Meeting of the WP on crystallization of the EFCE

18/09/2024

Torino and on-line meeting

Agenda

- Composition of the WP: new members!
- Report on the summer school 2024
- Next school (2025 or 2026?)
- Next spotlight talk spring 2025
- Planning of the next ISIC 2026 Budapest
- Any other business

Composition of the WP

			E-mail: marjatta.louhi-kultanen@aalto.fi
France	Delegate	Prof. Béatrice Biscans	Université de Toulouse, CNRS-Laboratoire de Génie Chimique UMR 5503, 4 Allée Emile Monso, BP 84234, 31432 Toulouse-Cedex 4, France Tel: +33 5 34 32 36 38 E-mail: beatrice.biscans@ensiacet.fr
	Delegate	Dr. Laurent Cassayre	Laboratoire de Génie Chimique 4, allée Emile Monso 31432 Toulouse E-mail: laurent.cassayre@
	Delegate	Dr. Philippe Carvin	Research & Innovation, Pr Senior Principal Scientist, 8 69190 SAINT FONS – Franc E-mail: philippe.carvin@sy

Report on the Summer school 2024

- Thanks to Ashwin Rajagopalan, Thomas Vetter, Simon Schiele and Mei Lee for the organization!

Report on the Summer school 2024

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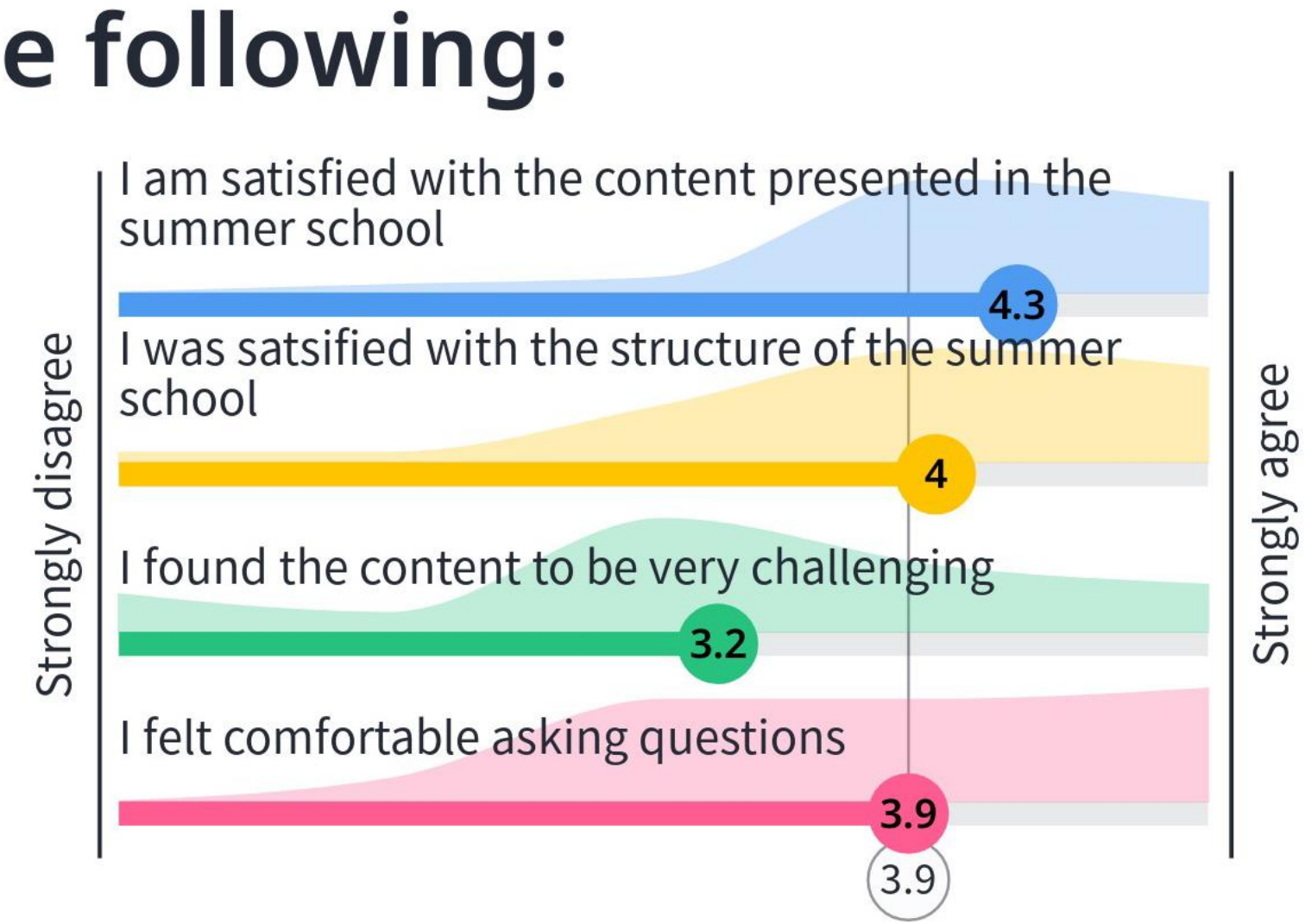
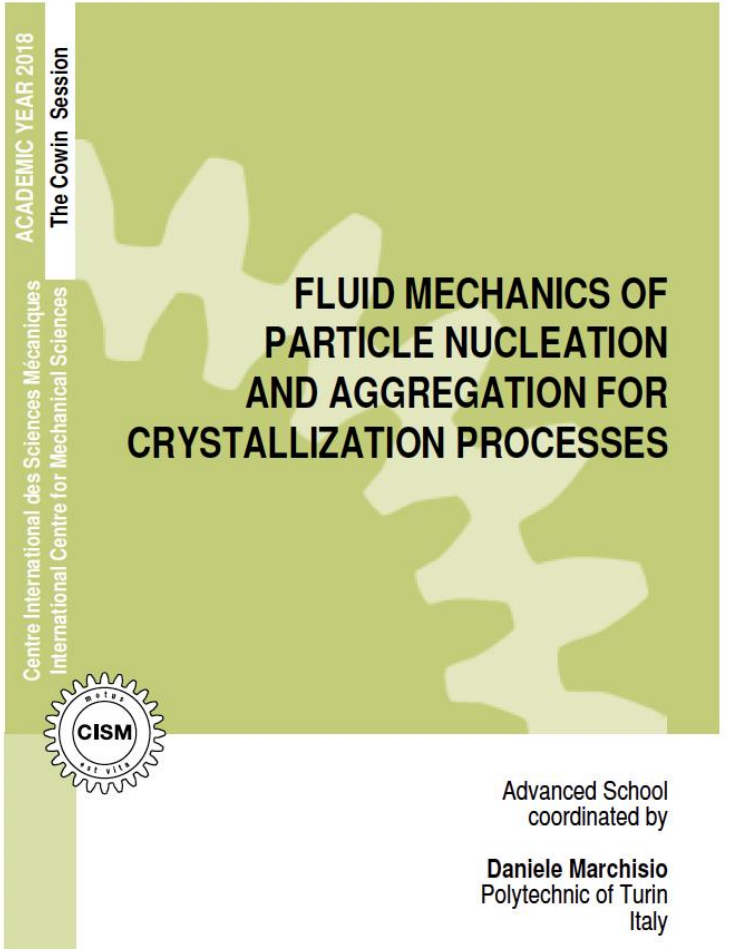


