27th International Symposium on Gas Kinetics & Related Phenomena

Sunday 14 – Thursday 18 July 2024

University of Leeds, UK

PROGRAMME

(subject to amendments)

Registration on Sunday 14th July takes place in the Parkinson Building, University of Leeds.

Registration on Monday will take place in the Newlyn Building between 08.00 and 09.00.

Tuesday - Thursday arrivals can collect their Symposium badge and abstract booklet from Esther Simpson Building, University of Leeds, outside the Esther Simpson Lecture Theatre LG.08.

All oral presentations and flash presentations take place in the Esther Simpson Lecture Theatre LG.08.

Refreshments, lunches, and posters are in the Newlyn Building.

Odd-numbered posters will be presented in Poster Session I on Monday 15th July.

Even-numbered posters will be presented in Poster Session II on Tuesday 16th July.

Sunday 14th July 2024

Registration and a welcome reception will take place on Sunday 14 July in the Parkinson Building. Registration will be open from 16.30 with a welcome reception between 17.00 and 18.30

Monday 15th July 2024

08:00-09:00	*Registration and refreshments – Newlyn GR.01*	
09:00-09:20	Welcome and introduction	RSC Gas Kinetics Interest Group and GK2024 organising committee
	Astrochemistry & Planetary Chemistry I	Session chair: Dr Julia Lehman
09:20-10:00	Gas-phase radical-molecule reactions relevant for prebiotic chemistry in star-forming regions	Prof. Elena Jiménez Universidad de Castilla-La Mancha, Spain
10:00-10:20	VUV photoionization of radicals of astrochemical interest	Dr Myriam Drissi Synchrotron SOLEIL, France
10:20-10:40	First steps in nucleation: conformer specific reaction kinetics of heterodimer formation at low temperatures	Prof. Ian R. Sims Université de Rennes, France
10:40-11:20	*Refreshments and exhibition – Newlyn GR.01 & GR.07*	
	Astrochemistry & Planetary Chemistry II	Session chair: Dr Kevin Douglas
11:20-11:40	Laboratory investigation of the O(^{3}P,^{1}D) + small aromatics reactions: the role of oxygen atoms in space organic chemistry	Dr Giacomo Pannacci University of Perugia, Italy
11:40-12:00	Kinetic modelling of the C/H/O/N/S chemistry of exoplanets with *ab initio* calculations validated on experimental data	Roméo Veillet Université Paris Cité and Université Paris Est Créteil, France
12:00-12:20	Carbon on Mars: Photolytic isotope effect shows CO is the building block of organic synthesis	Prof. Matthew Johnson University of Copenhagen, Denmark
12:20-12:40	New insights into catalytic chlorine oxidation of CO in the Venus mesosphere	Dr Frank Winiberg Jet Propulsion Laboratory, California Institute of Technology, USA
12:40-14:00	*Lunch and exhibition – Newlyn GR.01 & GR.07*	
	Theoretical Kinetics I	Session chair: Dr Luc Vereecken
14:00-14:40	Predicting Pressure Dependent Rate Constants	Dr Ahren Jasper Argonne National Laboratory, USA
14:40-15:00	The effects of quantum tunneling on pressure-dependent reaction rate coefficients	Dr Thanh Lam Nguyen University of Florida, USA
15:00-15:20	Modelling Post-Reaction Energy Distributions: The Key to Unlocking Coupled Reaction Systems	Dr Robin Shannon University of Leeds, UK
15:20-16:00	*Refreshments and exhibition – Newlyn GR.01 & GR.07*	
	Theoretical Kinetics II	Session chair: Prof. Keith Kuwata
16:00-16:20	The Role of the Pre-reaction Complex in the Dynamics of the CH_3 + HBr → CH_4 + Br Reaction	Prof. György Lendvay Research Centre for Natural Sciences, Hungary
16:20-16:40	Elucidating the Atmospheric Reactivity of HO_2 + NO: Reaction Kinetics, Roaming, and Branching Ratios	Nadjib Rais Scuola Normale Superiore, Italy
16:40-17:00	Theoretical study of the influence of O-atoms in heterocycles on the H-abstractions by alkoxy radicals	Gabriel Batalha-de-Souza Université de Lorraine, France
17:00-17:30	*Flash presentations*	
17:30-19:30	*Poster session I and drinks reception - Newlyn 1.01 & 1.07*	

