



Message from the Editor

Dear colleagues, ECIS members

**HAPPY NEW YEAR!**

**In this issue:**

- ◆ **Message from the Editor**
- ◆ **The third ECIS webinar on the fundamentals of Colloid Science will take place on 4/2/2025!**
- ◆ **39th ECIS (ECIS-2025) conference in Bristol**
- ◆ **Call for nominations for the Syensqo award and the Overbeek medal of ECIS for 2025**
- ◆ **Call for nominations for the Maria Miguel award of ECIS for 2025**
- ◆ **A new ECIS Vice-President will be elected in Bristol**
- ◆ **Interesting conferences related to Colloid and Interface Science in 2025**
- ◆ **Final notes**

The Board of ECIS wishes to all our members a happy, healthy and successful 2025.

This issue of our Newsletter aims to present the third ECIS webinar, which will take place on Tuesday, February 4th. Our two distinguished speakers, Prof. Gary Pielak from the University of North Carolina, and Prof. Daniel Harries from the Hebrew University of Jerusalem, will speak to us about the effects of crowding on colloidal and macromolecular interactions. We are thrilled to continue our webinar series with such an important current topic, and we hope that many of you will be able to join us in two weeks.

Next on line for 2025 is the 39th ECIS conference in Bristol (7-12/9/2025). We are looking forward to a great event, judging by the recent discussions of the organizers with the Board. Some of the information that they provided in the Copenhagen conference is reproduced once more in the following pages. We remind our members that the 39th ECIS is an important milestone, since it will be jointly held with the 5th UK Colloid Conference. The Joint Colloid Group of the Royal Society of Chemistry (RSC) and the Society of Chemical Industry (SCI) of Great Britain will be our valuable partners in this endeavor, which holds great promise for all partners involved.

## Message from the editor



As always at this time of the year, the Board would like to publish a Call for nominations for the two major awards of the Society, which are the Syensqo (former Solvay) award and the Overbeek medal.

In 2025 the Board decided to make a Call for the very first ECIS Maria Miguel award to be handed over at the next ECIS conference in Bristol. This new award was decided by the recent General Assembly and is given to an exceptional young scientist at a maximum of 8 years after the PhD.

We also remind our members that 2025 is an election year for ECIS. A new vice-President will be elected in Bristol during the 39th ECIS conference, and the Board welcomes all related nominations well in advance of the conference.

Finally, some additional conferences that will take place in 2025 and are related to Colloids and Interfaces, are highlighted in this issue for the benefit of our members.

On behalf of the Board

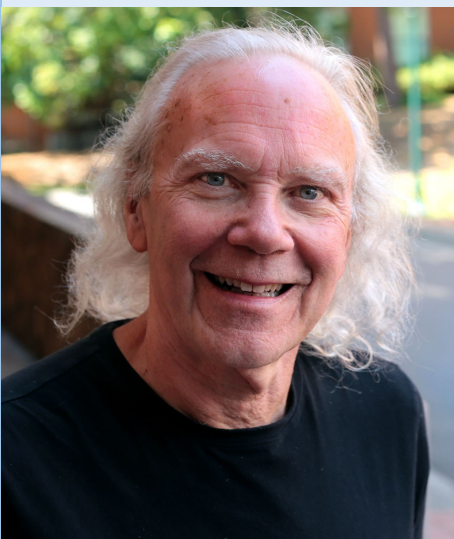
E. Leontidis

(Editor of ECIS newsletter)

**The third ECIS webinar  
on the fundamentals of  
Colloid Science will take  
place on 4/2/2025!**



After some unforeseen delays, we now have a final date for the 3d ECIS webinar: It will take place **on February 4th at 15:00 CET**. The format will be identical to that used in the previous two successful webinars that were run under the administration of LINXS (the Swedish Institute of Advanced Neutron and X-ray Science). In this third webinar we will discuss **crowding and depletion forces (interactions in confined spaces)**. Prof. Daniel Harries (from the Hebrew University) and Prof. Gary Pielak (from the University of North Carolina) will be our two speakers. As usual with ECIS webinars, we juxtapose an experimentalist and a theoretician to provide in depth coverage of exciting modern theoretical topics. Our first speaker, covering the experimental aspects, will be Prof. Pielak.