Report on the Summer school 2024

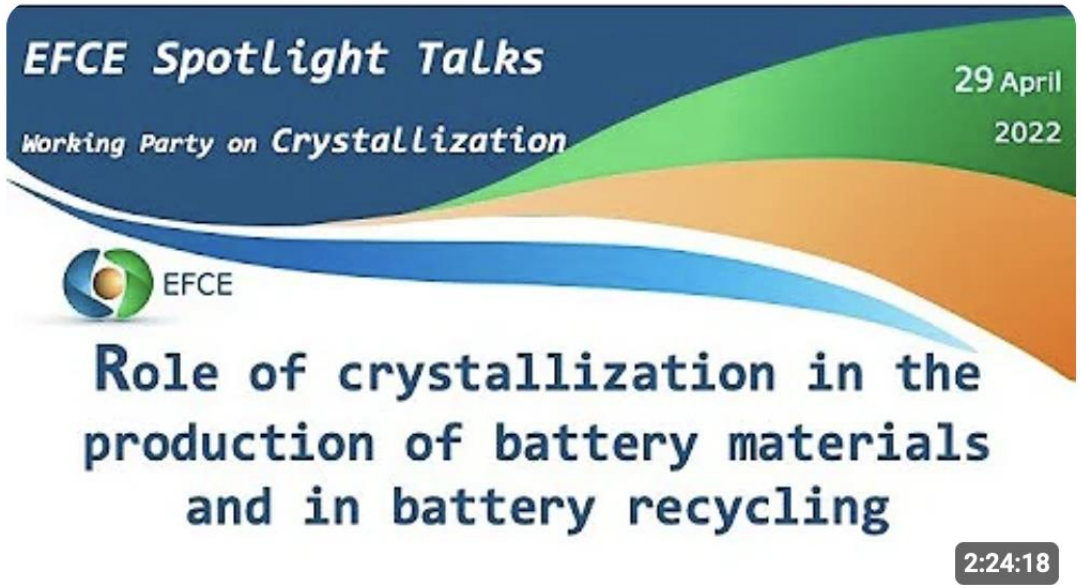
Heiko	25/06/2024	27/06/2024	307.7	Holiday Inn			Number of participants (academic)	26
Daniele	25/06/2024	28/06/2024	445.11	Holiday Inn			Number of participants (industry)	3
Kerstin	26/06/2024	28/06/2024	293.75	Holiday Inn			Total	8000
Gabriele	26/06/2024	28/06/2024	293.75	Holiday Inn			Available to Spend	6400
Ashwin	25/06/2024	28/06/2024	445.11	Holiday Inn			Spent	6181.84
Leif	25/06/2024	28/06/2024	443.94	Aparthotel			Excess	218.16
Kevin	N/A	N/A	N/A	N/A				
Wim	25/06/2024	27/06/2024	480	Ware				
Food	Price pp	No. of people	Total					
Social Activity 1 (Bowling)			216					
Lunch			777					
Dinner		40	1895					
Social Activity 2 (Dinner)		25	584					