Tuesday 16th July

	Combustion Chemistry I	Session chair: Prof. Frédérique Battin-Leclerc
09:00-09:40	Workflows for Gas-Phase and Gas-Surface Reaction Kinetics	Dr Judit Zádor Sandia National Laboratories, USA
09:40-10:00	Role of ring-opening reactions in low-temperature oxidation of cis- and trans-2,3-dimethyloxiranyl radicals	Nicholas Dewey University of Georgia, USA
10:00-10:20	Understanding High-Pressure Chemistry in Acetylene Oxidation: Experimental Insights from Jet-Stirred Reactor and Pressure Effects	Dr Qian-Peng Wang Chinese Academy of Sciences, China
10:20-10:40	Unimolecular dynamics of the hydroperoxyalkyl intermediate (•QOOH) in cyclohexane oxidation	Prof. Marsha Lester University of Pennsylvania, USA
10:40-11:20	*Refreshments and exhibition – Newlyn GR.01 & GR.07*	
	Chemistry with Laser and Shock Tubes – Tribute to Horst Hippler	Session chair: Prof. Matthias Olzmann
11:20-11:30	Tribute to Professor Horst Hippler	Prof. Matthias Olzmann Karlsruhe Institute of Technology (KIT), Germany
11:30-11:50	On the multichannel dissociation of styrene and PAH growth	Dr Robert Tranter Argonne National Laboratory, USA
11:50-12:10	Pyrolysis Reactions of Phosphine: Shock Tube Studies and Kinetic Modeling	Dr Johannes Wenz Karlsruhe Institute of Technology (KIT), Germany
12:10-12:30	Shock tube TOF-MS study of the decomposition of trimethylsilanol and hexamethyldisiloxane	Dr Rachel Schwind University of Edinburgh, UK
12:30-14:00	*Lunch and exhibition – Newlyn GR.01 & GR.07*	
	Heterogeneous Kinetics	Session chair: Prof. Maria Teresa Baeza Romero
14:00-14:40	Predicting Multiphase Kinetics in Aerosols and Microdroplets	Dr Kevin Wilson Lawrence Berkeley National Laboratory, USA
14:40-15:00	Dehydrogenation processes of Liquid Organic Hydrogen Carriers (LOHC)	Dr Franziska Dahlmann KTH Royal Institute of Technology, Sweden
15:00-15:20	Condensed Phase Redox Chemistry induces Mass Loss during Photochemical Aging of Atmospheric Aerosols	Dr Thomas Schaefer Leibniz Institute for Tropospheric Research (TROPOS), Germany
15:20-16:00	*Refreshments and exhibition– Newlyn GR.01 & GR.07*	
	Combustion Chemistry II	Session chair: Dr Patrick Lynch
16:00-16:20	Reactions of the OH Radical with Conjugated Cyclic Ketones	Dr Fabien Goulay West Virginia University, USA
16:20-16:40	Experimental and modelling high-pressure study of ammonia/diethyl-ether oxidation in a flow reactor	Prof. Maria Alzueta University of Zaragoza, Spain
16:40-17:00	Insights into Hydrocarbon Oxidation from Time-Resolved Speciation Measurements and Theory-Based Modeling	Dr Leonid Sheps Sandia National Laboratories, USA
17:00-17:30	*Flash presentations*	
17:30-19:30	*Poster session II and drinks reception – Newlyn 1.01 & 1.07*	

