

EUROTECH SUMMER SCHOOL · 2026

Energy Storage & Demand

A one-week intensive school on the full spectrum of energy storage, hosted by the GEM Lab at EPFL Valais, Sion.

31 Aug – 4 Sep 2026

EPFL Valais · Sion & EPFL Lausanne

EUROTECH UNIVERSITIES ALLIANCE

OPENING STATEMENT

Storage is the hinge of the energy transition.

Dear Participants,

It is my pleasure to welcome you to the EuroTech Energy Storage & Demand Summer School 2026 at EPFL. This week brings together students, researchers, and experts from across the EuroTech Universities Alliance to exchange ideas, learn from one another, and build new collaborations. Through lectures delivered by leading academics and industry experts, laboratory visits, and scientific discussions, participants will have the opportunity to explore current developments and emerging challenges in energy storage and demand management. The Summer School provides a stimulating environment in which knowledge, perspectives, and experiences can be shared across disciplines, fostering meaningful exchanges and strengthening connections within the broader energy research and innovation community.

Beyond the academic program, this week is also an opportunity to engage with peers from different backgrounds, discover new approaches and ideas, and develop relationships that may lead to future collaborations. I encourage you to make the most of these interactions and to contribute actively to the discussions throughout the week.

I would like to thank all speakers, contributors, and organizers for making this event possible, and all participants for their engagement and enthusiasm.

I hope you find this week inspiring, enjoyable, and rewarding, and that the knowledge gained and connections established here will continue to benefit you long after the Summer School has concluded.

On behalf of the entire organizing team,

I warmly welcome you to the EuroTech Energy Storage & Demand Summer School 2026



Dr. Jan Van Herle
Director · GEM Lab, EPFL

Dr. Jan Van Herle

Director, Group of Energy Materials (GEM) — EPFL Valais · Wallis, Sion

ABOUT

The EuroTech Universities Alliance

The EuroTech Universities Alliance is a strategic partnership of leading European universities of science and technology joining forces to build a strong, sustainable, sovereign, and resilient Europe. The partners bring their excellence in research and education, active engagement in vibrant eco-systems, and service to society. Together, they join forces to accelerate their research in high-tech focus areas and advocate for change through dedicated partners and a strong presence in Brussels.

Based on the EuroTech values, the partners aspire to a new level of cooperation by bringing together their inclusive, diverse, and sustainable campuses. The EuroTech Universities create a unique environment for international talents to lead a new generation of change agents in research, entrepreneurship, industry, and society.

EPFL & the GEM Lab

École Polytechnique Fédérale de Lausanne (EPFL), founded in 1969 in Lausanne, Switzerland, is one of Europe's leading universities, recognized for its excellence in research, education, and innovation. It offers programs in engineering, computer science, natural sciences, architecture, and life sciences, with students, researchers, and faculty from more than 120 countries.

Known for its cutting-edge research, entrepreneurial culture, and strong industry ties, EPFL hosts the Group of Energy Materials (GEM), which specializes in fuel cells and electrolyzers. GEM conducts interdisciplinary research across the modeling, design, experimental validation, and characterization of energy systems at the component, cell, stack, and system levels. Drawing on advanced laboratory facilities and close collaboration with experts in mechanical engineering, materials science, chemistry, and electron microscopy, alongside industrial and European research partners, GEM helps EPFL drive innovation in sustainable energy technologies.

The 2026 Summer School

The Summer School runs over one intensive week, from 31 August (starting 15:30) to 4 September 2026 (ending 13:30), across EPFL's campuses in Sion and Lausanne. The program pairs lectures by leading international academics and industry experts with hands-on laboratory visits, giving participants direct exposure to cutting-edge energy storage research. Attendees will also join an excursion highlighting the links between energy systems, natural resources, and sustainability, and a poster session offering the chance to present research, exchange ideas, and build collaboration across students, researchers, and professionals from diverse backgrounds. Updated information is available at <https://eurotechsummerschool2026.epfl.ch/>.

