



MONDAY 9 SEPTEMBER

17:00	Drinks reception at Halston Aparthotel, Carlisle, CA1 1AB
19:00	Coaches for Cockermouth

TUESDAY 10 SEPTEMBER

08:00	Sunrise Session - Fundamentals, David Grills and Matt Bird
09:00	Fundamentals-I Session (pulsed), Chair - David Grills I1 "Time-Resolved Resonance Raman Studies of Pulse Radiolytic Reactions" Ireneusz Janik
09:35	I2 "Partial Molar Volume of the Hydrated Electron and a Comment on Its Vertical Detachment Energy" Dave Bartels
10:10	P1 "Chemical Dosimetry of Femtosecond Electron Bunches Provided by Laser-Plasma Acceleration" Gerald Baldacchino
10:35	P2 "Femtosecond Resolution for Picosecond Radiolysis Using Electron Pump-Repump-Probe Spectroscopy" Sergey Denisov
11:00	Coffee
11:20	Fundamentals-II Session (other), Chair - Jim Wishart I3 "Simulation of Radiation Damage Processes" Andrey Solov'yov
11:55	I4 "Mimicking Oxidative Stress by Radiation Biochemistry. Addition of Free Radicals to a Free Radical Producer: NADPH Oxidase" Chantal Houée-Levin
12:30	P3 "Molecular Simulations of the Oxidative Radiolysis of two Inverse Peptides: Methionine Valine and Valine Methionine" Pierre Archirel
12:55	P4 "Comprehensive Model for X-ray-Induced Damage in Protein Crystallography" David Close
13:20	Free Time
16:30	Pre-poster talks Session, Chair - Mats Jonsson/Fred Currell PP1 "Impact of Doping and Functionalisation of Graphene Support on the Radiolytic Synthesis of Palladium Nanoparticles for Electrocatalysis" Kun Guo
16:45	PP2 "Role of Electronic Energy Loss of the Ion Beam in the Modification of Graphene Oxide Film" Chetna Tyagi
17:00	PP3 "Radiation Induced Polymerization of Nanostructured Conducting Polymers" Teseer Bahry
17:15	PP4 "Effect of Surface Deformation on Stress Corrosion Crack Initiation in Austenitic Stainless Steels in PWR Primary Water" Litao Chang
17:30	PP5 "Method of Assessing the Radiation Tolerance of Commercial Strippable Coatings" Alex Jenkins
17:45	PP6 "Studying Nascent Proton-Driven Radiation Chemistry in H ₂ O in Real Time Using Laser-Based Sources" Mark Coughlan
18:00	Poster Session-I (even numbers) Coffee/refreshments available
19:00	Coaches for Cockermouth

WEDNESDAY 11 SEPTEMBER

08:00	Sunrise Session - Heterogeneous, Simon Pimblott
09:00	Heterogeneous-I Session, Chair - Simon Pimblott
09:35	I5 "H ₂ and H ₂ O Production from Water and Alumina" Jay LaVerne
10:10	I6 "Radiolytic Formation of H ₂ O: The Elucidation of the H ₂ /O ₂ Recombination Mechanism" Darryl Messer
10:35	P5 "Electron Irradiation Treatment of Nanodiamonds" Christian Laube
	P6 "Hydrogen Production by Steel Anoxic Corrosion under Gamma Irradiation" Lina Giannakandropoulou
11:00	Coffee
	Heterogeneous-II Session, Chair - Jay LaVerne
11:20	I7 "Radiolytic Hydrogen Production in Oxide and Hydroxide Sludges" Mel O'Leary
11:55	I8 "Radiation-Induced Chemistry on Polymer-Liquid Interfaces and Diffusive Behaviour of Hydrogen" Aliaksandr Baidak
12:30	P7 "Radiolytic Degradation of an Extractant for Actinides, HONTA — a Comparative Study of Direct and Indirect Radiolysis Processes" Yuta Kumagai
13:00	Free Time
16:00	Posters 2 (odd numbers) Coffee/refreshments available
	Industrial Hot Topics Session, Chair - Fred Currell
17:00	H1 "Research in Radiation Chemistry to Support the Safe Storage of Plutonium on the Sellafield Site" Helen Steele
17:45	H2 "Radiation Chemistry of Spent Nuclear Fuel Systems" Steve Walters
18:30	Panel discussion, Steve Walters, Helen Steele, Mats Jonsson, Robin Orr
19:00	Coaches for Cockermouth

