Meeting of the WP on crystallization of the EFCE

October 2022

On line meeting

Members attending the meeting

Dr. Pataki Hajnalka
Simon Schiele
Marchisio Daniele
Joop ter Horst
Steven Ferguson
Petros Koutsoukos (Επισκέπτης) (Guest)
Riccardo Tomassetti
Bubnik Zdenek
Bubnik Zdenek
Nagy, Zoltan
Nagy, Zoltan
philippe CARVIN (Invité) (Guest)
Szilágyi Botond
Demeter Ádám dr.
Michael Svärd (Guest)
Simone Elena
Zwijnenburg, A. (Bart)
Jan Sefcik
Peter Daudey - TNW
Stepanski, Manfred
Heike Lorenz (Gast) (Guest)
Claudia Pudack
Louhi-Kultanen Marjatta
Jaime Gómez Morales (Invitado) (Guest)
Zoltan Nagy
Geertman, Robert [JRDBE]
Mei Lee
Markovits, Imre HU

Agenda

- Past conferences: BIWIC 2022 and WPTC9
- Future conference: ECCE14
- New members
- Nominations for EFCE awards
- Status of organization of ISIC 2023 in Glasgow
- Bids for ISIC 2026
- Any other business

Past and future conferences

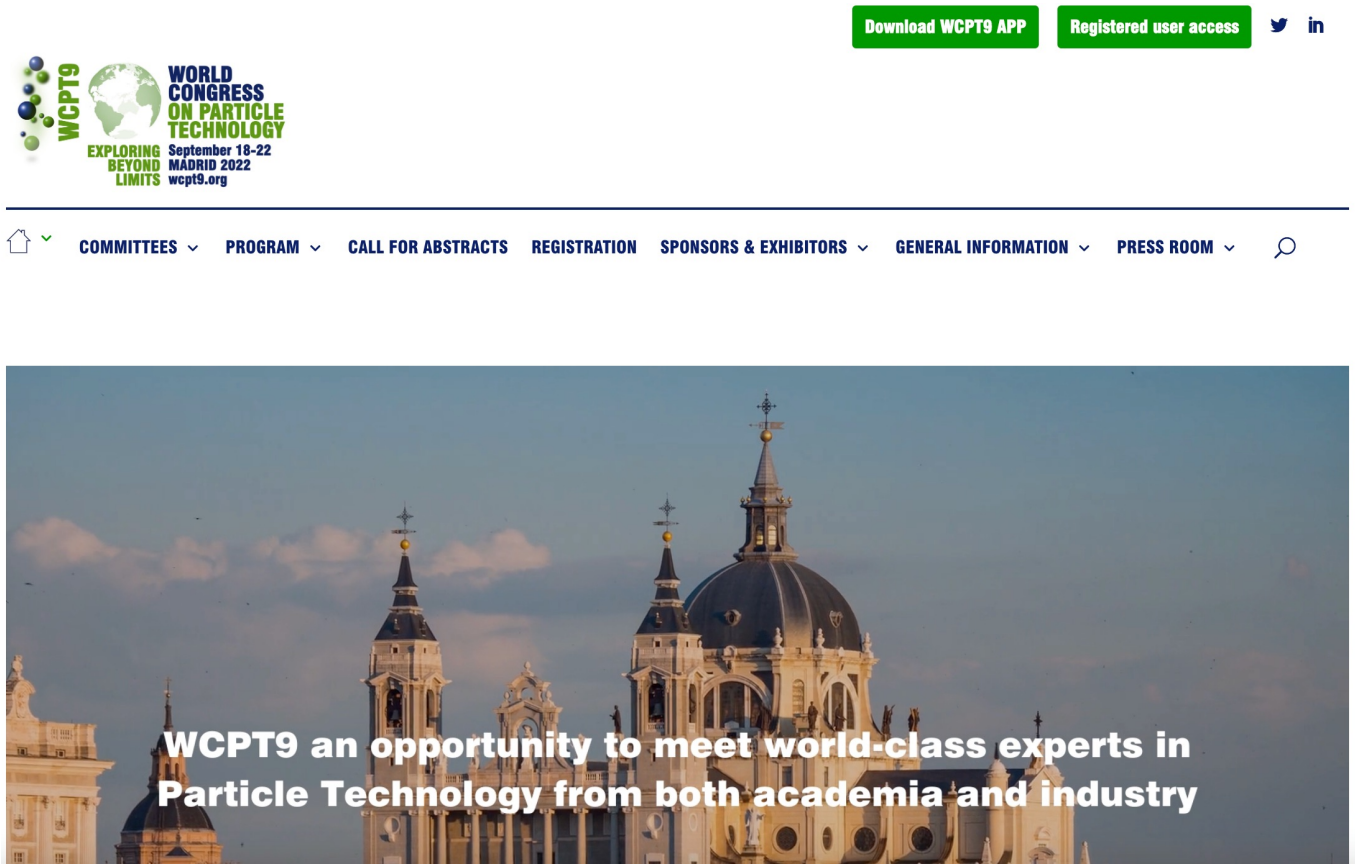
Welcome to BIWIC 2022!