Wednesday 17th July

	Atmospheric Chemistry I	Session chair: Dr Rabi Chhantyal Pun
09:00-09:40	Towards an improved understanding of tropospheric oxidation processes by comparison of field observations of radical species with Master Chemical Mechanism box model predictions	Dr Lisa Whalley University of Leeds, UK
09:40-10:00	Kinetics, products, and mechanisms for the OH radical initiated oxidation of piperitone	Prof. John Wenger University College Cork, Ireland
10:00-10:20	Investigation of the temperature-dependent kinetics of Criegee intermediate (CH_2OO) with 2-butanone and 2-pentanone under tropospherically relevant conditions	Prof Balla Rajakumar Indian Institute of Technology Madras, India
10:20-10:40	Direct Kinetic Measurements of the Cyclic and Diethyl Substituted Criegee Intermediates: *c*-$(CH_2)_5COO$ and $(CH_3CH_2)_2COO$	Dr Jari Peltola University of Helsinki, Finland
10:40-11:20	*Refreshments - Newlyn GR.01 & GR.07*	
	Atmospheric Chemistry II	Session chair: Dr Iusti Bejan
11:20-12:00	From volatile to non-volatile in sub second timescales	Prof. Matti Rissanen Tampere University and University of Helsinki, Finland
12:00-12:20	Gas-phase Kinetics of Criegee Intermediates: Expanding the Reactivity Database using a Novel Relative Rate Technique	Pengcheng Wang ICARE-CNRS, France
12:20-12:40	Gas-Phase Oxidation of Atmospherically Relevant Unsaturated Hydrocarbons by Acyl Peroxy Radicals	Dominika Pasik University of Helsinki and Institute for Atmospheric and Earth System Research, Finland
12:40-12:50	*Excursion details*	
12:50	*End of sessions – please collect your lunch boxes from Newlyn GR.01 & GR.07 and go directly to the area outside the Parkinson Building for the excursion*	
13:30	*Coaches depart from outside the Parkinson Building for the excursion to Fountains Abbey*	
17:45	*Coaches depart from Fountains Abbey for the return to Leeds*	

Coaches for the excursion to Fountains Abbey will depart from outside the Parkinson Building at 13:30. Please ensure that you arrive no later than 13:15 to ensure that coaches depart on time. A packed lunch will be provided for everyone registered for the Symposium, whether you are going on the excursion or not, and this can be collected from the Newlyn Building at 12:50 when the morning sessions have ended.

Please wear comfortable footwear and, as the weather can be unpredictable and Fountains Abbey is outdoors, please bring suitable clothing in the event of wet weather and sunscreen and a hat/head covering should the weather be sunny.

Thursday 18th July

	Novel Techniques and Elementary Processes I	Session chair: Dr Jim Lin
09:00-09:40	Quantitative MIR Laser Spectroscopies for Time-Resolved Gas Phase and Interface Studies	Prof. Gernot Friedrichs Christian-Albrechts-University Kiel, Germany
09:40-10:00	Frequency Comb Spectroscopy for Gas Phase Phenomena	Dr Julia Lehman University of Birmingham, UK
10:00-10:20	How the Atmospheric Ozonolysis Mechanism can Contribute to Low-Temperature Combustion Chemistry?	Prof. Frédérique Battin-Leclerc Université de Lorraine, France
10:20-10:40	Kinetic Measurements and Calculations on the Controversial Reaction of NH_2 with CH_2O	Prof. Paul Marshall University of North Texas, USA
10:40-11:20	*Refreshments – Newlyn GR.01 & GR.07*	
	Novel Techniques and Elementary Processes II	Session chair: Dr Leonid Sheps
11:20-11:40	OH + Formic Acid – Kinetics and Branching Ratios	Dr Mark Blitz University of Leeds, UK
11:40-12:00	Pulsed Laser Photolysis-Pulsed Laser Induced Fluorescence Studies of the Spectroscopy, Kinetics and Mechanism of HgBr	Prof. Dieter Bauer University of Miami, USA
12:00-12:20	Kinetic Studies of the OH + HO_2 Reaction via Direct Measurement of Precursor and Radical Concentrations with Mid-Infrared Time-Resolved Dual-Comb Spectroscopy	Dr Pei-Ling Luo Academia Sinica, Taiwan
12:20-12:40	Kinetics of the HO_2 + OH Reaction Using Infrared Kinetic Spectroscopy	Dr Charles Markus Jet Propulsion Laboratory, USA
12:40-13:40	*Lunch – Newlyn GR.01 & GR.07*	
	Chemistry of Atmospheres – Tribute to Professor Richard Wayne	Session chair: Prof. George Marston
13:40-13:50	Tribute to Professor Richard Wayne	Prof. George Marston, Northumbria University, UK
13:50-14:10	Influence of Pressure, Temperature, and Water Vapor on OH+NO+M Rate Coefficients	Prof. Carl Percival Jet Propulsion Laboratory, USA
14:10-14:30	Using the Mesospheric Lithium Layer to Monitor the Ablation of Space Debris	Prof. John Plane University of Leeds, UK
14:30-14:50	Evidence of Criegee intermediate oligomerization reactions in the Amazonian troposphere	Dr Rebecca Caravan Argonne National Laboratory, Sandia National Laboratories, and Jet Propulsion Laboratory, USA
14:50-15:00	*Closing remarks*	
15:00	*End of sessions – please be on time for the conference photo and transport to the Royal Armouries for the Polanyi lecture and conference dinner*	
15:50	*Conference photo outside the Parkinson Building*	
16:15	*Coaches depart from outside the Parkinson Building for the Polanyi lecture and conference dinner at the Royal Armouries*	
17:00-17:15	Award of the 2024 Polanyi medal to Dr Timothy Wallington	GK Committee Chair, Terry Dillon, and GK2024 Chair, Daniel Stone
17:15-18:00	Polanyi Lecture	Dr Timothy Wallington
18:00-19:30	*Reception at the Royal Armouries*	
19:30	*Conference dinner at the Royal Armouries*	
22:30	*Coaches depart from the Royal Armouries for the return to University of Leeds*	

