

Thursday, 29 August

- 8:15 am **Registration**
Main Entrance, UCD Health Sciences Centre
- 9:00 am **Conference Opening Session**
Health Sciences Centre, Room C007
- Session I: Methodology Development for Micro- and Nanoplastics Analysis**
» Chair: Prof. Aoife Gowen
- 9:15 am **Plenary Lecture**
Plastic Pollution – Human Health vs. Environment
» Prof. Jacob de Boer, Vrije Universiteit Amsterdam
- 10:00 am **Cultured Kidney Cells Show Nanoplastic Uptake and Impairments in Growth and Cell Cycle Following Long-Term Exposure**
» Hayden Gillings, Flinders University
- 10:15 am **EnderScope: A Low-Cost 3D Printer Based Microscope for Microplastic Detection**
» Niamh Burke, University College Dublin
- 10:30 am **Non-Contact Detection of Fluorescent Microplastic Particles in Water Flow Using Spectrometry**
» Nico Merck, University of Rostock
- 10:45 am **Painting Microplastics: A Novel Generative Methodology for Future Microplastic Research**
» T Joshua Osborne, University of Surrey

- 11:00 am **Coffee Break & Networking**
- Session II: Methodology Development for Micro- and Nanoplastics Analysis**
» Chair: Dr. Rajat Nag and Dr. Abhrajyoti Tarafdar
Health Sciences Centre, Room C007
- 11:30 am **Automated Microplastics Identification from <500nm to mm's: Particle Shape/Size Artefact-Free Submicron IR and Simultaneous Raman with Fluorescence Imaging to Pre-Filter**
» Miriam Unger, Photothermal Spectroscopy Corp. GmbH
- 11:45 am **Exploring Micro- and Nanoplastic Pollution Through More Realistic Test Materials**
» Stefania Federici*, University of Brescia
- 12:00 pm **Microplastic Detection in FFPE Colon Tissue Sections Using High-Resolution Infrared Spectroscopy**
» Verena Karl, RECENDT GmbH
- 12:15pm **Neurotoxicity Induced by Microplastics and Nanoplastics**
» John Placheril*, IIS (Deemed to be) University
- 12:30 pm **Degradation Products of Plastics Are Markers of Microplastics**
» José P. Da Silva, Centre of Marine Sciences Algarve
- 12:45 pm **Development of a Quality Control Tool for Standardising Microplastics Testing on the Laser Direct Infrared Imaging System**
» Fisayo Olotu, Queen Mary University of London
- 1:00 pm **A New Screening Framework to Support The Identification of Microplastic Particles *in Situ* in Pathological Tissue Samples**
» Stephanie Wright*, Imperial College London
- 1:15 pm **Lunch Break & Networking**
- 2:00 pm **Virtual Poster Showcase**
Health Sciences Centre, Room C007

Continued from Thursday, 29 August

Session III: Potential Health Impacts of Micro- and Nanoplastics

» Chair: Dr. Eoin Brennan

Health Sciences Centre, Room C007

- 3:00 pm **Plenary Lecture**
Microplastic Exposures at the Beginning of Life
» Prof. Amy O'Higgins, University College Dublin
- 4:00 pm **Impact Of Nano- and Microplastics on Blood Pressure**
» Liesa Geppner, Danube Private University
- 4:15 pm **Detection of Microplastics in Bottled Water Using Optical Photothermal Infrared**
» Xiaohui Lin, University College Dublin
- 4:30 pm **Toxicological Assessment of Benzo(A)Pyrene-Coated PET Microplastics in Vitro On A 3D Model of The Human Bronchial Epithelium**
» Safaa MAWAS, Université Paris Cité
- 4:45 pm **Epithelial Barrier Theory for The Development of Allergic and Autoimmunity Diseases: Exploring Implications for Microplastics**
» Cezmi Akdis*, University Zurich
- 5:00 pm **Nanoplastics in Coastal Environments: Challenges, Solutions, and Future Directions**
» Wei Xu*, Texas A&M University - Corpus Christi

- 5:15 pm **Validation of A Protocol to Measure Size and Concentration Measurements of Microplastics in Synthetic Samples by Dynamic Light Scattering**
» Paola Jimenez Chaves, University of Costa Rica

- 6:00 pm **Gala Dinner at UCD University Club**

Friday, 30 August

- 8:15 am **Registration**
Main Entrance, UCD Health Sciences Centre

Session IV: Human and Environmental Exposure to Micro- and Nanoplastics

» Chair: Dr. Clare Reynolds

Health Sciences Centre, Room C007

- 9:00 am **Plenary Lecture**
Advancements and Challenges in Assessing Human Exposure to Nanoplastics and Microplastics
» Prof. Kevin Thomas, The University of Queensland
- 10:00 am **Analysis of Plastic Distribution in Coastal and Farming Areas of Shanghai**
» Shuai Chen*, Shanghai Polytechnic University
- 10:15 am **An Assessment of Microplastic Contamination in Commercially Important Brachyuran Crab *Portunus Sanguinolentus* of Gujarat State, India**
» Vasantkumar Rabari, Hemchandracharya North Gujarat University