Gary J. Pielak earned a B.A. in Chemistry from Bradley University in Peoria, Illinois, and a Ph.D. in Biochemistry from Washington State University in Pullman, Washington. He was a postdoctoral fellow in the laboratory of Michael Smith at the University of British Columbia in Vancouver, Canada, and then the laboratory of Robert J. P. Williams at the University of Oxford. Gary is Kenan Distinguished Professor of Chemistry, Biochemistry and Biophysics at the University of North Carolina at Chapel Hill. He has been the recipient of several awards for his work in protein science. He has made fundamental discoveries in the field of protein chemistry by unraveling protein biophysics under crowded conditions *in vitro* and in living cells. Pielak has developed innovative and quantitative techniques for measuring protein structure, stability, diffusion, and concentration in living cells and under crowded **in vitro** conditions. His efforts have led to major advances in understanding how the intracellular environment impacts both globular and intrinsically disordered proteins. Prior to his work, almost all knowledge about proteins came from studies under artificial environments involving either dilute buffer or solutions crowded with synthetic polymers. Pielak's work has revolutionized our understanding of how proteins work **where they actually function – inside cells**. Using in-cell nuclear magnetic resonance spectroscopy, a technique he helped develop, his pioneering work has overturned the decades-old idea that the impacts of crowding arise solely from the close packed nature of the cytoplasm. His work shows that repulsive and attractive interactions between cellular components determine the effect of macromolecular crowding. He has recently presented a quantitative model to explain crowding effects, independent of crowder identity. These interactions organize the inside of cells, controlling metabolism and signaling. His research reveals the true consequences of the cellular environment on proteins and creates new opportunities for physiologically relevant biophysics.

**The third ECIS webinar  
on the fundamentals of  
Colloid Science will take  
place on 4/2/2025!**



The second speaker of the webinar, Prof. Daniel Harries, is well-known to the ECIS community, as he has been a very active member of the community and has contributed to very many ECIS conferences. Daniel Harries received a B.Sc. in Chemistry and a Ph.D. in Theoretical Chemistry from the Hebrew University of Jerusalem, Israel. He was a postdoctoral fellow in the laboratory of V. Adrian Parsegian in the Laboratory of Physical and Structural Biology at the National Institutes of Health in Bethesda, Maryland. Daniel currently holds the Dr. & Mrs. Philip Gotlieb Chair in Physical Chemistry at the Institute of Chemistry and the Fritz Haber Research Center at Hebrew University.



Daniel Harries has made significant advances in understanding how biologically diverse environments influence macromolecular behavior through research at the interface of physical chemistry and molecular biophysics. Harries has developed theoretical frameworks, closely integrated with experimental findings, to dissect the forces driving macromolecular associations, dissociations, and functional complex formation in cells. His work focuses on systems such as protein folding, association, and aggregation, and lipid membrane properties and interactions.

A key area of Harries's research explores the effects of molecular crowding, osmotic pressures, and confinement on macromolecular stability. By addressing processes such as peptide folding and aggregation into amyloid fibers, membrane confinement in nanodiscs, and viral assembly, Harries has provided new insights into how macromolecular systems function in realistic cellular environments. His work underscores how forces such as depletion interactions, crowding, and confinement play important roles in shaping biological processes, with broad implications for health and disease.

The common title suggested by both speakers for the ECIS webinar is: “**Crowding beyond depletion forces: a tale of two dimers**”. Gary Pielak provided the following short abstract for his contribution:

Protein-protein interactions are modulated by their environment. High macromolecular solute concentrations crowd proteins and shift equilibria between protein monomers and their assemblies. We aim to understand the mechanism of crowding by elucidating the molecular-level interactions that determine dimer stability. Using  $^{19}\text{F}$ -NMR spectroscopy, we studied the effects of various polyethylene glycols (PEGs) on the equilibrium thermodynamics of two protein complexes: a side-by-side and a domain-swap dimer (continued).

**The third ECIS webinar  
on the fundamentals of  
Colloid Science will take  
place on 4/2/2025!**



Analysis using our mean-field crowding model shows that, contrary to classic crowding theories, PEGs destabilize both dimers through enthalpic interactions between PEG and the monomers. The enthalpic destabilization becomes more dominant with increasing PEG concentration, because the reduction in PEG mesh size with concentration diminishes the stabilizing effect of excluded volume interactions. Additionally, the partially folded domain-swap monomers fold in the presence of PEG, contributing to dimer destabilization at low PEG concentrations. Our results reveal that polymers crowd protein complexes through multiple conjoined mechanisms, impacting both their stability and oligomeric state.

