



ISTA 63rd ANNUAL CONFERENCE
4th & 5th April 2025, Maynooth University
“Adapting to a changing world in Science Education” ”



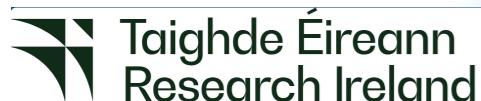
Friday 4th April 2025

Venue: – The Glenroyal Hotel

- 17.00 – 18.30 Registration
- 18.30 – 19.30 Welcome reception and refreshments (Tea /coffee and biscuits)
- 19.30 – 20.00 Official Opening
- 20.05 – 20.30 “The proposed new National Science Centre” – Barbara Galavan, CEO of the NCSC
- 20.30 – 00.00 Four course meal

LT3: Lecture Theatre 3
 CT1: Callan Lecture Theatre 1
 CT2: Callan Lecture Theatre 2

- Bringing Quantum into the Classroom – new Perimeter Institute resources. Stuart Farmer, IoP CT1
- Practical AI Applications in Education and Maintaining Academic Integrity. Talk 2 – Patrick Hickey CT2
- Micro:bit FUNdamentals with W5 Belfast. Matthew Davidson TSI 1.28
- Workshop: DNA Profiling for the Classroom – Amgen Biotech Experience, Ireland (Anna Wedderburn) TSI 1.25
- Pasco Systems – John Phelan TSI 1.26
- Tour of The Science & Ecclesiastical Museum at St Patrick’s College, with Dr. Neal Trappe Meet at: 53.3 Café



Saturday 5th April 2025

Venue: TSI building – Maynooth University from 8:30am

Registration will take place from 8:30am. TSI 0.41

53.3 café in the TSI Building will be open all day, as will the Phoenix Restaurant (located behind the Callan building).

- 9:00 – 9.50 **Plenary session** LT3
 Professor Paul Moynagh, Interim Dean of the Faculty of Science and Engineering: A brief welcome to the university
 Professor T Lambe, one of the principal investigators overseeing the Oxford/AstraZeneca vaccine programme: Keynote speaker
 Helen Van Eesbeck, Oide senior science leader: A briefing on Oide services and supports

- 10:00 – 10:40 **Concurrent sessions**
 Oide Science Workshop A: LT3
 W5 – Science for the Open Night CT1
 Understanding AI’s Power, Potential, and Ethical Use in Education. Talk 1 – Patrick Hickey CT2
 Lessons from experiment-based projects for pre-service physics teachers. Paul van Kampen, DCU TSI 1.28
 Models for Modelling. The Walton Club, TCD. Dr Paul Irving and Dr Arlene Gallagher TSI 1.25
 Synapses Teacher Academy: Making Connections between Sustainability Citizenship and Science: Margaret Farren, Dr. Yvonne Crotty and Sean Manley, DCU TSI 1.26

- 10:15 – 11:00 Computational thinking with the Bebras Challenge National Final LT1

- 10:40 – 11:15 Tea/Coffee and exhibitions TSI 0.39 & Foyer

- 11:15 – 11:45 Practical project work in the final years of Scottish schooling LT3

- 11:55 –12:35 **Concurrent sessions**
 Extended Q&A :
 Scottish Advanced Higher project ideas database LT3

- 12:35 – 13:30 Exhibitions and Brown Bag lunch. Tea/coffee TSI 0.39 & Foyer

- 13.30 – 14.00 **ISTA Annual Business Meeting** LT3

- 14.00 – 14.40 **Concurrent sessions**

- What Maynooth’s Rev Professor Nicholas Callan can teach us about Junior Cycle science and Leaving Cert. physics and chemistry: Eoin Gill & Dr. Sheila Donegan (SETU) TSI 0.41

- Applying Universal Design for Learning Principles in Science Teaching and Learning: Professor Denise Rooney, MU CT1

- Making Connections – Energy within & across Junior Cycle specifications: SEAI, Mary Gorey CT2

- Science on Stage Ireland Workshop TSI 1.28

- Bringing back the macromolecule lab without crazy prep. Erika Fong (Embitec) TSI 1.25

- Chemical Agents in Science – Key Health and Safety Considerations: Declan Foster & Michelle McDermott (HSA) TSI 1.26

- 14:50 – 15:30 **Plenary session**
 Research Ireland. Why do space? John Hurley (H2 Learning) & Frances McCarthy (MTU-BCO) LT3

- 15:40 – 16:20 LLMs in Education: Auto-Marking Free-Text Responses with Fairness and Transparency: Diane Dowling LT3

- The Race to Reproduce; Planting for Wildlife through the Seasons – Karen Sheil (RSPB) CT1

- RSC resources for the new LC Chemistry practical Dr John O Donoghue CT2

- Emphasising connections and everyday context in Senior Cycle Chemistry – Maryanne Dalton TSI 1.26

- Developing inquiry-based learning Jennie O Flaherty and Sean Kelleher – Oide. TSI 1.28

- The student experience – lessons from competition & coursework. SciFest Winner 2023: Jack Shannon. TSI 1.25

- 16:30 – 17:15 Panel Discussion: Introduction: Patrick O’Donnell LT3

- “Quantifying the Workload in the proposed model of the Additional Assessment Component (AAC)”: Dr. Muriel Grenon (University of Galway) / Erin Traynor (University of Strathclyde) / ISTA subject convenors (Mary Mullaghy, Seán Finn & David O’Brien)

Moderated by Humphrey Jones.