Poster Presentations

Poster 1: Analytical methods for measuring organic peroxides in both polar and non-polar systems: An evaluation, Maria Teresa Baeza Romero *et al.*

Poster 2: Aqueous OH kinetics of oxygenated aliphatic organic compounds, Bartłomiej Witkowski *et al.*

Poster 3: Towards Accurate Prediction of the Thermochemistry and Kinetics of Key Elementary Steps in Low-Temperature Hydrocarbon Combustion, Kgalaletso Otukile *et al.*

Poster 4: Study of low-to-moderate temperature oxidation of 1,2,4-trimethylbenzene/n-heptane blend, Subharaj Hossain *et al.*

Poster 5: Tailoring Advanced Biofuel Blends Using Predictions of Ignition Behaviour and Computational Kinetic Analysis, Christian Michelbach *et al.*

Poster 6: Uptake and Reactions of Gas-Phase Organic Peroxy Radical with Solid Surfaces, Olivier Durif *et al.*

Poster 7: Catalysis Probed by Muonium Atom Reactivity on Metal Nanoparticles, Stephen Cottrell *et al.*

Poster 8: An Experimental and Kinetic Modeling Investigation of the Oxidation of two Lignin-Derived Biofuels: Anisole and Guaiacol, Jérémy Bourgalais *et al.*

Poster 9: Estimating Rate Constants for the Reactions of Ethers + OH: A New Application of the Electrotopological State, Max McGillen *et al.*

Poster 10: Atmospheric Degradation of New “Green” Solvents, James Metcalf *et al.*

Poster 11: Solketal’s Energy Exploration: Mass Spectrometry-Informed Plug Flow Reactor Studies and Reaction Mechanism Generation using RMG, Solmaz Nadiri *et al.*

Poster 12: Fast and Accurate Estimation of Kinetic Parameters for the Unimolecular Decomposition of 1,3-dioxetane and 1,3,5-trioxane Derivatives, Gilles Dossche *et al.*

Poster 13: Pyrolysis of CH_2F_2 and the role of self-reactions of CHF, Ahren Jasper *et al.*

Poster 14: Theoretical kinetic modelling of the OH radical reaction with volatile organosilicons, Thi Nguyen *et al.*

Poster 15: Numerical Study of PFAS Doped Methane/Air/Argon flames, Reema Aroos *et al.*

Poster 16: A Detailed Chemical Kinetic Model for the Destruction of Per- and Polyfluoroalkyl Substances (PFAS), Reema Aroos *et al.*

Poster 17: In-Situ FTIR analysis of reaction between water and polyurethane, Owen Rogers *et al.*

Poster 18: Underpinning the autoxidation mechanism of naphthalene in the atmosphere: What are we missing?, Prasenjit Seal *et al.*

Poster 19: Kinetics and Mechanism of a New Material for Automotive Catalysis, Alexander James *et al.*

Poster 20: Accurate reduced cost VRC-TST rates for barrierless reaction by means of DFT geometry optimizations, coupled cluster composite methods, and difference-dedicated multireference contributions, Luigi Crisci *et al.*

Poster 21: GC-MS Studies of Iron-Catalyzed Decomposition of Isoprene Hydroxy Hydroperoxide (ISOPOOH) in the Aqueous Phase., Elena Poschart *et al.*

Poster 22: Rapid formation of aerosol precursors from the autoxidation of aromatic carbonyls, Shawon Barua *et al.*

Poster 23: Hydrogen combustion: mixture rules and rate constants, Matteo Primi *et al.*

