, 14-18 juni 1998.
229. C.A. de Lange, C.R. Scheper, J. Kuijt, W.J. Buma.  
Poster getiteld: REMPI-PES on Rydberg states of N<sub>2</sub>O.  
Gordon Research Conference on Multiphoton Processes, Tilton, New Hampshire,  
USA, 14-18 juni 1998.
230. C.A. de Lange, J.B. Milan, W.J. Buma  
Poster getiteld: Laser photoelectron spectroscopy of the SH radical.  
Najaarsvergadering NNV Sectie Atoomfysica en Quantumelektronica, Lunteren, 5-6  
november 1998.
231. Laser photoelectron spectroscopy: radicals and molecules of atmospheric interest.  
Moleculaire en Mikroskopische Processen in de Atmosfeer (2e Jaarlijkse  
Atmosfeerdag), Universiteit Utrecht, Utrecht, 25 november 1998.
232. Laser photoelectron spectroscopy: mixed traits of electronic states.  
Spectroscopy from the Laboratory to Space,  
invited Annual Association of British Spectroscopists (ABS) Lecture, University of  
Nottingham, Nottingham, UK, 20-22 december 1998.
233. Laser photoelectron spectroscopy: mixed traits of electronic states.  
Institut für Physikalische Chemie und Elektrochemie, Heinrich Heine Universität,  
Düsseldorf, Duitsland, 2-3 februari 1999.
234. C.R. Scheper, W.J. Buma, C.A. de Lange, W.J. van der Zande, A. de Lange, W.  
Ubachs.  
Poster getiteld: Dissociation dynamics of H<sub>2</sub>: excited atom distributions.  
CW Studiegroep Spectroscopie en Theorie, Lunteren, 8-9 februari 1999.
235. D.H.A. ter Steege, M. Smits, C.A. de Lange, N.P.C. Westwood, J.B. Peel  
Poster getiteld: Resonance enhanced multiphoton ionization photoelectron  
spectroscopy of ClO.  
CW Studiegroep Spectroscopie en Theorie, Lunteren, 8-9 februari 1999.

236. Laser photoelectron spectroscopy: the fate of a superexcited state.  
Polish Academy of Sciences, Warschau, Polen, 17 maart 1999.
237. Prediction from molecular shape of solute orientational order in liquid crystals.  
University of Warsaw and Medical University of Warsaw, Warschau, Polen, 18 maart 1999.
238. M. Müller, J. Squier, C.A. de Lange, G.J. Brakenhoff  
CARS microscopy: non-linear optical spectroscopy at high spatial resolution.  
12th International Conference on 3D Image Processing in Microscopy & 11th International Conference on Confocal Microscopy, Heidelberg, Duitsland, 11-15 april 1999.
239. Laser photoelectron spectroscopy: mixed traits of electronic states.  
Institute for Molecular Science, Okazaki, Japan, 3 juni 1999.
240. Excited state photoelectron spectroscopy and dynamics of small molecules.  
Institute for Molecular Science, Okazaki, Japan, 4 juni 1999.
241. Excited state photoelectron spectroscopy and dynamics of small molecules.  
Department of Chemistry, Kyoto University, Japan, 5 juni 1999.
242. Laser photoelectron spectroscopy: mixed traits of electronic states.  
Department of Chemistry, Tokyo University, Japan, 9 juni 1999.
243. Excited state photoelectron spectroscopy and dynamics of small molecules.  
Photon Factory, Tsukuba, Japan, 11 juni 1999.
244. M. Müller, J. Squier, C.A. de Lange, G.J. Brakenhoff  
Non-linear CARS microscopy.  
European Conference on the Spectroscopy of Biological Molecules, Enschede, 29 augustus-2 september 1999.
245. Laser photoelectron spectroscopy: the fate of an excited state.  
Beijing International Conference on Photoelectron Spectroscopy (BICPES '99)  
12-17 September 1999, Beijing, China.
246. M. Müller, J. Squier, C.A. de Lange, G.J. Brakenhoff  
Poster getiteld: CARS microscopy: non-linear optical spectroscopy at high spatial resolution.  
1999 OSA Annual Meeting & ILS-XV: 15th Interdisciplinary Laser Science Conference, Santa Clara, CA, USA, 26 september-1 oktober 1999.
247. D.H.A. ter Steege, M. Smits, J.B. Peel, N.P.C. Westwood, C.A. de Lange  
Poster getiteld: Resonance enhanced multiphoton ionization photoelectron spectroscopy of chlorine oxide.  
European Research Conference on "Highly Excited Electronic States", 23-28 oktober 1999, San Feliu de Guixols, Spanje.