Daniel has taken up the challenge of addressing the theoretical aspects in more depth and has provided the following abstract:

Understanding the effect of macromolecular crowding and depletion forces on proteins and other macromolecules is key to understanding biophysics in cells. However, it has been difficult to develop a comprehensive theory of crowding effects that will capture key experimental observations that have emerged over the past decade. I will describe how we apply our recently developed model to the dimerization of two proteins in the presence of a large range of crowder size as a function of both crowder concentration and temperature. Our analysis shows that crowding effects depend not only on protein-crowder interactions but also on the thermodynamic dimer association mechanism. These comprehensive tools and analyses will provide a better understanding of crowding in the test tube and in biologically realistic environments.

As mentioned, the administrative work for the webinar is kindly offered by LINXS, the Institute of Advanced Neutron and X-ray Science located in Lund, Sweden. We are grateful to LINXS for the continuing support of the ECIS webinar initiative. The webinar link is:

**<https://www.linxs.se/events/2025-02-04/linxs-ecis-guest-webinar-daniel-harries-gary-pielak>**

## 39th ECIS conference (ECIS-2025) in Bristol



The next annual ECIS conference will be held in Bristol, UK, and will be jointly organized with the Joint Colloid Group of the RSC and the Society of the Chemical Industry (SCI) of the UK. The call for abstracts and first circular were sent to our members last November, but it is useful to provide a reminder here!

### 39<sup>th</sup> ECIS Conference (Jointly with UK Colloids 2025)

With the support of the ECIS Board and the RSC/SCI Joint Colloids Group, the 39<sup>th</sup> ECIS conference will be jointly held with UK Colloids 2025 in the historic city centre of Bristol on 7-12 September 2025.



We are pleased to announce the conference **Scientific Themes**:

- Interfaces, wetting, adhesion & superhydrophobicity
- Bioinspired colloidal systems, bio-interfaces, colloids in health applications & bio-delivery
- Nanoparticles, nanostructured materials, nano-ions, & ion specific effects
- Theory & multi-scale modelling of colloids & interfaces
- Active colloids & catalysis, droplets, emulsions and microemulsions, bubbles & foams
- Surfactants, lipids, membranes & self-assembly
- Colloidal interactions, surface forces, rheology, dynamics & lubrication
- Polymer colloids, hydrocolloids, polyelectrolytes, microgels and hydrogels,
- Colloid science for sustainability, application & formulated products

The following **Special Sessions** will also be organised:

- Scattering in Colloid Science
- Aerosols
- Vincent-Cosgrove Symposium

Details for *Plenary Speakers, Scientific Committees, Registration Fees, Accommodation, Travel, Excursions & Social Programme* can be found at <https://ecis-ukcolloids2025.org/>.

**Important dates:**

- 4<sup>th</sup> Nov 2024: Abstract submission & Registration open
- 11<sup>th</sup> Apr 2025: Abstract submission deadline
- 19<sup>th</sup> May 2025: Presentations selected by Scientific Committees informed
- 13<sup>th</sup> Jun 2025: *Early Bird* Registration concludes
- 11<sup>th</sup> Jul 2025: Last day for Oral Presentation registration
- 7<sup>th</sup> Sep 2025: Conference opens

*Any questions please email us at [ecis2025@inanyevent-uk.com](mailto:ecis2025@inanyevent-uk.com).*

**Organising Committee**  
Professor Wuge H. Briscoe (Chair)  
A. Prof. Richard Greenwood (Co-Chair)  
Ms Victoria Hancock (Conference Secretariat)  
A. Prof. Shirin Alexander (Treasurer)  
Dr Sarah Rogers  
Professor Peter Dowding  
Prof. emeritus Brian Vincent  
Prof. emeritus Terence Cosgrove



## 39th ECIS conference (ECIS-2025) in Bristol



Prof. Wuge Briscoe, the main organizer on behalf of ECIS, has provided additional information to the Board, which we would like to make available to our members:

**Organising Committee**

- Professor Wuge H. Briscoe (Chair)
- Dr Richard Greenwood (Co-Chair)
- Ms Victoria Hancock (Conference Secretariat)
- A. Prof. Shirin Alexander
- Dr Sarah Rogers
- Professor Peter Dowding
- Prof. emeritus Brian Vincent
- Prof. emeritus Terence Cosgrove