Poster 24: High temperature kinetics of F + hydrocarbons: experiments and modeling to isolate prompt reactions, Patrick Lynch *et al.*

Poster 25: Kinetics of the O_2 reactions with radical intermediates of the gas phase oxidation of methyl formate and ethyl formate, Lavinia Onel *et al.*

Poster 26: The Highly Instrumented Low Temperature Reaction Chamber (HILTRAC): A New Tool for Astrochemistry, Daniel Lucas *et al.*

Poster 27: Updated Thermodynamic and Chemical Kinetic Parameters for Ammonia Oxidation Modeling, Alon Grinberg Dana *et al.*

Poster 28: A Predictive Chemical Kinetic Model for Hydrazine Decomposition, Alon Grinberg Dana *et al.*

Poster 29: Improving the representation of dimethyl sulfide oxidation through ensemble chamber simulation studies and Monte Carlo uncertainty quantification, Lorrie Jacob *et al.*

Poster 30: Oxidation of NH_3-DEE mixtures, Maria. Uxue Alzueta *et al.*

Poster 31: Long Range Dynamics in Analogs of OH + CO, Theodore Dibble *et al.*

Poster 32: Yield of Stabilized Criegee Intermediates from Isoprene Ozonolysis, Rabi Chhantyal Pun *et al.*

Poster 33: Experimental and Modelling Study of Phenol Combustion and Oxidation, Frédérique Battin-Leclerc *et al.*

Poster 34: How SVUV-PEPICO spectroscopy improves the analysis of hydroperoxides formed during fuel low-temperature oxidation, Frederique Battin-Leclerc *et al.*

Poster 35: Experiments on combustion properties of CO-O_2 mixtures diluted with CO_2 at different pressures and temperatures, Eugenio Luis Torres de Ritter *et al.*

Poster 36: Reactions of *Tert*- and *Iso*-butyl Chlorides with OH Radicals and Cl Atoms: Kinetics and Implications, Fredy Joy *et al.*

Poster 37: An Experimental and SAR Approach to Determining Site Specific Rate Coefficients for Multifunctional Compounds, Niamh Robertson *et al.*

Poster 38: UV Spectroscopy and Reaction Kinetics of Criegee Intermediates, Jim Lin *et al.*

Poster 39: Laboratory photolysis studies of atmospheric carbonyls, Ruth Winkless *et al.*

Poster 40: Chlorine over the North Atlantic: Photocatalytic chloride to chlorine conversion by iron in aerosols, Matthew Johnson *et al.*

Poster 41: NO_2 in the Borough of Camden: RPCA-based techniques for pattern extraction, hotspot identification and signal correction using data from a dense network of low-cost sensors, Matthew Johnson *et al.*

Poster 42: Emission Rates from Cooking – an indoor air chemistry study, Wael Dighriri *et al.*

Poster 43: Benchmarking the Irish Atmospheric Simulation Chamber using the NO_X-Ozone reaction system, Mixtli Campos-Pineda *et al.*

Poster 44: Criegee Intermediate (CH_2OO) Reactions with n-Butyraldehyde and Isobutyraldehyde: Kinetics and Mechanism, Amit Debnath *et al.*

Poster 45: Kinetics of Bromine Monoxide Radical with Propyl and *iso*-Propyl Peroxy Radicals using Cavity Ring-down Spectroscopy, Prasanna Kumar Bej *et al.*

Poster 46: Temperature-dependent kinetics of the reaction of CH_2OO with isobutyl amine using Cavity Ring-down Spectroscopy, Sulfath N *et al.*

Poster 47: Kinetic investigations on the OH-initiated reactions of Methyl cyclohexene in the atmosphere: A combined experimental and theoretical study, Gopika S. Madhu *et al.*

Poster 48: Gas-phase kinetics investigation for the reaction of 2-chlorobutane and 2-aminobutane with OH radicals, Bishnupriya Kar *et al.*

Poster 49: Atmospheric chemistry of furans initiated by OH radicals, Iustinian Bejan *et al.*

Poster 50: Kinetic study of the gas-phase reactions of OH radicals and O_3 with furfuryl alcohols, Iustinian Bejan *et al.*

Poster 51: Demonstration of a new graphical user interface (GUI) for MESMER, Robin Shannon *et al.*