248. D.H.A. ter Steege, M. Smits, C.A. de Lange, N.P.C. Westwood, J.B. Peel, L. Visscher  
Poster getiteld: Laser photoelectron spectroscopy of the ClO radical: the C state.  
CW Studiegroep Spectroscopie en Theorie, 31 januari-1 februari 2000, Lunteren.
249. A.M. Rijs, E.H.G. Backus, C.A. de Lange, M.H.M. Janssen.  
Poster getiteld: Rotationally excited nitrogen from the photodissociation of nitric oxide.  
CW Studiegroep Spectroscopie en Theorie, 31 januari-1 februari 2000, Lunteren.
250. Laser photoelectron spectroscopy: excited states of small and medium-sized molecules.  
Department of Chemistry, University of Bristol, Engeland, 31 maart 2000.
251. Resonance-enhanced multiphoton ionisation photoelectron spectroscopy of the ClO radical: the C  $^2\Sigma^-$  state.  
Invited contribution, Faraday Discussion 115, University of York, Engeland, 3-5 april 2000.
252. NMR of solutes in nematic phases dissolved under pressure.  
AMPERE VIII NMR School, Zakopane, Polen, 4-9 juni 2000.
253. A.M. Rijs, E.H.G. Backus, C.A. de Lange, N.P.C. Westwood, M.H.M. Janssen.  
Poster getiteld: Rotationally resolved photoionisation dynamics of hot N<sub>2</sub> and CO photofragments.  
Gordon Research Conference on Atomic and Molecular Interactions, 2-7 juli 2000, Colby Sawyer College, New London, NH, USA.  
Aan deze poster werd de tweede prijs toegekend in de poster-competitie.
254. A.M. Rijs, E.H.G. Backus, C.A. de Lange, K. Wang, V. McKoy, N.P.C. Westwood, M.H.M. Janssen.  
Poster getiteld: Rotationally resolved photoionisation dynamics of hot N<sub>2</sub> and CO photofragments.  
Najaarsvergadering NNV Sectie Atoomfysica en Quantumelektronica, Lunteren, 16-17 november 2000.
255. Laser photoelectron spectroscopy: photofragmentation and atmospherically relevant species.  
National Research Council, Ottawa, Canada, 29 november 2000.
256. Laser photoelectron spectroscopy: photofragmentation and atmospherically relevant species.  
Department of Chemistry, University of British Columbia, Vancouver, Canada, 8 december 2000.
257. Rotationally resolved laser photoelectron spectroscopy of hot diatomic fragments formed in the photofragmentation of N<sub>2</sub>, OCS and CS<sub>2</sub>.  
221<sup>st</sup> National Meeting of the American Chemical Society, San Diego, CA, USA, 1-5 april 2001.

