

INTERNATIONAL FLOW BATTERY FORUM 2025



IFBF 2025

PRELIMINARY PROGRAMME

24 - 26 JUNE 2025 / VIENNA, AUSTRIA
..and online

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POSTER SESSION



CONFERENCE DINNER



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IFBF 2025 - PRELIMINARY PROGRAMME

DAY ONE TUESDAY 24 JUNE

INTERCONTINENTAL HOTEL
Morning and Afternoon

PLEASE NOTE THAT THIS
IS NOT A FINAL VERSION
AND THE AGENDA WILL
STILL CHANGE

INVITED KEYNOTE ADDRESSES AND DISCUSSIONS COVERING

- The need for and the take up of energy storage in Austria, central and Eastern Europe
- Presentations by the California Energy Commission and EU policymakers on the European and US market opportunities for flow batteries, and longer duration energy storage.
- Energy security and energy storage security.
- Changes needed in the current regulatory environments to grow and support the flow battery industry

DELIVERY OF A LARGE-SCALE FLOW BATTERY INSTALLATION

- Cost effective applications for flow batteries such as:
 - Replacements for peaking plants
 - Providing 24 / 7 (continuous) power
 - The role of capacity markets
 - Assembling the application value stack
 - Supplying energy, or power, or both?
- The roles of an EPC and a systems integrator
- Warranties, and technical assurance for flow battery projects
- The life cycle analysis of a flow battery project

THE KEY TRENDS IN THE FLOW BATTERY INDUSTRY

- Technical and commercial performance metrics for flow batteries
- Competitive analysis between flow batteries and other energy storage types
- Flow batteries in microgrids, transport and other non stationary applications



PALAIS FERSTEL
Evening

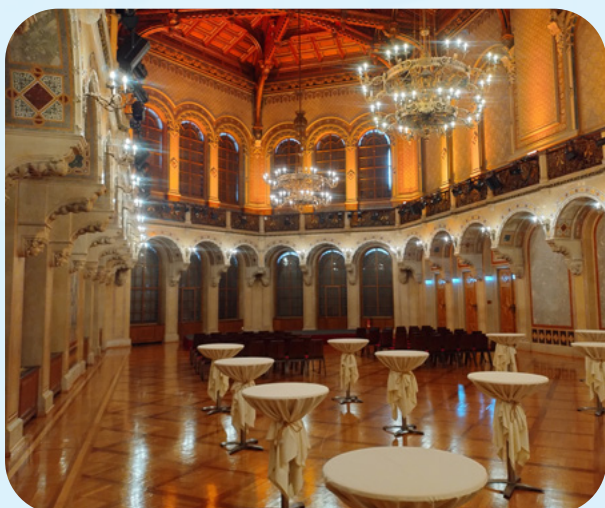
CONFERENCE DINNER AT PALAIS FERSTEL

Enjoy an elegant night in the historic Palais Ferstel, where timeless Italian architecture meets the Viennese elegance.

On Tuesday, June 24, the IFBF Conference Dinner will be held at Palais Ferstel, a magnificent palace inspired by Venetian architecture and situated in the heart of Vienna's historic first district.

Originally designed as a stock exchange, the venue features stunning rooms, dazzling chandeliers, and an impressive colonnaded courtyard. Palais Ferstel offers the perfect setting for an unforgettable evening, complemented by traditional Austrian cuisine.

Are you interested in sponsoring the conference dinner in this stunning location? Contact us at info@flowbatteryforum.com!