5

DAYS

11

LECTURES

5

LAB VISITS

1

EXCURSION

ORGANIZING TEAM



GEM Lab — EPFL



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Under the direction of **Dr.-Ing. Jan Van Herle**, Director of the GEM Lab. General enquiries: eurotech2026@epfl.ch



PROGRAM

Week at a glance

MON 31 Aug SION	TUE 01 Sep SION	WED 02 Sep GRANDE DIXENCE	THU 03 Sep LAUSANNE	FRI 04 Sep SION
<div style="border: 1px dashed gray; padding: 10px; text-align: center; margin-bottom: 10px;"> <i>Arrival</i> </div> <div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 1</div> <div style="background-color: teal; color: white; padding: 5px; margin-bottom: 5px;">Icebreaker</div> <div style="background-color: teal; color: white; padding: 5px; margin-bottom: 5px;">Welcome dinner</div>	<div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 2</div> <div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 3</div> <div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 4</div> <div style="background-color: teal; color: white; padding: 5px; margin-bottom: 5px;">Lunch</div> <div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 5</div> <div style="background-color: darkgray; color: white; padding: 5px; margin-bottom: 5px;">Lab visit 1</div> <div style="background-color: darkred; color: white; padding: 5px; margin-bottom: 5px;">Discussion</div> <div style="background-color: darkgray; color: white; padding: 5px; margin-bottom: 5px;">Lab visit 2</div> <div style="background-color: teal; color: white; padding: 5px; margin-bottom: 5px;">Free evening</div>	<div style="background-color: teal; color: white; padding: 20px; text-align: center; margin-bottom: 10px;"> Excursion <i>(Lunch included)</i> </div> <div style="background-color: darkgray; color: white; padding: 5px; margin-bottom: 5px;">Lab visit 3</div> <div style="background-color: lightgray; color: darkgray; padding: 5px; margin-bottom: 5px;">Poster session</div> <div style="background-color: teal; color: white; padding: 5px; margin-bottom: 5px;">Free evening</div>	<div style="background-color: darkgray; color: white; padding: 5px; margin-bottom: 5px;">Travel</div> <div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 6</div> <div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 7</div> <div style="background-color: teal; color: white; padding: 5px; margin-bottom: 5px;">Lunch</div> <div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 8</div> <div style="background-color: darkgray; color: white; padding: 5px; margin-bottom: 5px;">Lab visit 4</div> <div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 9</div> <div style="background-color: darkgray; color: white; padding: 5px; margin-bottom: 5px;">Lab visit 5</div> <div style="background-color: teal; color: white; padding: 5px; margin-bottom: 5px;">Lake & dinner</div>	<div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 10</div> <div style="background-color: red; color: white; padding: 5px; margin-bottom: 5px;">Lecture 11</div> <div style="background-color: darkgray; color: white; padding: 5px; margin-bottom: 5px;">Conclusion</div> <div style="background-color: teal; color: white; padding: 5px; margin-bottom: 5px;">Lunch</div>

- Lecture
- Discussion
- Lab / travel
- Excursion
- Social
- Poster

Detailed schedule on the following pages →

MONDAY**31 AUGUST****Introduction**

EPFL Valais · Wallis, Sion

15:30

16:30

LECTURE 1**Energy on Demand: Why Storage Is Central to Future Energy Systems**

Prof. Emeritus Alfred Rufer — EPFL

16:30

18:30

ICEBREAKER**Sion City Welcome Event***A guided wander through the old town of Sion to get to know the group.***19:00**

22:00

DINNER**Welcome Dinner — Cheese Fondue***A Valais classic to open the week.*

TUESDAY**01 SEPTEMBER****Electrochemical Storage**

EPFL Valais · Wallis, Sion

08:30

09:30

LECTURE 2**Supercapacitors Challenge Batteries**

Dr. Roland Gallay — Garmanage

09:45

10:45

LECTURE 3**Batteries Fundamentals, Research & E-Mobility**

Prof. Priscilla Caliandro — BFH

11:00

12:00

LECTURE 4**Large-Scale Storage with Redox Flow Batteries**

Prof. Antoni Forner Cuenca — TU/e

*12:00 – 13:30 · Lunch break***13:30**

14:30

LECTURE 5**LAB VISIT 1****Grid-Connected Energy Storage: Applications and strategies.**