258. Rotationally resolved laser photoelectron spectroscopy of hot diatomic fragments formed in the photofragmentation of N<sub>2</sub>, OCS and CS<sub>2</sub>.  
Mini-Symposium on Photoionization Dynamics, Institute of Molecular Science, Okazaki, Japan, 14 mei 2001.
259. Laser photoelectron spectroscopy: spectroscopy and dynamics of excited states in small and medium-sized molecules.  
17<sup>th</sup> Symposium on Chemical Kinetics and Dynamics, Kyushu University, Fukuoka, Japan, 22-25 mei 2001.
260. Laser photoelectron spectroscopy: spectroscopy and photoionization dynamics of fragments produced in photodissociation processes.  
Research Institute for Electronic Science, Hokkaido University, Sapporo, Japan, 5 juli 2001.
261. Laser photoelectron spectroscopy: spectroscopy and photoionization dynamics of fragments produced in photodissociation processes.  
Tokyo University, Tokyo, Japan, 10 juli 2001.
262. Rotationally resolved laser photoelectron spectroscopy of hot diatomic fragments formed in the photofragmentation of N<sub>2</sub>, OCS and CS<sub>2</sub>.  
Nano-Molecule Photonics Facility, National Communication Research Laboratory, Shidami Science Park, 2268-1 Anagahora, Nagoya 463-0003, Japan, 18 juli 2001.
263. Laser photoelectron spectroscopy of stable and unstable photofragments.  
Institute of Molecular Science, Okazaki, Japan, 31 juli 2001.
264. Ultrafast time-resolved photoelectron spectroscopy and angular distributions of small molecules.  
3<sup>rd</sup> Network Meeting on "Reactive Intermediates", Garching, Duitsland, 11-14 oktober 2001.
265. Rotationally resolved laser photoelectron spectroscopy of hot diatomic fragments produced in the photodissociation of N<sub>2</sub>O, OCS and CS<sub>2</sub>.  
5<sup>th</sup> Iberian Joint Meeting on Atomic and Molecular Physics (IBER 2002), Lissabon, Portugal, 23-26 maart 2002.
266. Laser photoelectron spectroscopy: mixed traits of electronic states.  
Departamento de Fisica / Faculdade de Ciencias e Tecnologia, Universidade Nova de Lisboa, Portugal, 27 maart 2002.
267. The prediction of orientational order from molecular shape.  
85<sup>th</sup> Canadian Society for Chemistry, University of British Columbia, Vancouver, BC, Canada, 1-5 juni 2002.
268. Rotationally resolved laser photoelectron spectroscopy of hot diatomic fragments produced in the photodissociation of N<sub>2</sub>O, OCS and CS<sub>2</sub>.



The Third Informal Conference on Reaction Kinetics and Atmospheric Chemistry, LO-Skolen Conference Center, Helsingør, Denmark, 7-9 juni 2002.

269. M. Smits, M. Schmitt, C.A. de Lange, D. Rayner, A. Stolow  
Poster getiteld: Strong Field Ionization of Niobium Clusters: Multielectron Dynamics.  
Gordon Research Conference on Multiphoton Processes, Tilton, NH, USA, 30 juni-5 juli 2002.
270. Laser photoelectron spectroscopy: the surprising world of excited electronic states.  
5<sup>th</sup> Network Meeting on "Reactive Intermediates", Southampton, UK, 7-11 september 2002.
271. Laser photoelectron spectroscopy: the confusing world of superexcited states.  
Institute for Molecular Science, Okazaki, Japan, 29 oktober 2002.
272. Laser photoelectron spectroscopy: the confusing world of superexcited states.  
Tokyo University, Tokyo, Japan, 30 oktober 2002.
273. E. Witkowicz, J. Mes, H. Linnartz, S. Stolte, C.A. de Lange, W. Ubachs.  
Poster getiteld: Cavity Ringdown Spectroscopy of Molecular Ions.  
27<sup>th</sup> Fall Meeting van de NNV sectie Atomic, Molecular and Optical Physics (AMO),  
Lunteren, Nederland, 14-15 november 2002.
274. J. Philip, Th. Pielage, J.P. Sprengers, E. Reinhold, C.A. de Lange, W. Ubachs.  
Poster getiteld: Highly accurate transition frequencies in the H<sub>2</sub> Lyman and Werner bands.  
27<sup>th</sup> Fall Meeting van de NNV sectie Atomic, Molecular and Optical Physics (AMO),  
Lunteren, Nederland, 14-15 november 2002.
275. E. Witkowicz, J. Mes, H. Linnartz, S. Stolte, C.A. de Lange, W. Ubachs.  
Poster getiteld: Cavity Ringdown Spectroscopy of Molecular Ions.  
CW Studiegroep Spectroscopie en Theorie,  
Lunteren, Nederland, 27-28 januari 2003.
276. The prediction of solute orientational order in uniaxial liquid crystals from molecular shape.  
9<sup>th</sup> Annual Symposium of the National Magnetic Resonance Society (NMRS) of India, Bangalore, India, 3-6 February 2003.
277. Charged-particle imaging studies with nanosecond and femtosecond lasers: the CO molecule and the NO dimer.  
Fysisch Chemisch Colloquium, Vrije Universiteit, Amsterdam, 24 februari 2003.
278. Charged-particle imaging studies with nanosecond and femtosecond lasers: the CO molecule and the NO dimer.  
ETH, Zürich, Zwitserland, 18 maart 2003.
279. Charged-particle imaging studies with femtosecond lasers: the NO dimer.

