

FASEM 2026

for Energy Materials

Advanced school

French-Swedish Academy

for Scattering Experiments & Modeling



16-20
March

Institut Laue-Langevin
France

Closing remarks & Poster & Clip Awards

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SCOPE

The FASEM is a recurring biennial advanced-school, rotating across three key thematic areas: Scattering Techniques for Environment & Materials, Life Sciences, and Energy Applications. Its goals are to prepare the future generation of users of large-scale facilities for synchrotron and neutron scattering; develop and strengthen sustainable scientific exchanges between the French and Swedish communities on the use of large-scale facilities, in connection with the forthcoming ESS commissioning; and strengthen the links between institutes in France (ILL, ESRF, SOLEIL) and in Sweden (MAX-IV, ESS).

TOPICS

- Interactions of n & X with matter
- Neutron and X-ray imaging
- Neutron and X-ray diffraction
- SANS, SAXS
- Reflectometry
- Battery materials: operando studies
- Materials for nuclear reactor and fusion plants
- X-ray spectroscopy
- Neutron spectroscopy
- Hydrogen storage materials
- Energy research in industry
- Surfaces and Interfaces Batteries
- Proton conduction
- Uranium extraction
- Data treatment and FAIR principle
- Artificial Intelligence in Data Analysis
- Managing nuclear waste
- Nuclear fuel, tomography
- Societal impact of energy research

SCIENTIFIC COMMITTEE

- Peter Fouquet, ILL
- Gerardo Carbone, MAX IV
- Fabrice Cousin, CEA
- Céline Dumiale, ESS
- Pascale Launoi, CNRS/SFN
- Marie Piazzanet, UGA
- Valentin Vinci, ESRF
- Max Wolff, UU

ORGANISING COMMITTEE

- Peter Fouquet, ILL
- Christine Darve, (FASEM coord.) ESS
- Victor Ducret, French Embassy
- Yan Pautrat, French Embassy
- Laurence Teller, ILL

Institut Laue-Langevin
Grenoble, France



APPLICATION DEADLINE
02/02/2026

<https://workshops.ill.fr/e/FASEM2026>
contact: FASEM2026@ill.fr

FASEM – Advanced School on Neutron & Synchrotron Techniques, driven by French–Swedish synergies

Topics

- Neutron and X-ray Techniques
- Battery and Hydrogen Materials
- Nuclear Materials and Fuel Cycle
- Simulations and AI in Energy Research
- Industrial Applications and Societal Impact

- 20 Professors
- 152 Candidates registered by February 2, 2026
- 30 selected in-persons
- 9 countries: Allemagne, Australie, Danemark, Espagne, France, Italie, Royaume-Uni, Suède, Suisse
- 22 institutes
- Many participants on-line from more than 37 Countries thanks to Open-Access !

Agenda



	16/3/2026 MONDAY	17/3/2026 TUESDAY	18/3/2026 WEDNESDAY	19/3/2026 THURSDAY	20/3/2026 FRIDAY
09:00	Registration	Neutron and X-ray Diffraction (for Energy Materials) <i>Ove Korjus</i>	X-ray spectroscopy <i>Valérie Briois</i>	DFT Modelling <i>Elisa Rebolini</i>	Societal impact of energy research <i>Héloïse Goutte</i>
09:30	Welcome address and presentation of ILL		Coffee break	Coffee break	Coffee break
10:00		Neutron & X-ray Reflectometry <i>Max Wolff</i>			
10:30	Coffee break	Small Angle Neutron and X-ray Scattering <i>Xaver Brems</i>	Hydrogen storage materials <i>Max Wolff</i>	Neutron spectroscopy studies of perovskites for energy applications <i>Maths Karlsson</i>	
11:00	Introduction to X-rays and Neutrons for Materials Science and Energy <i>Aleksandar Matic</i>	Lunch break	Lunch break	Lunch break	Closing remarks & Clip Awards
11:30					
12:00		Lunch break	Lunch break	Lunch break	Lunch break
12:30					
13:00		Lunch break	Lunch break	Lunch break	Lunch break
13:30					
14:00	An Introduction to Neutron and X-ray Imaging <i>Alessandro Tengattini</i>	Neutron spectroscopy <i>Michael Marek Koza</i>	ILL visit	Preparation of Beamtime Proposals <i>Peter Fouquet and the Lecturers</i>	Closing remarks & Clip Awards
14:30		Operando characterizations of batteries <i>Sandrine Lyonnard</i>		Radioactive Sources and Long Term Storage <i>Frank Cocina Jr.</i>	
15:00	Coffee break	Coffee break	Coffee break	Coffee break	Closing remarks & Clip Awards
15:30				Coffee break	
16:00	ESRF welcome (Visitor Center) and visit	Materials for nuclear reactor and fusion plants <i>Pär Olsson</i>	Energy research in industry <i>Jonas Okkels Birk and Markus Strobl</i>		Imaging for (nuclear) energy <i>Markus Strobl</i>
16:30				Materials for nuclear reactor and fusion plants <i>Pär Olsson</i>	Energy research in industry <i>Jonas Okkels Birk and Markus Strobl</i>
17:00	Poster Session & reception (mezzanine ESRF)	School dinner	School dinner		
17:30				School dinner	School dinner
18:00		School dinner	School dinner		
18:30				School dinner	School dinner
19:00		School dinner	School dinner		