THURSDAY 12 SEPTEMBER

08:00	Sunrise Session - Health, Fred Currell and Joao Alberto Osso Junior
09:00	Health-I Session, Chair - Joao Alberto Osso Junior I9 "Monte Carlo Track-Structure Simulations for Boron-Neutron Capture Therapy" Jose Ramos-Mendez
09:35	I10 "Nanoagents to Improve Radiotherapy and Hadrontherapy Performances: Green Synthesis and Impact on Blood Proteins" Sandrine Lacombe
10:10	P8 "Study on the Dose Enhancement in Water by Activation of Clusters of Nanoparticles of High-Z Materials with a 6 MeV True Varian linac" Balder Villagomez-Bernabe
10:35	P9 "New Explanation for Radiosensitization by Gold Nanoparticles: Chemical Effect" Viacheslav Scherbakov
11:00	Coffee
11:30	Health-II Session, Chair - Chantal Houée-Levin I11 "Oxygen Effects on Antioxidant Protection of Lymphoid Cells against Free Radicals by a Range of Dietary Carotenoids" Ruth Edge
12:05	P10 "Effects of Additives on Radiation-Induced DNA Damage: From the Viewpoints of Free Radical Scavenging and Chemical Repair" Hao Yu
12:30	P11 "Solvation Effects on Dissociative Electron Attachment to Thymine" Bin Gu
12:55	Coaches to Dalton Cumbrian Facility (DCF)
13:30	Buffet Lunch (provided by DCF) Tours of DCF Trustees Business Meeting (using DCF Meeting Room)
16:30	Coaches to Cockermouth
17:00	Free Time
18:30	Coaches to Conference Dinner
19:00	Conference Dinner at Energus
23:00	Coaches to Cockermouth

FRIDAY 13 SEPTEMBER

08:00	Sunrise Session - Energy, Robin Orr and Dan Whittaker
09:00	Energy-I Session, Chair - Robin Orr I12 "Rapid Capture of Holes in Organic Solvents Studied by Picosecond Pulse-Radiolysis" Andrew Cook
09:35	I13 "Radiation Energy Transfer Simulation toward Extraction Solvent in Minor Actinide Separation Process" Tomohiro Toigawa
10:10	P12 "Effect of Supports on Metal-Nanoparticle Catalysts: The Radiolytic H ₂ Evolution Reaction" Tomer Zidki
10:35	P13 "Radiation-Induced Redox Chemistry of Californium-249" David Meeker
11:00	Coffee
11:30	Energy-II Session, Chair - Dan Whittaker I14 "Capturing Sunlight with Molecular Systems – A Pulse Radiolysis Investigation into Charge Recombination and Escape for Solar Energy Conversion" Matthew Bird
12:05	I15 "Drastic Changes in the Surface Reactivity of UO ₂ -Based Spent Nuclear Fuel upon Exposure to Radiolytic Oxidants – How Will This Influence the Safety Assessment of Deep Geological Repositories for Spent Nuclear Fuel?" Mats Jonsson
12:40	P14 "Reduction of Cobaoxime-Based Complexes: Mechanisms, Products and Implications" Axel Kahnt
13:05	Buffet Lunch (provided by Energus)
14:00	Educational Session - Materials, Laura Leay and Clelia Dispenza
15:00	Materials-I Session, Chair - Clelia Dispenza I16 "Heterogeneous Alteration of a Mimas MOX Fuel under Oxidizing Conditions Revealed by Raman Spectroscopy" Lola Sarrasin
15:35	I17 "Heavy Ion-Induced Defect Production in Single-, Few-Layer and Bulk Crystals of MoS ₂ " Liam Isherwood
16:10	P15 "Y-Radiolysis of Thermal Transition Phases in Boehmite" Patricia Huestis
16:35	P16 "Key Role of the Oxidized Citrate Free Radical in the Nucleation Mechanism of the Metal Nanoparticles Turkevich Synthesis" Sarah Al Gharib
17:00	Coffee
17:30	Materials-II Session, Chair - Laura Leay I18 "The Effects of Gamma Radiation on the Accelerated Carbonation of Fly-Ash Blended Cement" Alex Potts
18:05	P17 "The Radiation Chemistry of Aqueous PVP Solutions Exposed to Pulsed E-beam Irradiation: Experiments and Numerical Simulations" Clelia Dispenza
18:30	P18 "Internal Structure and Composition of Fukushima-Derived Particulate Revealed through Combined Synchrotron and Mass-Spectrometry Techniques" Peter Martin
18:55	Conference Closing remarks
19:00	Coaches to Cockermouth
19:30 - 22:00	Evening social event at Jennings Brewery

Organised coaches on Saturday morning (8am, arrival around 11am) to airports