- 6th Network Meeting on "Reactive Intermediates", Bremen, Duitsland, 26-30 maart 2003.
280. E. Witkowicz, J. Mes, H. Linnartz, C.A. de Lange, W. Ubachs, A. Sfounis, M. Massaouti, M. Velegakis.  
Poster getiteld: Reactive species in a planar plasma expansion studied by CRD spectroscopy and TOF mass spectrometry.  
6th Network Meeting on "Reactive Intermediates", Bremen, Duitsland, 26-30 maart 2003.
281. J. Philip, J.P. Sprengers, C.A. de Lange, W. Ubachs.  
Poster getiteld: Narrowband XUV laser source for the study of predissociation in N<sub>2</sub>.  
6th Network Meeting on "Reactive Intermediates", Bremen, Duitsland, 26-30 maart 2003.
282. The prediction of solute orientational order in uniaxial liquid crystals from molecular shape.  
AMPERE XI NMR SCHOOL, Zakopane, Polen, 1-6 juni 2003.
283. M. Smits, C.A. de Lange, D.M. Rayner, A. Stolow.  
Poster getiteld: Strong field ionisation of small niobium clusters.  
Femtochemistry VI, Parijs, Frankrijk, 6-10 juli 2003.
284. J. Philip, J. P. Sprengers, C. A. de Lange, W. Ubachs.  
Poster getiteld: Frequency mixing scheme for the production of tunable narrowband XUV radiation (91-95 nm).  
7th Network Meeting on "Reactive Intermediates", Saint Lambert des Bois, Frankrijk, 3-7 september 2003.
285. Charged-particle imaging of molecules of atmospheric interest.  
Department of Chemistry, University of Southampton, UK, 24 oktober 2003.
286. Ultrafast dissociation processes in the NO dimer studied with time-resolved photoelectron imaging.  
Gordon Research Conference on Multiphoton Processes, Tilton, NH, USA, 13-18 juni 2004.
287. NMR of Oriented Molecules Undergoing Internal Motion: Ethane.  
AMPERE XIII NMR School, Zakopane, Polen, 5-10 juni 2005.
288. The prediction of solute orientational order in uniaxial liquid crystals from molecular shape.  
NMR in Oriented Phases, Tropea, Italië, 29 september – 2 oktober 2005.
289. Maria Ofelia Vieitez, Toncho Ivanov, Kees de Lange, Wim Ubachs.  
Poster getiteld: XUV spectroscopy of molecular nitrogen.  
Tulip Summer School, Noordwijk, 26-29 april 2006.