Sponsoring

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EUROPEAN
SPALLATION
SOURCE



UPPSALA
UNIVERSITET



UGA
Université
Grenoble Alpes



Special thanks to : **ENEN**

European Nuclear Education Network

We bring our contribution in preserving and developing the European Capacity in the Nuclear Fields

“Swedish”
students
sponsored:

Andreas

Anjali

Erika

Hugo

huifang

Jugo

Juliana

Marcus

Pardeep Kumar

Sagar

Erlandsson

Vijayan

Magnusson

Mårtensson

Yang

Okabe

Avtarovski

Liljenberg

Tanwar

Jathar



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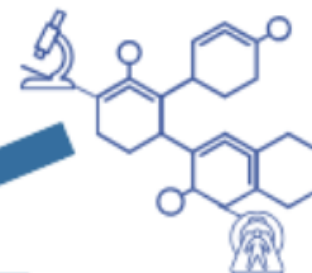
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June 2019: Materials & Environment (see Indico)



March 2024: Life Science



Evolution since 2019

- From experiments to data analysis
- Hybrid format enabling wider participation
- Broader ecosystem: academia, research infrastructures & industry



March 16 to 20, 2026 @ ILL (FR):
Energy Applications / Energy Materials



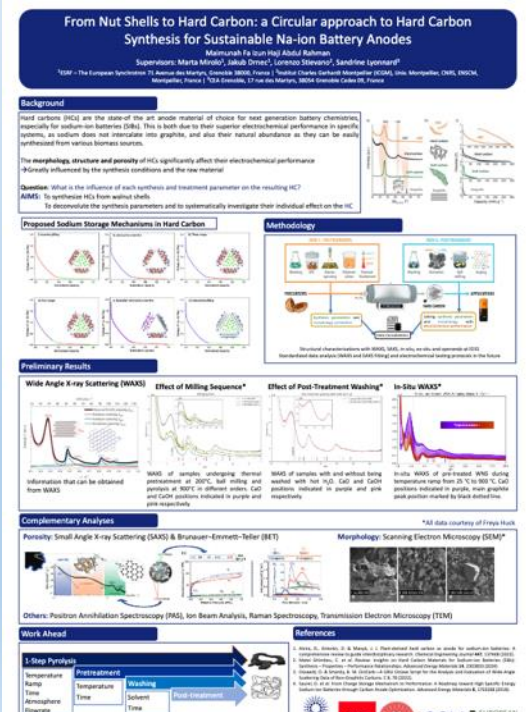
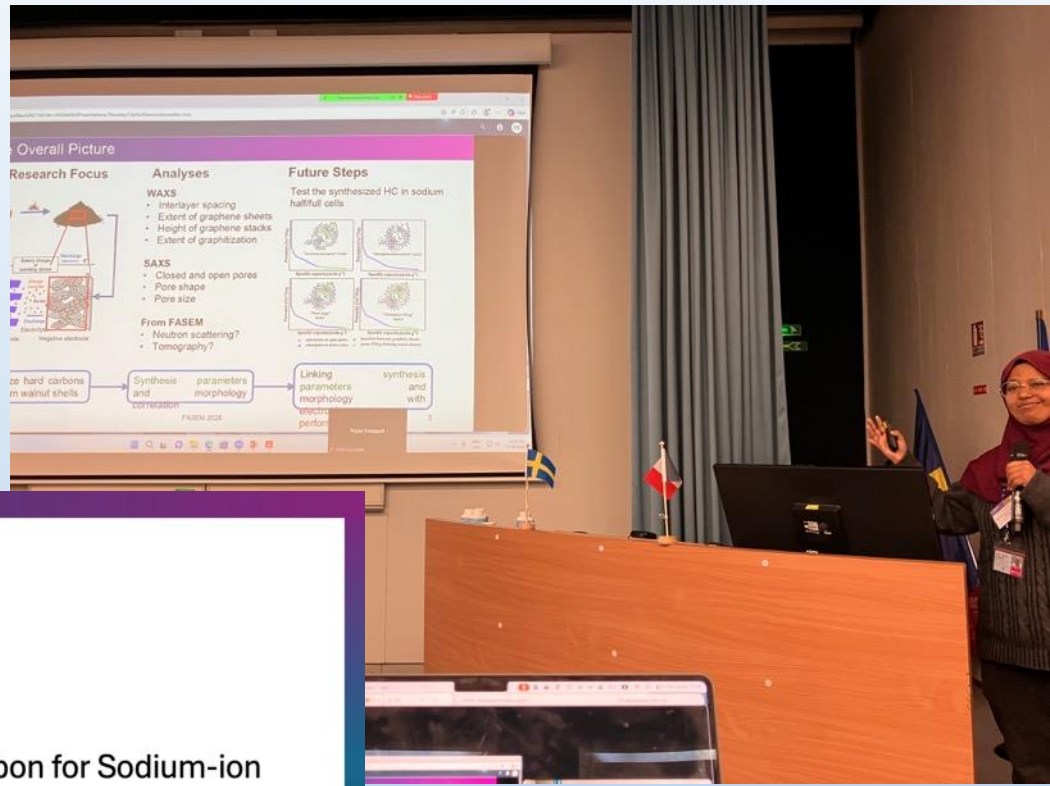
Poster & Clip Awards



Best Poster & Clips

1st Prize :

Maimunah Fa Izun Haji
Abdul Rahman



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Biomass-Derived Hard Carbon for Sodium-ion Batteries

Maimunah Fa Izun Haji Abdul Rahman
maimunah@esrf.fr

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Best Poster & Clips

2nd Prize :

Sagar Jathar

ESRF
The European Synchrotron

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Biomass-Derived Hard Carbon for Sodium-ion Batteries

Maimunah Fa Izun Haji Abdul Rahman
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EUROPEAN BATTERY HUB