**39th ECIS 2025**  
**UK Colloids**

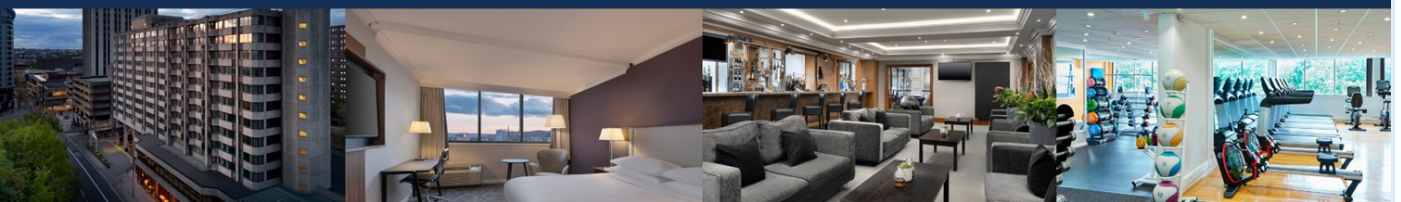
7 - 12 September 2025 | Bristol · UK

[ecis-ukcolloids2025.org](http://ecis-ukcolloids2025.org)  
Delta by Marriott Bristol City Centre  
+44 01275 266001



## Venue

**The Delta Hotel by Marriott Bristol City Centre**



Bristol & Coach bus station – 10 min walk  
Temple Meads – 23 min walk  
Bristol Park way – 25 mins drive  
Bristol Airport – 20 min by car  
Cardiff Airport – 1 hour 20 mins by car

## 39th ECIS conference (ECIS-2025) in Bristol



Bristol is an excellent city to host the 2025 conference, and the conference organizers would like to remind us of this fact:



## Travelling to Bristol



Bristol Airport by bus or coach is easy and convenient. If you are travelling to and from Bristol Airport then please note the Bristol Clean Charge. There are over 70 services a week from Heathrow Airport. Your drop off point is right in the city centre.



- Bristol Temple Meads is largest rail hub in the west of England, with direct services available to and from London Paddington and the rest of the UK.
- Bristol Parkway is located to the north of the city. Services run from Birmingham, Cardiff, Gloucester and London.



- Bristol Bus Station is situated on Marlborough Street, near Broadmead shopping centre.
- Megabus run coaches all over the UK from Bristol, along with National Express service.
- The bus from Heathrow Airport is approximately 2 hours and 3.5 from Gatwick Airport.



## 39th ECIS conference (ECIS-2025) in Bristol



As usual with ECIS conferences we anticipate an excellent program and great science



### Scientific Themes & Special Sessions



- **Themes: 4 parallel sessions**
  - *Wetting, adhesion, superhydrophobicity, & interfaces*
  - *Bioinspired colloidal systems, bio-interfaces, colloids in health applications & bio-delivery*
  - *Nanoparticles and nanostructured materials*
  - *Theory & multi-scale modelling of colloids & interfaces*
  - *Active colloids & catalysis, aerosols, droplets, emulsions and microemulsions, bubbles & foams*
  - *Surfactants, lipids, membranes & self-assembly*
  - *Colloidal interactions, surface forces, rheology, dynamics & lubrication*
  - *Polymer colloids, hydrocolloids, polyelectrolytes, microgels and hydrogels,*
  - *Colloid science for sustainability, application & formulated products*
- **Special sessions:**
  - **Scattering in Colloids** (Sarah Roger, **ISIS/Diamond/ESRF/ILL**)
  - **Vincent-Cosgrove Symposium** (Brian Vincent & Terence Cosgrove)
  - **Aerosols** (Bryan Byzdek, **CDT in Aerosol Science**)
  - *More TBC - Happy to consider expression of interests (Sarah Roger)*

*Girl with Pierced Eardrum - Banksy*

### Plenary Speakers

- **Professor Kazue Kurihara (Japan)**
- **Professor Debora Berti (Italy)**
- **Professor Karen Edler (Sweden)**
- **Professor Tony Ryan (UK) – RSC Rideal Prize**

### Keynote Speakers

- **To selected from Abstract evaluation by the Scientific Committees**

### Special Session Invited Speakers

ECIS 2025 – Bristol  
UK Colloids 2025



The Matthew, Cumberland Basin, Bristol - photo by Nick Greville

## 39th ECIS conference (ECIS-2025) in Bristol



And everything is provided at very reasonable prices!