290. Scope and limitations of accurate structure determination of solutes dissolved in liquid crystals.  
AMPERE NMR School, Wierzba, Polen, 25 juni – 1 juli 2006.
291. Toncho Ivanov, Maria Ofelia Vieitez, Kees de Lange, Wim Ubachs, Mourad Roudjane, Lydia Tchang-Brillet.  
Poster getiteld: High resolution XUV laser spectroscopy of H<sub>2</sub> and HD.  
The 5th International Conference on Atomic and Molecular Data and Their Applications (ICAMDATA), Meudon, Frankrijk, 15 -19 oktober 2006.
292. T.Ivanov, M.O. Vieitez, C.A. de Lange, W. Ubachs.  
Poster getiteld: High precision spectroscopy with lasers in the XUV spectral domain.  
1<sup>st</sup> ATLAS workshop: Chemical Dynamics, Heraklion, Crete, Greece, 16-20 oktober 2006.
293. Scope and limitations of accurate structure determination of solutes dissolved in liquid crystals.  
Department of Chemistry, University of British Columbia, Vancouver (B.C.), Canada, 20 oktober 2006.
294. W. Leo Meerts, C.A. de Lange, A.C.J. Weber, E.E. Burnell.  
Poster getiteld: A simple two-step automatic assignment procedure for complicated NMR spectra of solutes in liquid crystals using genetic algorithms.  
CW Studiegroep Spectroscopie en Theorie, Lunteren, Nederland, 29-30 januari 2007.
295. Ofelia Vieitez, Toncho Ivanov, Kees de Lange, Brenton Lewis, Wim Ubachs.  
Poster getiteld: Perturbation and predissociation in the dipole spectrum of N<sub>2</sub>; some peculiar local effects.  
CW Studiegroep Spectroscopie en Theorie, Lunteren, Nederland, 29-30 januari 2007.
296. Toncho Ivanov, Ofelia Vieitez, Mourad Roudjane, Lydia Tchang-Brillet, Kees de Lange, Wim Ubachs.  
Poster getiteld: Ultrahigh resolution XUV spectroscopy of HD for probing cosmological mass variation.  
CW Studiegroep Spectroscopie en Theorie, Lunteren, Nederland, 29-30 januari 2007.
297. Maria Ofelia Vieitez, Toncho Ivanov, Kees de Lange, Wim Ubachs.  
Poster getiteld: XUV spectroscopy of molecular nitrogen.  
31<sup>th</sup> Scientific Meeting van de NNV sectie Atomic, Molecular and Optical Physics (AMO), Lunteren, Nederland, 4-5 april 2007.
298. Toncho Ivanov, Ofelia Vieitez, Mourad Roudjane(\*), Lydia Tchang-Brillet(\*), Kees de Lange, Wim Ubachs.  
Poster getiteld: Ultrahigh resolution XUV spectroscopy of HD for probing cosmological mass variation.  
31<sup>th</sup> Scientific Meeting van de NNV sectie Atomic, Molecular and Optical Physics (AMO), Lunteren, Nederland, 4-5 april 2007.
299. W. Leo Meerts, C.A. de Lange, A.C.J. Weber, E.E. Burnell.

- Poster getiteld: A simple two-step automatic assignment procedure for complicated NMR spectra of solutes in liquid crystals using genetic algorithms.  
31<sup>th</sup> Scientific Meeting van de NNV sectie Atomic, Molecular and Optical Physics (AMO), Lunteren, Nederland, 4-5 april 2007.
300. Perturbation and predissociation in the electric dipole spectrum of N<sub>2</sub> studied with XUV spectroscopy.  
2007 Annual Marie Curie Chair Conference, Recent Advances in Laser Spectroscopy and Laser Technology, Lodz, Polen, 29-31 mei 2007.
301. Automated analysis of complex high-resolution NMR spectra using genetic algorithms  
AMPERE NMR School, Bukowina Tatrzenska, Polen, 24-30 juni 2007.
302. W. Leo Meerts, C.A. de Lange, A.C.J. Weber, E.E. Burnell.  
Poster getiteld: A simple two-step automatic assignment procedure for complicated NMR spectra of solutes in liquid crystals using genetic algorithms.  
The 20th Colloquium on High Resolution Molecular Spectroscopy, Dijon, France, 3-7 september 2007.
303. T. I. Ivanov, M.O. Vieitez, M. Roudjane, W.-Ü.L. Tchang-Brillet, C.A. de Lange, W. Ubachs.  
Poster getiteld: High precision XUV spectroscopy of molecular hydrogen and its isotopomers.  
The 20th Colloquium on High Resolution Molecular Spectroscopy, Dijon, France, 3-7 september 2007.
304. Ofelia Vieitez, Toncho Ivanov, Kees de Lange, Wim Ubachs.  
Poster getiteld: Rydberg-valence interactions and predissociation mechanisms in molecular nitrogen.  
The 20th Colloquium on High Resolution Molecular Spectroscopy, Dijon, France, 3-7 september 2007.
305. Automated analysis of complex high-resolution NMR spectra using genetic algorithms.  
NMR in Oriented Phases, Tropea, Italië, 3-7 oktober 2007.
306. Basics of NMR of molecules in uniaxial anisotropic environments.  
AMPERE NMR School 2008, Poznan, Polen, 19-22 juni 2008.
307. C.A. de Lange, E.E. Burnell.  
A solute's view of a liquid crystal  
Part 1: Orientational mechanisms  
Part 2: Flexible solutes  
AMPERE NMR School 2008, Workshop 'NMR of ordered liquids', Wierzba, Polen, 22-28 juni 2008.
308. Scope and limitations of accurate structure determination using liquid-crystal NMR.  
AMPERE NMR School 2008, Wierzba, Polen, 22-28 juni 2008.