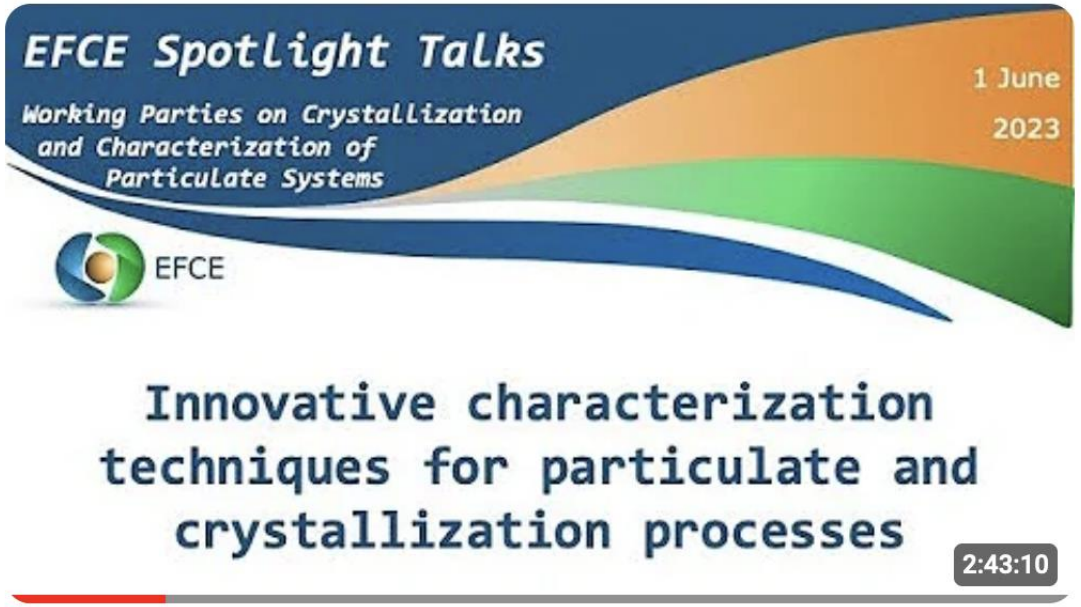
Next school?

- The schools were not run on a regular basis
- We had one in Udine (organized by DM) in 2018
- We were supposed to have one on 2020 (cancelled)
- We had another one in June 2022 hosted by Kerstin in TU/Dortmund
- This one in Stevenage June 2024
- What about the next one?
- 2025? 2026? If 2026 together with ISIC in Budapest?