Conferences and workshops

We are glad to inform you that the 27th International Workshop on Industrial Crystallization (BIWIC 2022) will be held at Aalto University as an in-person event on 31 August - 2 September 2022. BIWIC in an international conference that brings researchers and engineers from academia and industry together to discuss latest discoveries and challenges in industrial crystallization. Previous BIWIC events were organized in Germany, France, Denmark, The Netherlands, Finland, South Africa, South Korea, China and Thailand.

https://www.aalto.fi/sites/g/files/flghsv161/files/2022-08/BIWIC2022%20Programme_7.pdf

Past and future conferences



5 PARTICLE FORMATION AND DESIGN

Crystallization and precipitation

Encapsulation

Hydrogel and aerogel particles and applications

Pharmaceutical particles

New approaches for particle preparation

9 MODELLING AND SIMULATION

Fundamentals and developments

Quantum computing

Extended discrete element method (XDEM)

Discrete element method and coupled simulations

Population balance, Lattice Boltzmann and molecular modelling

Euler-Euler and Euler-Lagrange approaches

Calibration methods and devices

Upscaling of particle systems

Industrial applications

Past and future conferences

The Pharma Challenge: a cross-cutting perspective from the WPs CAPE, Crystallization and Thermodynamics and Transport Properties

New members

SWEDEN

Dr. Michael Svärd
Docent
KTH Royal Institute of Technology
Dept. of Chemical Engineering
Teknikringen 42
10044 Stockholm, Sweden
Tel: +46-8-7908228
Contact

CURRICULUM VITAE – MICHAEL SVÄRD

Name Michael Svärd

Date of birth 1976-11-13

Home address and contact information

Tröskvägen 26
17552 Järfälla
Phone: 070-372 3897

Current workplace address and contact information

KTH
Dept. of Chemical Engineering
Teknikringen 42
10044 Stockholm
E-mail: micsva@kth.se

Current employment

Researcher in Chemical Engineering at KTH, 2014-07-01 –

Previous employments

- Postdoctoral research fellow at University of Limerick, Ireland, 2013-12-01 – 2019-05-31 (part-time)
- Postdoctoral research fellow in Chemical Engineering at KTH, 2011-07-01 – 2014-06-30
- Ph.D. student, Dept. of Chemical Engineering, KTH, 2005-03 – 2011-06

Higher education

- 2018: Associate Professor (Docent) in Chemical Engineering, KTH.
- 2011: Doctor of Technology degree in Chemical Engineering. Thesis title "Structural, Kinetic and Thermodynamic Aspects of Crystal Polymorphism of Simple Aromatic Compounds". School of Chemical Research and Engineering, KTH.

Nominations for EFCE awards

Deadline: Wednesday, 1 March 2023

Jacques Villermaux Medal

The **Jacques Villermaux Medal** is presented every four years to recognise *"scientific achievements within the context of the Federation's science policy, working parties, conference programme or other related activities."*

Lifetime Achievement Award

> Read more

Nomination Procedure The Award is only given at the occasion of ECCE events (European Congress of Chemical Engineering, organised every two years), and only to one candidate per event. The call for nominations is released about 12 months before the nearest ECCE event, and the tender is closed after 6 months. During this period a candidate must receive a nomination (or more) from any of the EFCE member societies, and/or EFCE Working Parties, and/or Sections. The EFCE bodies are strongly encouraged for submitting their nominations. More nominations for one candidate will be appreciated as a potential sign of her/his strong position in terms of LAA. But it is not a condition. A winning candidate might be supported, in principle, with only one nomination.

ISIC2023 Glasgow

https://www.strath.ac.uk/engineering/chemicalprocessengineering/internationalsymposiumonindustrialcrystallization/

ISIC 2026 BID SUMMARY

Zoltán K. Nagy (Purdue University/Loughborough University),
Ádám Demeter (Gedeon Richter PLC),
Hajnalka Pataki (BUTE),
Botond Szilágyi (BUTE),
Organizing partner: **Akadémiai Kiadó**

WHERE: BUDAPEST

www.budapest.com

- Budapest, capital of Hungary - bisected by the Danube,
- Historical inner town, frequent tourist attraction spot,
- Safe city, with “international” city center,
- Lot of sightseeing, culture, wellness etc. opportunity, rich gastronomy,
- Great transportation system:
  - Direct train connection with cities (Vienna, Zurich, Ljubjana, Prague, Munchen etc.).
  - One of the cheapest intercontinental hubs within Europe,
- **ISIC would return to Budapest after 45 years!**