Continued from Friday, 30 August

10:30 am **Assessment of Suspended Atmospheric Microplastics in Qatar: Sources, Distribution and Potential Health Risks**
 » Hashir Puthukkudi Kuningarath, Qatar University

10:45 am **Sustainable Edible & Ecofriendly Packaging Films & Tableware Tackling Plastic Pollution**
 » Paramasivam Raajeswari*, Avinashilingam University

11:00 am **Coffee Break & Networking**

Session V: Human and Environmental Exposure to Micro and nanoplastics

» Chair: Dr. Anna Molter
Health Sciences Centre, Room C007

11:30 am **Mapping Human Immune Responses to Micro and Nanoplastics: The Norwegian Football Field Study**
 » Berit Granum, Norwegian Institute of Public Health

11:45 am **Prevalence of Microplastics in Estuarine Ecosystem: Insights from India**
 » Aiswriya Vijayalekshmi Padmachandran, Central University of Kerala

12:00 am **Investigation of Microplastics Release from Plastic Products**
 » Liwen Xiao*, Trinity College Dublin

12:15 pm **Microplastics Abundance and Distribution Across Composting Phases of Municipal Solid Waste**
 » Chijioke Emenike, Dalhousie University

12:30 pm **Pathways of Human Exposure to Micro and Nanoplastics: Food, Air, and Medical Treatment**
 » Sedat Gündoğdu*, Cukurova University

12:45 pm **Marine Plasticsphere: Vector for Accumulation of Trace Metals and Interesting Species**
 » Joao Frias*, Atlantic Technological University

1:00 pm **Effects of Microplastics on Growth and Yield of Tomato Under Greenhouse Condition**
 » Adeola Adelugba, Dalhousie University

1:15 pm **Lunch Break & Networking**

2:00 pm **Virtual Poster Showcase**
Health Sciences Centre, Room C007

Session VI: Remediation Strategies for Micro- and Nanoplastics

» Chair: Dr. Tamiris Da Costa and Dr. Xiaohui Lin
Health Sciences Centre, Room C007

3:00 pm **Floating Solar Panel-induced Microplastic Contamination in Surface Water**
 » Mainak Bhattacharya, Indian Institute of Technology Delhi

3:15 pm **Predicting Micro- and Nanoplastic Reduction in Drinking Water Distribution System Via Biofilm Attachment**
 » Ahana Sarkar, University College Dublin

3:30 pm **Synthesis Gas Production from High-Temperature Gasification Treatment of Microplastic Waste Using Thermal Plasma**
 » Yang Zhou, China University of Mining and Technology

Continued from Friday, 30 August

- 3:45 pm **Remediation of Toxic Nanoplastics and The Heavy Metal Ions from Water**
» Zahid Ahmad Ganie, Indian Institute of Science Education and Research Kolkata
- 4:00 pm **Biodegradation of Pristine and Pretreated High-Density Polyethylene Microplastics by Fungus *Aspergillus Flavus***
» Sheetal Kothawale, IIT Bombay
- 4:15 pm **Additive Chemicals in Daily Use Food-Grade Plastics- A Serious Concern**
» Garima Kaushik, Central University of Rajasthan
- 4:30 pm **Beyond Beads: A Story of Plastic Microbeads Regulations and Future Policy Needs**
» Riya Kumbukattu Alex, Cochin University of Science and Technology
- 4:45 pm **Closing Remarks**
Announcement
Young Scientist Travel Grant
Best Poster Award

Instructions for Online Attendance

How to Attend Online

To attend the conference virtually, simply use the Zoom link provided below. This will grant you access to all live sessions, including keynote speeches, panel discussions, and virtual poster showcases.

Zoom Link: <https://ucd-ie.zoom.us/j/61322739767?pwd=ZFASmdXuuLFjKYWxqgdZb7o9a0gfwd.1>

Guidelines for Online Speakers

- Join the webinar **10 minutes** before the session begins. You will receive a notification saying, "The host would like to promote you to panelist." Please click "Join as Panelist" to proceed.
- To share your PowerPoint presentation:
 - Open Your PowerPoint Presentation: Start the "**Slide Show**" in PowerPoint.
 - Return to Zoom: Make sure the Zoom window is active.
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 - **Select the PowerPoint Window**: Choose the "PowerPoint Slide Show" window from the list of available screens or applications.
 - Click "**Share**": Click the "Share" button to begin sharing your presentation.
- Online speakers are encouraged to participate in a **testing session** before the conference. Please coordinate with Cihang Yang (cihang.yang@ucdconnect.ie) and Zhongyuan Liu (zhongyuan.liu@ucd.ie) to schedule this testing.