TYPE	EARLY BIRD PRICE*	FULL PRICE**	ONSITE PRICE
REGULAR (THE REGISTRATION FEE INCLUDES A 1-YEAR ECIS MEMBERSHIP)	£615	£665	£715
STUDENTS & RETIREES	£375	£425	£475
INDUSTRY REPRESENTATIVES	£615	£665	£715
HONORARY MEMBERS	£0	£0	£0
GALA DINNER	£65	£70	£75

Dear colleagues

Join ECIS, RSC and SCI in Bristol for this exciting conference. More information and details can be found in the conference website:

<https://ecis-ukcolloids2025.org/>



**Call for nominations for  
the 2025 Syensqo award  
and the Overbeek medal  
of ECIS**



The Board invites all ECIS members to nominate candidates for the two major awards yearly bestowed by our Society. These are (i) the Overbeek medal, which is the ECIS lifetime-achievement award in Colloid and Interface Science, and (ii) the Syensqo (formerly Solvay) award, which is an award recognizing significant advances in a particular area in the past five years. Nomination rules and templates are available in the ECIS website at <https://www.ecis-web.eu/awards/overbeek-medal/about-the-overbeek-medal/> and <https://www.ecis-web.eu/awards/ecis-solvay-award/about-the-ecis-solvay-award/> for the Overbeek and Syensqo respectively.

An email has been circulated by the ECIS Secretary concerning all nominations. Nominations for the Syensqo award and Overbeek prize are open now, **with a deadline set to 30/4/2025**, and should be sent to the ECIS Secretary, Prof. Pierandrea Lo Nostro (Pierandrea.lonostro@unifi.it).

## Call for nominations for the Maria Miguel award of ECIS for 2025



The new “Maria Miguel” award for excellent young researchers in the first stages of their research careers (up to 8 years from obtaining their PhD) was approved by the General Assembly of ECIS in Copenhagen. The Board has set up the related rules

Professor Maria da Graça Martins Miguel (1949-2021) was a well-known colloid scientist at the University of Coimbra and a guest professor at Lund University, who supported and inspired many young scientists. She was strongly engaged in the international colloid and interface community and served as a member of the ECIS board between 2006-11 and was president of ECIS from 2008 to 2009.



The Maria Miguel Award is annually granted to a young scientist working in the field of in colloid and interface science in Europe.

The independent scientific work of the awardee should be original and of outstanding quality. The recipient of the Award must have obtained his/her PhD in the last 8 years and must have published at least 5 peer-reviewed publications as corresponding author without the PhD supervisor as a co-author. Nominations can only be made by a scientist that is/was not part of the PhD supervisor's group.

The Award consists of 1.500 € from ECIS and a certificate.

The awardee will give a plenary lecture during the ECIS annual meeting.

The selection will be made by a committee composed of 7 members, the ECIS board (President, Past President and Vice-President), the last two awardees of the Overbeek Gold Medal and the last two recipients of the ECIS-Syensqo Award.

The nomination template for this award may be downloaded from the ECIS website. The PDF of the nomination file is:

<https://www.ecis-web.eu/wp-content/uploads/2025/01/Miguel-Nomination-2025-1.pdf>

Nominations should be submitted before **30/4/2025**



**A new ECIS Vice-President will be elected by the General Assembly held in the Bristol conference**

2025 marks the end of the tenure of Prof. Minos Leontidis in the ECIS Board. As Prof. Tommy Nylander will become Past-President and Prof. Regine von Klitzing the new ECIS President, we will vote for a new Vice-President. According to the ECIS statutes, each member of the Board follows a six-year trajectory, voted first to become Vice-President for two years. He/she then becomes ECIS President for another two years, and completes his/her tenure in the ECIS Board as Past President for two more years. All members are invited to nominate Colloid Scientists wishing to serve the Society. There are no particular rules, but a Board member is expected to be affiliated with ECIS for some length of time, to have visited the annual ECIS conferences a number of times, and to be willing to serve the large and vibrant European community of Colloid and Interface Scientists. Every person in the Board and Secretariat of ECIS has a strong and important role to play. We are happy that since the creation of ECIS many excellent scientists have voluntarily contributed to the Society, and have helped it grow and achieve the prominent international status that it has today.

Nominations for the next Vice-President should be submitted to the ECIS secretary Prof. Pierandrea Lo Nostro (Pierandrea.lonostro@unifi.it), until **31/5/2025**. Please note that the Board will not accept further nominations after this strict deadline.