River Danube and the Parliament

Chain Bridge with Castle Hill

Heroes' Square

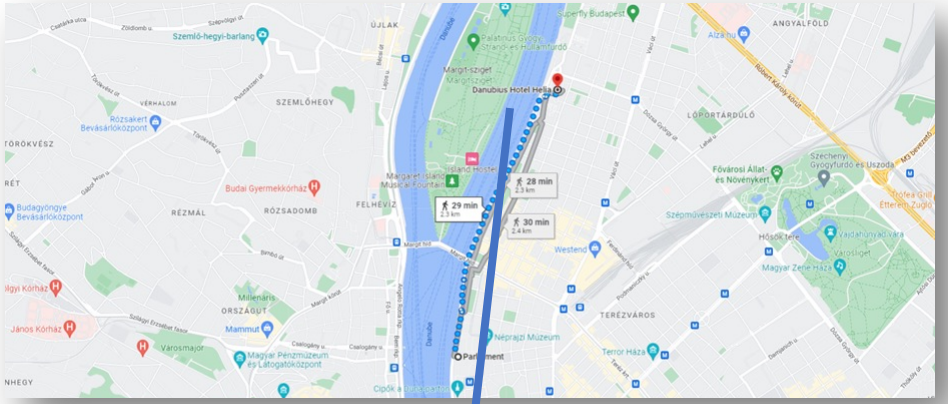
THE PROPOSED VENUE

Proposed date: 2026 September 6-9

- Danubius Hotel Helia **** / Spa and conference hotel Budapest, next to the wonderful Margaret Island,
- Walking distance from all major points of interest,
- Can accommodate all participants of a typical ISIC, fully accessible,
- On-site wellness center – to help fostering after-hour networking,

400 #	largest room
800 #	guests accomodated
10 #	event rooms
360 m²	largest room size

- Sustainability in focus (e.g., food). Great public transportation → Car/cab free participation.
- Why not university?
  - University is not free either,
  - Overlaps with teaching (makes it difficult to keep participants together),
  - No accommodation. Segregates the community further.



[Click here for interactive floor plan]

THE CONFERENCE

Proposed structure and topics

Layout in numbers:

- 3 full days,
- 6 plenary lectures (to be selected in co-operation with WP),
- 3 parallel sections,
- ~250 attendees (equality and diversity will be considered throughout the selection process),
- Tutorials may be organized in the first day of the conference.

Proposed topics:

- Fundamentals of crystallization (thermodynamics, kinetics, polymorphism, etc.)
- Crystallization in fine chemicals, specialty & life-science industries
  - Food, pharmaceuticals, agrochemicals,
  - Renewable resources,
  - Energetic materials, battery technology,
- Developments in large scale industrial crystallization (including process intensification, energy saving solutions, novel continuous crystallization platforms etc.)
- Crystallization for sustainability (e.g., work-up of wastewaters, recovery of valuable materials)
- Integrated process design: crystallization in the industrial process chain (reaction – work-up – recycle)
- Crystal engineering (polymorphism prediction, crystal habit control)
- Data driven modeling, data science for design, control and techology transfer
- Advances in process monitoring (both hardware and data interpretation/calibration)
- Mechanistic modeling and numerical/analytical solution methods

ORGANIZERS

And supporting organizations

Organizers:

- **Zoltán K. Nagy** (organized a several workshops/conferences related to industrial crystallization)
- **Ádám Demeter** (host of the recurring Hungarian Crystallization & Formulation Conference)
- **Hajnalka Pataki** (co-organized an international conference on fire retardant polymers)
- **Botond Szilágyi** (initiated and organized a workshop on model-based industrial crystallization, 2022 Nov.)
- Partner company with extensive event organization experience: **Akadémiai Kiadó (Academic Press)**
- **Akadémiai Kiadó** will handle all the administration, from the website to the registration

Supporting organizations:

- The Department of Crystallization and Formulation of the Hungarian Chemical Society,
- Colleagues of Hungarian academic and industrial crystallization community (e.g., Dr. Petra Bombicz (Hungarian Academy of Sciences), Dr. Zsofia Szalay (Richter Gedeon PLC), Dr. Ferenc Farkas (Egis), etc.),
- EFCE WP on Crystallization,
- Several equipment suppliers as exhibitors,
- FirePharma research group (prof. Marosi's group)

BUDGET

Surface-level breakdown. Approximate, conservative estimates for 2023 prices

Assumptions:

- In-person, hybrid or on-line organization subject to discussion. Technically speaking, the team has experience in all of them, prices may vary accordingly. The approximate budget was made for **in-person** organization,
- We assumed ~200 paying attendees (organizers, plenary presenters etc. not counted). It is a conservative guess that also helps mitigate the (very likely) price rises.

Proposed registration fees:

	Net EUR		Gross EUR*	
	Early	Normal	Early	Normal
Full	591	606	750	850
Discounted (Young / Retired etc.)	370	449	490	590

* Calculated with 27 % VAT, currently applicable in Hungary

- See the detailed, itemized breakdown in the document

ISIC 2026 BID SUMMARY

Zoltán K. Nagy (Purdue University/Loughborough University),
Ádám Demeter (Gedeon Richter PLC),
Hajnalka Pataki (BUTE, Department of Organic Chemistry),
Botond Szilágyi (BUTE),
Organizing partner: **Akadémiai Kiadó**

Any other business (?)