08:30	WELCOMING COFFEE - Foyer and Exhibition Area
09:30	Introduction to the IFBF. A review of the successes and challenges for the flow battery industry <ul style="list-style-type: none"> Anthony Price, Programme Coordinator IFBF, Kees van de Kerk, President of Flow Batteries Europe.
09:45	Deployment of large-scale flow batteries and energy storage systems <ul style="list-style-type: none"> Sponsor's Keynote Address: CellCube: Christoph Stelzer, CellCube Jan grosse Austing, Vanevo: Business Cases for Flow Batteries Philip Krause, Rongke Power: National and international flow battery project development Christian Barba Rodulfo, EDPR: Storage experience with LDES, thermal and other storage types Karl Zach, Verbund: Why aren't large redox flow batteries implemented in Central Europe yet? A utility's perspective Pascal Wyss, Flexbase: Developing a multi 100 MW FB in Switzerland Jean Louis Cols, Invinity Energy Systems, Using effective partnerships to scale up for utility-scale vanadium flow batteries
10:55	COFFEE BREAK - Foyer and Exhibition Area
11:35	Policies and plans to promote Long Duration Energy Storage and flow batteries in Europe and North America <ul style="list-style-type: none"> Viktor Horváth, Deputy State Secretary for Energy Transition, Hungary: Diverse energy storage technologies for a balanced energy transition Commissioner David Hochschild, California Energy Commission: Why is California investing in LDES and flow batteries? Speaker European Commission, TBA Speaker Austrian Ministry, TBA
13:00	LUNCH BREAK - Restaurant - Ground Floor
14:00	The future for large flow battery installations <ul style="list-style-type: none"> Andrew Deadman, Faraday Institution, Looking for the next generation LDES Technology Gill Davies, UK Department for Energy Security and Net Zero (DESNZ), The GB example of a cap and floor for LDES Massimo Guarnieri, University of Padua, Flow battery share of the LDES market
15:25	TEA BREAK - Foyer and Exhibition Area
16:00	The market potential for flow batteries <ul style="list-style-type: none"> Conrad Nichols, IDTechEx: The Global view of the flow battery market Jens Noack, Fraunhofer Institute-ICT: Flow battery development and deployment in Australia Johannes Haentzschel, Prolux Solutions: The flow battery markets in DACH (Germany, Austria, and Switzerland) Jeremy Peters, Veeco Gp: Supporting mining operations in Australia Daisaku Taguchi, Sumitomo Electric: Development and modelling of large scale vanadium flow batteries Andrii Bodnar, R-Flow Ukraine: Flow batteries as a tool for rebuilding Ukraine's energy grid Ahmad Hammad, Saudi Aramco: Technologies and development of flow batteries in Saudi Arabia
19:00	CONFERENCE DINNER - Palais Ferstel <u>IMPORTANT: A separate ticket is needed for the IFBF Conference Dinner.</u> The conference dinner is sponsored by AvCarb.





DAY TWO

WEDNESDAY 25 JUNE

INTERCONTINENTAL HOTEL
Full Day

UPDATES ON TECHNICAL AND COMMERCIAL DEVELOPMENTS IN THE WORLD OF FLOW BATTERIES

- Operational experience of flow battery installations: reviews of commercial applications, and technical performance
- Novel chemistry and novel configurations
- Research and development in flow battery operation, components, integration, and manufacture

IMPROVING THE COMPETITIVENESS OF PRODUCING AND DELIVERING FLOW BATTERIES

- The supply chain for flow battery materials, components and subsystems, including vanadium electrolyte and other electrolytes
- Manufacturing issues and case studies
- Delivering scale in manufacturing and delivery
- Introducing standardisation to achieve scale in the flow battery industry
- Financial analyses and comparisons between market sectors

SELECTION OF FLOW BATTERIES FOR ENERGY STORAGE PROJECTS

- Comparisons between flow battery types (inorganic / organic and hybrid systems)
- Hybridisation of flow batteries with other energy storage systems

RESEARCH AND ACADEMIC INSTITUTIONS AND SUPPORT FOR FLOW BATTERY DEVELOPMENT

- Status of research projects, (including the US National Labs, American states initiatives, European Framework Programmes and other national support)
- Policy support for flow battery R&D and investment in flow battery manufacturing and project development

POSTER SPEED PITCH "JUST A MINUTE!"

As a prelude to the IFBF Poster session, invited poster presenters will talk for "just a minute" about their work. Listen to their pitches as you hear about the latest research and new ideas in the industry before the poster and exhibition networking session.

IFBF POSTER SESSION AND NETWORKING RECEPTION

Our popular IFBF poster session is back! We will be featuring 50 posters on the latest R&D in the world of flow batteries. Pick up your refreshments and talk to the poster presenters, visit our exhibition stands and discuss the latest developments with experts, colleagues and friends!



