



The University of Limerick is delighted to host the 72nd Irish Chemistry Research Colloquium 17th -18th of June as a Virtual event hosted by the Department of Chemical Sciences and Bernal Institute.

Thursday 17th June

09h15 Welcome Address Professor Nigel Healey Interim Provost and Deputy President, University of Limerick

09h30 Keynote Talk Professor David Cole-Hamilton University of St Andrews, UK
'The Role of Chemists in a Sustainable World'
Chair: Prof. Kevin M. Ryan, UL

10h15 Materials Chemistry (Each talk 15 mins + 5 mins questions)

Daniele Costa da Silva Alves, NUIM: *Development of chitosan/carbon nanotube sponge adsorbent to remove pollutants from H₂O*

Daniela Tomasino, RCSI: *Glycosylated Nanoparticles via SET-LR-PISA*

Natalia Garcia Domenech, TCD: *Development of new nanofiltration membranes using 2D nanomaterials*

Chair: Prof. Edmond Magner, UL

11h15 Coffee Break

11h30 Inorganic Chemistry (Each talk 15 mins + 5 mins questions)

Aoibhín Cullen, DCU: *Singlet Fission in BODIPY copolymers; a photophysical, TD-DFT, electrochemical and hydrogen evolution study*

Adrian Sanz Arjona, TCD: *Mild Hydrothermal Synthesis of Zircon-type Silicates (MSiO₄) as Analogues to Radioactive Species*

Conor Kelly, UCD: *The Trigonal Prism: An Atypical Geometry for Mn^{II}*

Chair: Prof. Michael Zaworotko, UL

12h30 'Thesis in 3' Session 1

Dan Kerr (DCU), Elliot Murphy (NUIG), Chunchun Li (QUB), Cathal Caulfield (RCSI), Lorna Doyle (TCD), Erika Mooney (TUD), Louise Cooney (UCC), Georgios Papoutsidakis (UCD), Seamus Killian (UL), Abdulmoez Elkhbuli (NUIG), Yuanting Qiao (QUB)

Chair: Dr Peter Davern, UL

13h15 Lunch Break

14h00 Organic Chemistry (Each talk 15 mins + 5 mins questions)

Luke Marchetti, NUIM: *Amidosquaramides: Towards New Horizons in Anion Recognition*

Kevin Sheehy, UCC: *Rationalising Ambident Reactivity using Marcus Theory*

Christopher Murnaghan, QUB: *Synthesis of advanced biomass models*

Chair: Dr Emmet O'Reilly, UL

15h00 Nanochemistry (Each talk 15 mins + 5 mins questions)

Sean Hennessey, NUIG: *A Prototype Pyrene-Ruthenium Molecular Complex for the Creation of Innovative Photoactive Materials*

Gavin Irvine, QUB: *Biocompatible cross-linked star polymer model networks for drug delivery applications prepared by aqueous polymerisation*

Madhuri Dandamud, WIT: *Topical ocular drug delivery through surface-modified nanoparticles to treat age related macular degeneration*

Chair: Dr Teresa Curtin, UL

16h00 Break

16h15 'Thesis in 3' Session 2

Dan (Chau Thuy) Nguyen (WIT), Michal Bartowski (DCU), Syl Byrne (NUIG), Anne McGrogan (QUB), Sheila Fitzgerald (RCSI), Rory Whelan (TUD), Gerard Pareras (UCC), Jennie O'Loughlin (UCD), Vanya Petseva (UCD)

Chair: Dr Michael Scanlon, UL

17h00 Close of Day 1

Friday 18th June

09h30 Keynote Talk Professor Tomislav Friscic, McGill University, Canada

"Promoting Green Chemistry and Sustainability through the Solid State: Sky is the Limit"

Chair: Dr Hugh Geaney, UL

10h15 Analytical Chemistry (Each talk 15 mins + 5 mins questions)

Fionn O Fearghal, (TUD): *Exploring Shellfish By-Products as Sources of Blue Bioactivities*

Niamh O'Mahoney, (UCC): *Characterisation of Pharmaceutical Formulations using the novel technique Broadband Acoustic Resonance Dissolution Spectroscopy (BARDS).*

Esther Adegoke, (UL): *In situ TEM Studies of Nanocrystal Composition, Structure, and Phase.*

Chair: Dr Tadhg Kennedy, UL

11h15 Coffee Break

11h30 Physical Chemistry (Each talk 15 mins + 5 mins questions)

Tanushree Mandal, (NUIG): *Mediated electrochemistry on electrodes with defined surface area for peroxidase-based sensors*

Eva Clemente, (RCSI): *Probing the glycans accessibility of the biomolecular corona*

Dorottya Krizsan (UCD): *Dual Emitting Silica Coated Carbon Dot Probes for DNA Detection*

Chair: Dr Sarah Hudson, UL

12h30 'Thesis in 3' Session 3

Stephen O'Reilly (DCU), Ioannis Titilas (NUIG), Carl Fogarty (NUIM), Yaoguang Song (QUB), Niamh Curtin (RCSI), June Lovitt (TCD), Kate Byrne (TUD), Alex Lonergan (UCC), Dan O'Hearn (UL), Nataly Rey Munoz (UL), Eadaoin Casey (UCC), Mark O'Loughlin (UCD)

Chair: Dr Shalini Singh, UL

13h15 Lunch & Business Meeting

14h00 Biochemistry (Each talk 15 mins + 5 mins questions)

Melisa Finnegan, (DCU): *Wearable colorimetric sensors for biodiagnostic applications*

Kim Shortall, (UL): *Immobilization of aldehyde dehydrogenase employing cofactor regeneration for use in biocatalysis*

Hollie Jenkins, (TUD): *Cytotoxicity of Copper(II) Complexes under Varying Oxygen Conditions*

Chair: Prof. Tewfik Soulimane, UL

15h00 'Thesis in 3' Session 4

Fernando Otero (UL), Kavnen Tseke (WIT), Miren Ruiz De Eguilaz (DCU), Ahmed Ahmed (NUIG), Roberta Pacifico (RCSI), Eimear Heffernan (UCC), Caytlin Boylan (NUIM), Samantha Bann (QUB)

Chair: Dr Luis Padrela, UL

16h00 Prizes & Close of Day 2



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