**IACIS conference on  
Colloids and Interfaces  
in 2025:  
Edmonton, CA**



The 18th IACIS Conference will be held on 22-26 June 2025 in Edmonton, Alberta, Canada, jointly with the 99th American Chemical Society (ACS) Colloid and Surface Science Symposium. The immediate past 17th edition was held in Brisbane, Australia, in June 2022. A brief history of the conferences is here: <https://www.utwente.nl/en/iacis/iacis-conferences/#previous-conferences>.



This must-attend event for colloid and interface researchers features 16 technical tracks. The Conference brings together the most active researchers in academia, government, and industry—professionals and students—to engage, discuss, and innovate in the areas of colloid, surface, and interface science and technology. This premier destination for industry professionals provides five days of learning, technical presentations, business development, and networking opportunities.

The deadline for abstract submission has been extended to **January 31**, so there is still time to submit work for the conference. Early-bird registration at reduced prices is available until 31/3/2025. The conference website is [www.colloids2025.com](http://www.colloids2025.com).

## Formula XII Conference

16-18 June 2025

Sofia, Bulgaria



On 16-18/6/2025 the 12th edition of the “Formula” Conference will be hosted in Sofia, Bulgaria. It will be organized by the Department of Chemical and Pharmaceutical Engineering, Sofia University (<https://lepe.uni-sofia.bg/>). The conference aims to serve as a nexus for the industry experts and academia working in formulation in the colloidal sciences to meet, exchange ideas and novel insights in the field. The Formula Conference series is run by the Working Party on Formulation in Chemistry of the European Chemical Society. For more information on this conference series please visit the website <https://www.euchems.eu/divisions/working-party-formulation-chemistry/conferences/>. Several ECIS colleagues also participate in this Working Party, which is thus in a sense a “sister” Society. We encourage all our members interested in Formulation Science to attend this interesting event. More information can be found in the conference web-page <https://formula12.org/> and in the conference flyer below.

## Formula XII Conference 16-18 June 2025, Sofia, Bulgaria

*New strategies for innovation and performance prediction*



### Topics:

- Formulants: sourcing, lifecycle, safety and performance
- Formulation design: sustainability and disruptive innovation
- Fundamental science: mechanisms, structure-function relationship and theoretical modelling
- Formulation performance and measurement techniques
- Formulation stability and its prediction
- Formulation and delivery of hydrophobic drugs, biologics and other bio-actives
- Controlled release formulations
- Automation in formulation: high throughput screening and analysis
- AI/ML in formulation design, performance and process optimization

**Organized by:** Department of Chemical and Pharmaceutical Engineering, Sofia University

*Prof. Slavka Tcholakova*

*Assoc. Prof. Zahari Vinarov*

### Important dates

*Abstract submission opening: 1 Nov 2024*

*Abstract submission deadline: 1 Feb 2025*

*Early registration: 1 May 2025*

<https://formula12.org>



# Nordic polymer days 2025

11-13 June 2025



The Nordic Polymer Days is the premier Nordic polymer annual conference where researchers and professionals gather around new polymer science developments and applications.

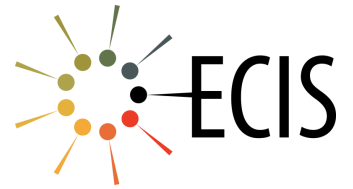
The 2025 Nordic Polymer Days conference will be arranged at the Norwegian University of Science and Technology in Trondheim, Norway. The main topics are:

- Hydrogels – characterization and applications
- Polymers in solution and in condensates
- Polymers at surfaces and interfaces
- Polymers and peptides for biomedical applications
- Polymers in environmental remediation
- Sustainable polymer chemistry
- Polymers in clean energy transition

The abstract submission deadline is **11 April 2025**. Please visit the conference site <https://www.ntnu.edu/npd2025> for more details about committees, invited speakers, registration fees and accommodation.



## Final notes



- You receive this newsletter as a registered participant in ECIS conferences
- If you wish your email contact to be removed from our mailing list, please contact our Secretary, Prof. Pierandrea Lo Nostro ([pierandrea.lonostro@unifi.it](mailto:pierandrea.lonostro@unifi.it))
- If you have comments or suggestions and if you wish to contribute to future newsletters, please contact the newsletter editor, Prof. Minos Leontidis ([psleon@ucy.ac.cy](mailto:psleon@ucy.ac.cy)), or the ECIS webmaster, Prof. Dominik Horinek ([dominik.horinek@ur.de](mailto:dominik.horinek@ur.de))