DAY TWO WEDNESDAY 25 JUNE

08:30	WELCOMING COFFEE - Foyer and Exhibition Area
09:00	Vanadium Systems <ul style="list-style-type: none"> • Terry Perles, <i>TTP Squared, Inc</i>: Vanadium market analysis • Svetlana Novikova, <i>RDI Center</i>: Central Asian Production for VFB • Nataliya Roznyatovskaya, <i>Fraunhofer-ICT</i>: Lab test methods for VFB electrolytes • Adam Whitehead, <i>CellCube</i>: The economics of state of health management for VFB • Alasdair Robertson, <i>Invinity Energy Systems</i>: VFB electrolyte: performance and durability • Jeehyang Huh, <i>H2, Inc.</i>: Insights into the design and operation of a LDES VFB in Spain
10:45	COFFEE BREAK - Foyer and Exhibition Area
11:15	Scale up and operation of inorganic flow battery systems <ul style="list-style-type: none"> • Fraser Hughson, <i>Allegro Energy</i>: Microemulsion flow battery at Australia's largest power station • Norah Alghamdi, <i>University of Queensland</i>: Optimizing zinc-ion salvation for ZnBr • Erlantz Villar, <i>KTH Royal Institute of Technology</i>: A systematic study on the performance and stability of hydrogen-manganese flow battery • Eleonora Natale, <i>Politecnico di Milano</i>: Scaling Zn-Mn flow batteries: performance & economic assessment • John Alper, <i>VoltStorage</i>: Iron salt battery for grid scale applications – MWh scaling • Mikhail Petrov, <i>Aarhus University</i>: All-iron dual flow battery for energy storage coupled with room temperature hydrogen production • Jiajun Cen, <i>Aquabattery</i>: Aquabattery at Deltares: scaling sustainable, cost-effective, behind-the-meter energy storage using water and table salt.
13:00	LUNCH BREAK (SPONSORED BY QUINO ENERGY) - Restaurant - Ground Floor 
14:00	Hybrid and organic systems: improvements in manufacturing, development and deployment <ul style="list-style-type: none"> • Sponsor's Keynote Address: QUINO ENERGY: Eugene Beh, <i>Quino Energy</i>: Multi MWh scale production of quinone flow batteries • Cristina Flox, <i>Iberian Center for Research in Energy Storage</i>: Promising organic flow batteries • Thomas Guarr, <i>Jolt Energy</i>: Optimization of a high performance nonaqueous organic flow battery via machine learning • Laura Giorgia Rizzi, <i>Flow Nano</i>: Nanostructured carbon electrodes • Liyu Li, <i>Cougar Creek</i>: Second generation Fe Cr • Ishani Natha, <i>Arxo Metals</i>: From mine to megawatt hour: Sustainable low-cost industrial scale production of iron-chromium flow battery electrolyte • Rick Winter, <i>Enduro</i>: How can flow battery manufacturers achieve a breakthrough?
16:00	Poster Speed Pitch "Just a minute!" <p>As a prelude to the IFBF Poster session, invited poster presenters will talk for "just a minute" about their work. Listen to their pitches as you hear about the latest research and new ideas in the industry before the poster and exhibition networking session.</p>
17:00	IFBF POSTER SESSION AND NETWORKING RECEPTION - Foyer and Poster Area <p>Our popular IFBF poster session is back! We will be featuring around 40 posters on the latest R&D in the world of flow batteries. Pick up your refreshments and talk to the poster presenters, visit our exhibition stands and discuss the latest developments with experts, colleagues and friends!</p> <p>The Poster Session and Networking Reception is sponsored by Pinflow.</p> 

DAY THREE

THURSDAY 26 JUNE

INTERCONTINENTAL HOTEL
Morning

THE GROWING OPPORTUNITIES FOR FLOW BATTERIES - MARKET DEVELOPMENTS IN ENERGY STORAGE

- What is the competition for flow batteries?
 - Competitive comparison between long and short duration energy storage technologies
 - Manufacturing cost comparisons between flow batteries and other battery types
 - Critical, financial and strategic issues in flow battery manufacture
- Comparisons and contrasts between business and environmental cases for flow batteries
- Business opportunities for flow battery applications in industrial and commercial operations