Prof. Fabrizio Sossan — HES-SO Valais–Wallis

14:45

15:45

DISCUSSION**Q&A and General Discussion**

General discussion and Q&A session

16:00

17:00

LAB VISIT 2**GEM Lab: Power-to-X, AEMWE & rSOC Demonstrator****17:00**

22:00

FREE EVENING**Free evening**

WEDNESDAY**02 SEPTEMBER****Hydropower & Pumped Storage**

Grande Dixence & EPFL Sion

09:00

15:00

EXCURSION**Grande Dixence Dam: Guided Visit and inside view***Bus departs from Sion at 9:06 · lunch included. The tallest gravity dam in the world.***15:15**

16:00

LAB VISIT 3**Hydropower Lab: Pumped Hydro and Beyond**

Prof. Cécile Münch-Alligné — HES-SO Valais–Wallis

16:15

17:15

POSTER**Poster Session — All Participants Present Their Research***PhD students & postdocs present an A0 poster (mounting provided).***17:30**

22:00

FREE EVENING**Free evening**

THURSDAY**03 SEPTEMBER****Thermal & Chemical Storage**

EPFL Lausanne Campus

07:39

09:09

TRAVEL**Train: Sion → EPFL Lausanne Campus****09:30**

10:30

LECTURE 6**Thermal Energy Storage: Principles & Technologies***To be defined* — HSLU Lucern**10:45**

11:45

LECTURE 7**GRZ Swiss Company: Metal Hydrides Hydrogen Solutions: Research and Applications**

Dr. Tai Sun — GRZ Technologies

*12:00 – 13:30 · Lunch break***13:30**

14:30

LECTURE 8**LAB VISIT 4****Power-to-X: Solar Fuels & Chemical Storage Pathways + LRESE Lab Visit**

Prof. Sophia Haussener — EPFL

15:00

16:30

LECTURE 9**LAB VISIT 5****Seeing the Grid in Real Time: Monitoring & Control + DESL Lab Visit**

Prof. Mario Paolone — EPFL

16:45

22:00

DINNER**CGN Boat + Dinner by the Lake**

FRIDAY**04 SEPTEMBER****Future Perspectives**

EPFL Valais · Wallis, Sion

09:00

10:00

LECTURE 10**PCM & Carnot Batteries: Power & Industry Applications**

Prof. Adriano Sciacovelli — DTU

10:15

11:15

LECTURE 11**Future Perspectives on Energy Storage**

Prof. Jan Van Herle — EPFL

11:30**CONCLUSION****Final Remarks***Closing of the EuroTech Summer School 2026.**12:00 – 13:30 · Farewell lunch*

SPEAKERS

Academics & industry, in order of appearance

MON 31 Aug 15:30	Prof. Emeritus Alfred Rufer Energy on Demand — Why Storage Is Central	EPFL
TUE 01 Sep 08:30	Dr. Roland Gallay Supercapacitors Challenge Batteries	Garmanage
TUE 01 Sep 09:45	Prof. Priscilla Caliandro Batteries Fundamentals & E-Mobility	BFH
TUE 01 Sep 11:00	Prof. Antoni Forner Cuenca Large-Scale Redox Flow Batteries	TU/e
TUE 01 Sep 13:30	Prof. Fabrizio Sossan Storage as a Grid Service	HES-SO
WED 02 Sep 15:15	Prof. Cécile Münch-Alligné Hydropower & Pumped Hydro	HES-SO
THU 03 Sep 09:30	To be defined Thermal Energy Storage	HSLU
THU 03 Sep 10:45	Dr. Tai Sun Hydride Storage, Fuel Cells & Electrolyzers	GRZ
THU 03 Sep 13:30	Prof. Sophia Haussener Power-to-X & Solar Fuels	EPFL · LRESE
THU 03 Sep 15:00	Prof. Mario Paolone Real-Time Grid Monitoring & Control	EPFL · DESL
FRI 04 Sep 09:00	Prof. Adriano Sciacovelli PCM & Carnot Batteries	DTU
FRI 04 Sep 10:15	Prof. Jan Van Herle Future Perspectives on Energy Storage	EPFL · GEM

Ten speakers confirmed - two to be finalised. The list will be updated as confirmations arrive.