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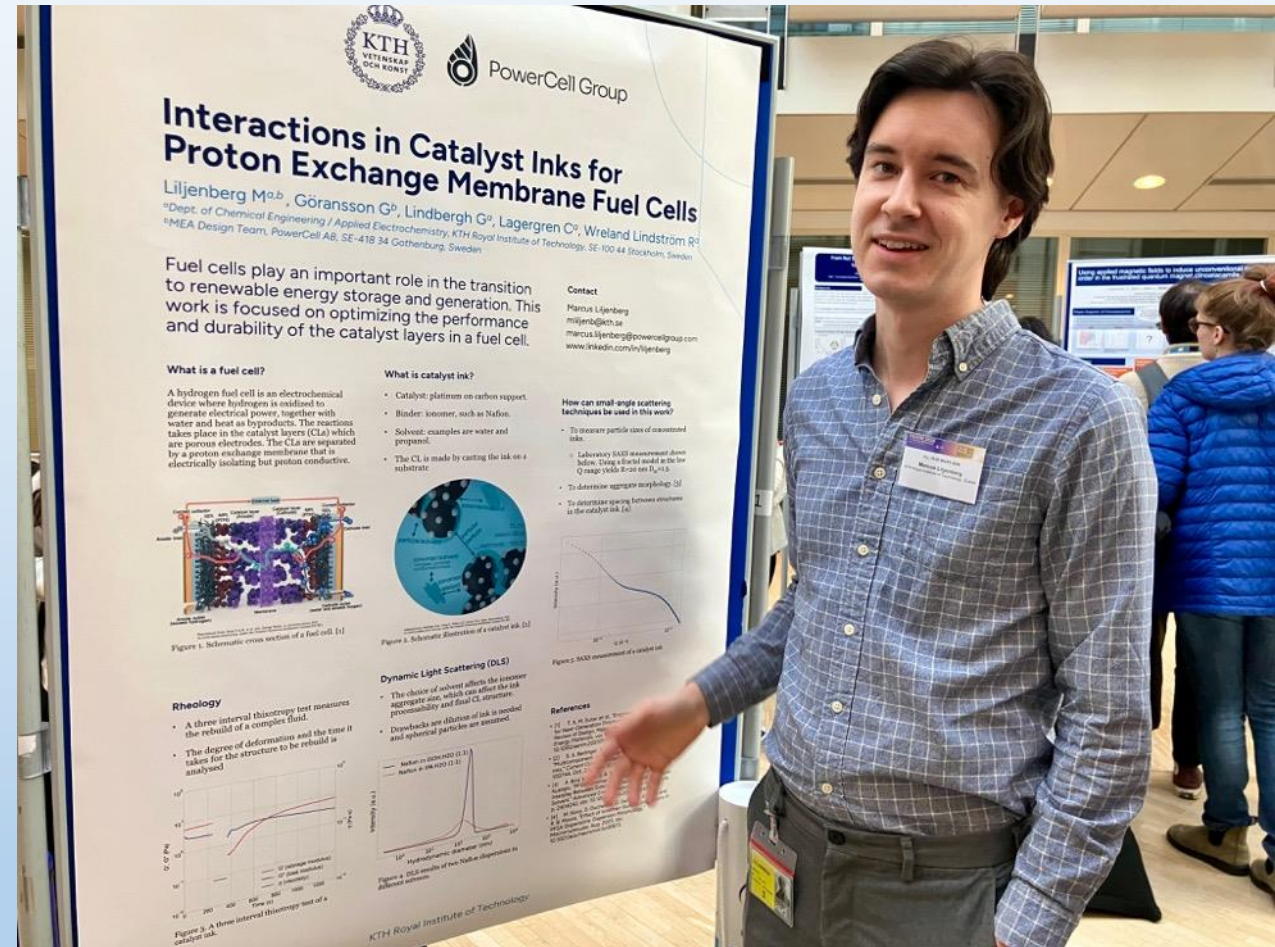


Best Poster & Clips

3rd Prize :

Marcus Liljenberg

“Interactions in Catalyst Inks for Proton Exchange Membrane Fuel Cells”



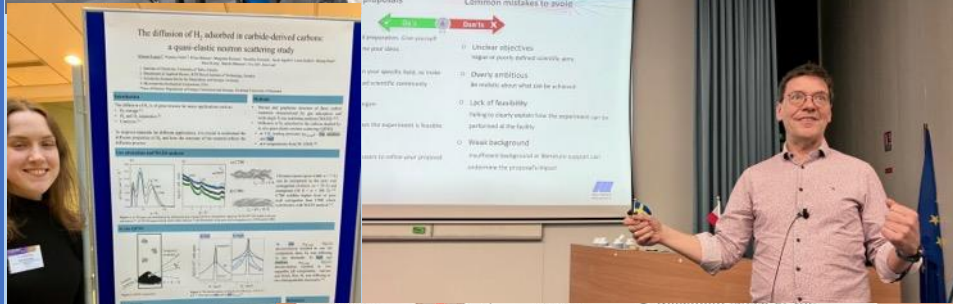
FASEM in pictures

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<https://cloud.ill.fr/index.php/s/djKR7n4KfRZFD3Z?path=%2FFriday%2FPhotos>



A special “Merci” !!

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