ENERGY STORAGE SUPPLY SECURITY

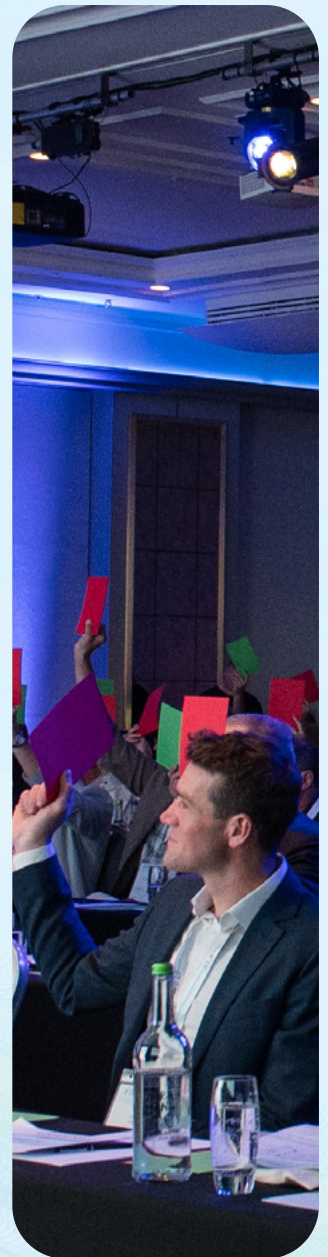
- Cyber security and operational security
- Supply chain security
- Environmental responsibility and safety

RESEARCH AND DEVELOPMENT IN FLOW BATTERY OPERATION, COMPONENTS, AND MANUFACTURING

- Operational experience of flow battery installations
- Flow battery systems integration, power conversion systems, digital control
- International collaboration on flow batteries and energy storage and reports on collaborative projects
- Finance, funding and regulatory changes to support the research, development and deployment of flow batteries

CONFERENCE CLOSING SUMMARY AND PRESENTATION OF AWARDS

- A short summary of the proceedings will follow the presentation of awards for the poster session



CELLCUBE HQ
Afternoon

IFBF SITE VISIT – CELLCUBE

As part of the IFBF visit, CellCube is excited to open its doors and provide exclusive behind-the-scenes access to the development and production of Vanadium Flow Batteries (VFB).

With decades of experience in energy storage, CellCube has become a trusted leader in the industry, delivering innovative, durable, and flexible energy storage solutions.



DAY THREE THURSDAY 26 JUNE

08:30	WELCOMING COFFEE - Foyer and Exhibition Area
09:00	Manufacturing, performance and reliability <ul style="list-style-type: none"> • Thorsten Seipp, <i>Volterion</i>: What's the perfect stack size? • Mike Perry, <i>Storion Energy</i>: High-Performance VFB electrolyte and cell stacks are the key to low-cost VFB systems • Jim Hoshino, <i>ACM Tokyo</i>: Carbon felt made of recycled aircraft parts for ample supply, quality assured, unit cost savings, and performance enhancement • Georg Lieser, <i>Schmalz</i>: Minimizing pressure loss and shunt currents • Matthias Gebert, <i>Syensqo Specialty Polymers</i>: Fluorine-free ionomer solutions for flow batteries • Lukas Pachernegg-Mair, <i>Ecolyte</i>: Biobased membranes for flow batteries • Nate Kirchhofer, <i>BioZen</i>: Development and validation of a flexible, low-cost, small-volume flow cell platform for high-throughput flow battery research, development, and deployment
10:45	COFFEE BREAK - Foyer and Exhibition Area
11:15	Business opportunities for flow batteries <ul style="list-style-type: none"> • Michael Weixelbraun, <i>Managing Director, Burgenland Eenergy</i>: Enhancing a power supplier's customer service with renewable power and energy storage • Philippe Stevens, <i>EDF R&D France</i>: EDF's programme to evaluate flow batteries and other energy storage types • Shail Godiwala, <i>UNSW</i>: Model predictive control of vanadium flow batteries for optimised economic benefit during power arbitrage • Jan Girshik, <i>Fraunhofer UMSICHT</i>: Project Spaceflow
12:30	Conference Closing Summary and Presentation of Awards Our short summary of the proceedings will follow the presentation of awards for the poster session.
13:00	LUNCH BREAK - Foyer and Exhibition Area
14:00	IFBF Site visit – CellCube Headquarters IZ NÖ Süd Straße 3, Obj. M36, Wiener Neudorf, Niederösterreich 2355, AT As part of the IFBF visit, CellCube is excited to open its doors and provide exclusive behind-the-scenes access to the development and production of Vanadium Flow Batteries (VFB). With decades of experience in energy storage, CellCube has become a trusted leader in the industry, delivering innovative, durable, and flexible energy storage solutions. IMPORTANT: A separate ticket is needed for the IFBF Site Visit. Your ticket will have the information on your assigned group and bus times for departure from the InterContinental Hotel. 



IFBF