EFCE spotlight talks





		Regis	part	Ratio (%)
March 2024	THERMODYNAMICS AND TRANSPORT PROPERTIES	364	171	47
	MEMBRANE ENGINEERING	151	68	45
	EDUCATION	245	104	42
	STATIC ELECTRICITY IN INDUSTRY	106	52	49
	DRYING	180	87	48
	FLUID SEP	295	150	51
	LOSS PREVENTION AND SAFETY	238	112	47
	CRYSTALLIZATION	341	128	38
	CHEM REAC. ENG + PROCESS INTEN.	477	218	46
	FLUID SEP	263	118	45
	FOOD	91	30	33
May 2023	QUALITY by DESIGN	108	39	36
	MULTIPHASE FLUID FLOW	142	68	48
	HIGH PRESSURE TECH.	161	66	41
	CHEM ENG as APPLIED to MEDICINE	91	29	32
	STATIC ELECTRICITY IN INDUSTRY	46	14	30
	EARLY CAREER CHEM ENG	99	32	32
	CRYSTALLIZATION + CHARACTERIZATION PART. SYS.	182	77	42
	THERMODYNAMICS AND TRANSPORT PROPERTIES	154	64	42
May 2022	DRYING	144	60	42
	MULTIPHASE FLUID FLOW	213	104	49
	MEMBRANE ENGINEERING	160	69	43
	EDUCATION	162	71	44
	MIXING	160	76	48
	CAPE	155	61	39
	HIGH PRESSURE TECH.	202	83	41
	CRYSTALLIZATION	249	113	45

EFCE spotlight talks

Next one in spring 2025?

On what topic?

5th EUROPEAN FORUM ON NEW TECHNOLOGIES

An event series of the European Federation of Chemical Engineering

ARTIFICIAL INTELLIGENCE in CHEMICAL ENGINEERING

13 December 2024

Paris - France

Artificial Intelligence and Machine Learning have had in the recent past a tremendous impact on chemical engineering. On the long run they can radically change the way in which we perform research on chemical processes, we design, scale-up and optimize chemical reactors and pieces of equipment and they can potentially introduce new paradigms on chemical process control and operation.

Many are the challenges ahead for our community that can be addressed by the EFCE and its Working Parties and Sections. These can a successful journey only if the European Chemical Engineering community, both academic and industrial, is fully engaged.

In this meeting we will bring together some visionary speakers to set out the potential and the challenges. There will be the opportunity to discuss the fundamentals of artificial intelligence, deep learning and machine learning, as well as their applications to process modelling, control and the building of digital twins.

LISTEN & INTERACT

Listen to the invited speakers and interact in discussions related the artificial intelligence and chemical engineering

TAKING PART IN THE ROUND-TABLE

Share your point of view

What are the industrialists expectations on AI?
How could academia help develop in this direction?
What should be taught at academia?

EASY ACCESS LOCATION

Hôtel MERCURE Montparnasse
40 rue du Commandant Mouchotte
75014 PARIS - France
Metro 4, 6, 12, 13 - Stop : Montparnasse-Bienvenue

REGISTER on line

Registration fees: 160 €
Registration fees (SFGP members): 120 €
Lunch and breaks included

CONTACT ORGANIZER

Martine.Poux@toulouse-inp.fr

SFGP Société Française de Génie des Procédés
www.sfgp.asso.fr

EFCE European Federation of Chemical Engineering
www.efce.info

5th EUROPEAN FORUM ON NEW TECHNOLOGIES

ARTIFICIAL INTELLIGENCE in CHEMICAL ENGINEERING

13 December 2024

Paris - France

Preliminary program
8:45 am
5:00 pm

- **Transforming process engineering with generative artificial Intelligence**
  Artur Schweidtmann
  Delft University of Technology, The Netherlands
- **AI & ML in the process industry: where we are and where we are going**
  Mattia Vallerio
  Syensqo, Milano, Italy
- **Different ways in which AI can be used within the organization to optimize industrial processes**
  Mathieu Cura
  Optimistik, Chambery, France
- **AI tools for process modeling and simulation: a critical overview on potentialities and limitations so far**
  Alessandro di Pretoro
  ENSIACET/Laboratoire de Génie Chimique, Toulouse, France
- **Process flowsheet generation by AI: motivation & current state**
  Thibaut Neveux
  EDF Lab, Chatou, France
- **Using machine learning for online 3D characterization of crystals in suspension**
  Anna Jaeggi
  ETH Zurich, Switzerland
- **Predicting solubility limits with machine learning**
  Florence Vermeire
  KU Leuven, Belgium
- **Deep-learning methods for the image-based assessment of the physical stability of formulated liquids of industrial interest**
  Massimiliano Villone
  Maurizio De Micco
  University of Naples Federico II, Italy

Round table

What are the industrialists expectations on AI and how could academia help develop in this direction?
What should be taught at academia?

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Click here to register

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SFGP

Next ISIC 2026 Budapest

- Event taking place in summer 2026
- Program defined in April-May 2026
- Review of the abstracts February-March 2026
- Deadline for abstract submission January 2026
- 2nd call for abstracts: November 2025
- 1st call for abstracts: September 2025
- Plenary speakers identified September 2025
- Announcement summer 2025

Any other business (?)