Poster 52: Reaction Pathways Leading to HPALD Intermediates in Tropospheric Isoprene Oxidation Mechanisms, Peter Szabo *et al.*

Poster 53: Reactivity of CN radical with NH_3 under interstellar conditions (T=11.7-115.3 K), Elena Jiménez *et al.*

Poster 54: Contribution of the oxidation of crotonaldehyde to the chemistry of cloud microdroplets, Francisco Javier Poblete *et al.*

Poster 55: Knowledge generation on combustion chemistry through automated database processing, Mengdi Li *et al.*

Poster 56: A high-level theoretical study on the OH-initiated atmospheric degradation mechanism of halogenated olefins., Zoi Salta *et al.*

Poster 57: Unimolecular Decomposition of CH_3O: An Experimental and Theoretical Study, Tobias Pazdera *et al.*

Poster 58: Quantifying Dialkyl Peroxide (ROOR) Formation in the gas-Phase self-Reaction of C_1-C_4 Alkyl Peroxy Radicals (RO_2), Barbara Noziere *et al.*

Poster 59: Probing decomposition kinetics of hydrogen-bonded clusters using molecular dynamics simulations: A case study of nitrate ion-molecule clusters, Christopher Daub *et al.*

Poster 60: Temperature-dependent kinetics of the reaction of ozone with linalool, nerol, and citronellol in the gas phase, Mirna Shamas *et al.*

Poster 61: Kinetic analysis of the reactions of isoprene hydroxy hydroperoxide radicals and sulphur dioxide and their impacts on tropospheric sulphate , Hiroo Hata *et al.*

Poster 62: Unimolecular Reactions of Unsaturated RO_2 Molecules: Theory, Experiment, and SARs, Luc Vereecken *et al.*

Poster 63: Impact of Temperature-dependent non-PAN Peroxynitrate Formation, RO_2NO_2, on nighttime Atmospheric Chemistry, Luc Vereecken *et al.*

Poster 64: Experimental investigation of gas-phase reactions triggered by lightning in Earth's Atmosphere, Lauren Cork *et al.*

Poster 65: Understanding the kinetics and atmospheric degradation mechanism of 3-methoxy-1-propanol initiated by OH radicals, Abolfazl Shiroudi *et al.*

Poster 66: Insight into Phosphine Oxidation from Shock Tube Experiments with Dual ARAS Detection, Christian Fruth *et al.*

Poster 67: Experimental Studies on the Kinetics of the Reactions of OH Radicals with a Series of Ethers, Miu Mach *et al.*

Poster 68: On the Kinetics of the NCN + H Reaction: ARAS Studies behind Reflected Shock Waves, Felix Poschen *et al.*

Poster 69: Determination of organic nitrate yields from RO_2 + NO reactions using a chemical amplifier, Clara Strunz *et al.*

Poster 70: Effect of Surface-Bulk Partitioning on the Heterogeneous Oxidation of Aqueous Aerosols, Kyani Selvaraj *et al.*

Poster 71: Kinetics of the reaction of OH with methyl nitrate (223–343 K), Christin Fernholz *et al.*

Poster 72: Kinetics of the reaction of OH with trifluoroacetaldehyde, Fabienne Baumann & Christin Fernholz *et al.*

Poster 73: Computational Chemistry Re-interprets Laboratory and Field Studies of Oxidation of Hg(0) Initiated by Nitrate Radical, Darshi Hewa Edirappulige *et al.*

Poster 74: Gas phase reactions of SO_3 with organic and inorganic acids under ambient conditions, Avinash Kumar *et al.*

Poster 75: Investigating radical processes at the surface of secondary organic aerosols, Abigail McConnell *et al.*

Poster 76: Hydrofluoroolefin degradation pathways by reaction with O_3 in the troposphere, Maria de Los Angeles *et al.*

Poster 77: Sources and Sinks of Aldehydes in Air, Terry Dillon *et al.*

Poster 78: Automated transition state models for alkyl radicals β-scissions, Fabiola Citrangolo Destro *et al.*

Poster 79: OH chemistry of 2,5-dimethylfuran, Niklas Illmann *et al.*

Poster 80: O_3 chemistry of 2,5-dimethylfuran: Mechanism development, Niklas Illmann *et al.*

Poster 81: Investigation of acetyl peroxy ($CH_3C(O)O_2$) radical reactions in the gas phase, Niklas Illmann *et al.*