TRAVEL

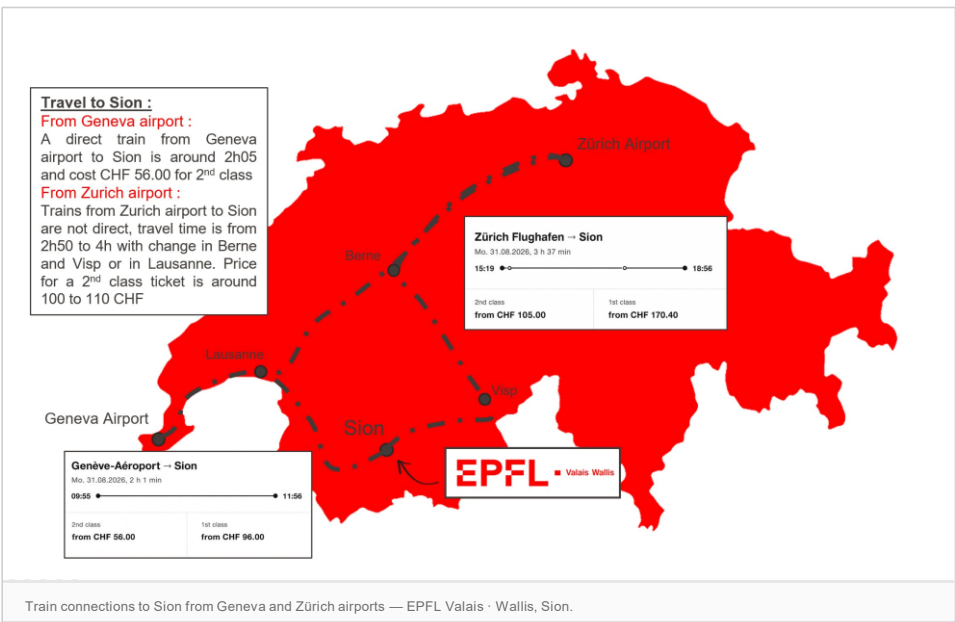
Getting to Sion

ARRIVAL

The school opens on the afternoon of **Monday 31 August**, first lecture at **15:30**, leaving the morning to travel and check in. Lunch on arrival day is not included.

DEPARTURE

The school concludes on **Friday 4 September**; a farewell lunch runs until **13:30**, after which participants are free to depart. Book return travel from Friday afternoon onwards.



FROM GENEVA AIRPORT

Genève-Aéroport → Sion

Journey ≈ 2h05
 2nd class **from CHF 56**
 1st class **from CHF 96**

Direct · no change

FROM ZÜRICH AIRPORT

Zürich Flughafen → Sion

Journey 2h50–4h00
 2nd class **from CHF 105**
 1st class **from CHF 170**

1 change · via Berne-Visp or Lausanne

Tip: Swiss tickets are date-specific, point-to-point fares. Book ahead on **sbb.ch**: the discounted **Super Saver** fare is tied to a specific train and limited in number. No seat reservation is needed on standard intercity journeys. ECTS credits are awarded only to participants who attend the full Summer School.

LOCATIONS & OTHER PRACTICAL INFO

MAIN VENUE · MON · TUE · WED · FRI

EPFL Valais · Wallis — Sion

Group of Energy Materials Laboratory Rue de l'Industrie 17, 1951 Sion · Switzerland 5-minute walk from Sion railway station.

Specific room details will be provided soon

[Map & directions: https://www.epfl.ch/labs/gem/about/how-to-find-us/](https://www.epfl.ch/labs/gem/about/how-to-find-us/)

THURSDAY · 03 SEP

EPFL Lausanne Campus

Thursday, 3 September, takes place on EPFL's main campus in Lausanne (Écublens), reached by a direct morning train from Sion provided by the school. The day concludes with an evening boat trip on Lake Geneva.

REGISTRATION FEE

EuroTech partners	100 CHF
Other institutions	200 CHF
ECTS credits	On request

ACCOMMODATION

HI Sion (Holiday Inn) ≈ 3 min walk.

reservation@hiexsion.ch

140 CHF/night EPFL RATE with code EPFL_EUROTECH26**Alaia Hostel** ≈ 2 min walk · alaia.ch/hostelOther hotels: **IBIS**, **Moxy**, and **Hotel Castel**Questions? eurotech2026@epfl.ch