309. Evolutionary strategies for solving extremely complicated NMR spectra of solutes in nematic solvents.  
International School of Liquid Crystals, 15<sup>th</sup> Workshop: Liquid Crystal Phases and Nano-structures, Erice (Sicilië), Italië, 27 oktober - 1 november 2008.
310. T.Ivanov, E. Reinhold, W.G. Roeterdink, C.A. de Lange, M.H.M. Janssen, W. Ubachs.  
Poster getiteld: Dissociation dynamics of highly-excited H<sub>2</sub>.  
32<sup>nd</sup> Scientific Meeting van de NNV sectie Atomic, Molecular and Optical Physics (AMO), Lunteren, Nederland, 28-29 oktober 2008.
311. M.O. Vieitez, T. Ivanov, E. Reinhold, C.A. de Lange, W. Ubachs.  
A heavy Bohr atom.  
32<sup>nd</sup> Scientific Meeting van de NNV sectie Atomic, Molecular and Optical Physics (AMO), Lunteren, Nederland, 28-29 oktober 2008.
312. C.A. de Lange, E.E. Burnell.  
NMR of ordered liquids.  
Workshop AMPERE NMR School 2009, Zakopane, Polen, 21-27 juni 2009.
313. Novel strategies for solving highly complex NMR spectra of solutes in liquid crystals.  
AMPERE NMR School 2009, Zakopane, Polen, 21-27 juni 2009.
314. Forty years of liquid-crystal NMR; an unusual partnership.  
Magnetic Resonance and Chemical Physics: A Symposium in Honour of Elliott Burnell, Vancouver, Canada, 21-23 augustus 2009.
315. Novel strategies for solving highly complex NMR spectra of solutes in liquid crystals.  
NMR in Oriented Phases, Tropea, Italië, 1-5 oktober 2009.
316. Arno Vredenburg, Wim G. Roeterdink, Cornelis A. de Lange, Maurice H.M. Janssen.  
Poster getiteld: Femtosecond Photoelectron-Photoion Coincidence Imaging.  
33<sup>rd</sup> Scientific Meeting van de NNV sectie Atomic, Molecular and Optical Physics (AMO), Lunteren, Nederland, 6-7 oktober 2009.
317. Molecular hydrogen: a treasure trove for quantum physics.  
Departments of Chemistry and Physics, University of British Columbia, Vancouver (B.C.), Canada, 18 november 2010.
318. What can liquid-crystal NMR teach us about solute conformations?  
AMPERE NMR School 2011, Zakopane, Polen, 19-25 juni 2011.
319. Nuclear magnetic resonance of alkane conformational statistics.  
AMPERE NMR School 2012, Poznan, Polen, 24-30 juni 2012.
320. Evolutionary strategies in liquid-crystal NMR: spectral analysis made easy.  
AMPERE NMR School 2013, Zakopane, Polen, 23-29 juni 2013.
321. E.E. Burnell, A.C.J. Weber, R.Y. Dong, C.A. de Lange.

Can NMR tell us anything about molecular conformations?  
AMPERE NMR School 2013, Zakopane, Polen, 23-29 juni 2013.

322. E.E. Burnell, A.C.J. Weber, R.Y Dong, W.L. Meerts, C.A de Lange.  
NMR of orientationally ordered hydrocarbons --- methane to *n*-hexane.  
98th Canadian Chemistry Conference, Ottawa, 13-17 juni 2015.
- 323 E.E. Burnell, C.A. de Lange, W.L. Meerts  
Poster getiteld: Molecular gears – Hexamethylbenzene.  
20<sup>th</sup> International Conference on Magnetic Resonance (ISMAR) 2017, Québec City,  
Canada, 23-28 juli 2017
- 324 E.E. Burnell, C.A. de Lange  
NMR of orientationally ordered short-chain hydrocarbons.  
International School of Liquid Crystals, meeting in honour of Claudio Zannoni, Erice,  
Italy, 7-10 october 2018.