Poster 82: Reactivity of functionalized surfaces with atmospheric radicals, Amy Wolstenholme-Hogg *et al.*

Poster 83: Does decalin auto-oxidize? Flow reactor investigations with chemical ionization mass spectrometry detection, Sana Farhoudian *et al.*

Poster 84: Sulfur chemistry in the Venus middle atmosphere, Franklin Mills *et al.*

Poster 85: Intercomparison of pump-probe OH reactivity instruments utilising broad-band UV spectroscopy and laser-induced fluorescence (LIF) spectroscopy, Thomas Luke *et al.*

Poster 86: Development of a novel instrument for long-term measurements of OH reactivity, Midhun George *et al.*

Poster 87: Molecular rearrangement of bicyclic peroxy radicals lead rapidly to aerosol precursors from xylene, Siddharth Iyer *et al.*

Poster 88: The Atmospheric Autoxidation of Mesitylene, Anni Savolainen *et al.*

Poster 89: Conformational Analysis of Isoprene Peroxy Radicals: Electronic Structures, Excited States and Spectral Simulation, Shefali Baweja *et al.*

Poster 90: Revised CHF_3 Yields from Hydrofluoroolefin Ozonolysis, Keith Kuwata *et al.*

Poster 91: Detailed kinetic modeling of propylene atmospheric chemistry using computational chemistry, Michiya Fujita *et al.*

Poster 92: Experimental Insights into Atmospheric Autoxidation of Furan Using MION Orbitrap Mass Spectrometry, Rabbia Asgher *et al.*

Poster 93: Simulating UV-Vis Spectra for Polysulfur Species in the Venusian Atmosphere, Robert Skog *et al.*

Poster 94: Kinetics of the Gas Phase Reactions of *syn*- and *anti*-CH_3CHOO Criegee Intermediate Conformers with SO_2 as a Function of Temperature and Pressure, Rachel Lade *et al.*

Poster 95: Kinetics of the Reactions of the Criegee Intermediate CH_2OO with Water Vapour, Rachel Lade *et al.*

Poster 96: Kinetics of CH_3CHOO Criegee intermediate conformer reactions with water vapour, Kate Livesey *et al.*

Poster 97: Alternative laboratory precursors for Criegee intermediates, Kate Livesey *et al.*

Poster 98: Evolving atmospheric chemistry: transition between night and daytime chemical regimes associated with biomass burning, Andrew Rickard *et al.*

Poster 99: Kinetics and mechanistic study of HOM formation from methylated furan oxidation initiated by OH radical: A computational perspective, Sakshi Jha *et al.*

Poster 100: Study of Peroxy Radical Autoxidation using Near Infrared Cavity Ring-Down Spectroscopy, Edward Bates *et al.*

Poster 101: Modelling atomic oxygen formation in atmospheric pressure plasma jets, Andrew Gibson *et al.*

Poster 102: Glyoxal Yields from Selected Hydrocarbon Oxidations, Danny McConnell *et al.*

Poster 103: Theoretical study of the reaction of the methylidyne radical (CH, $X^2\Pi$) with pentatetraenylidene (C_5H_2, X^1A_1)., Nadjib Rais *et al.*

Poster 104: Addition and Elimination Reactions on the C_4H_9 Potential-Energy Surface: Experiments and a Large-Scale Master-Equation Analysis of Literature Data, Timo Pekkanen *et al.*

Poster 105: C_2H_2 and C_4H_2 Detection in Dusty C_2H_2/Ar Plasma by Quantitative Mid-Infrared Frequency Modulation Spectroscopy, Michael Stuhr *et al.*

Poster 106: Development of an aircraft FAGE instrument, Graham Boustead *et al.*

Poster 107: Enhancing Chemical Models: Novel Propargyl + HO_2 Reactions, Enia Mudimu *et al.*

Poster 108: Improving the Findability, Accessibility, Interoperability and Reusability of Reaction Models, Florian Solbach *et al.*

Poster 109: Low-Temperature Reactions of NH and NH_2 Relevant to the Interstellar Medium, Kevin Douglas *et al.*

Poster 110: Iron mediated changes in α-pinene secondary organic aerosol composition, Natasha Garner *et al.*

Poster 111: VaPOrS: An automated model for estimating vapor pressure of organic compounds via SMILES, Mojtaba Bezaatpour *et al.*