

INTERNATIONAL FLOW BATTERY FORUM 2025



IFBF 2025

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 MAY
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.

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DAY ONE TUESDAY 24 JUNE

08:30	WELCOMING COFFEE - Foyer and Exhibition Area
09:15	Introduction to the IBBF. A review of the successes and challenges for the flow battery industry <ul style="list-style-type: none"> Patrick Clerens, <i>Director IBBF</i>, Anthony Price, <i>Programme Coordinator IBBF</i>, Kees van de Kerk, <i>President of Flow Batteries Europe</i>
09:30	Deployment of large-scale flow batteries and energy storage systems <ul style="list-style-type: none"> Sponsor's Keynote Address: CellCube: Christoph Stelzer, <i>CellCube</i> Christian Barba Rodulfo, <i>EDPR: Storage experience with LDES, thermal and other storage types</i> Karl Anton Zach, <i>Verbund: Why aren't large redox flow batteries implemented in Central Europe yet? A utility's perspective</i> Jan grosse Austing, <i>Vanevo: Business Cases for Flow Batteries</i> Philip Krause, <i>Rongke Power: National and international flow battery project development</i> Pascal Wyss, <i>Flexbase: Developing a multi 100 MW FB in Switzerland</i> Jean Louis Cols, <i>Invinity Energy Systems, Using effective partnerships to scale up for utility-scale vanadium flow batteries</i>
10:50	COFFEE BREAK - Foyer and Exhibition Area
11:30	Policies and plans to promote long duration energy storage and flow batteries <ul style="list-style-type: none"> Viktor Horváth, <i>Deputy State Secretary for Energy Transition, Hungary: Diverse energy storage technologies for a balanced energy transition</i> Commissioner David Hochschild, <i>California Energy Commission: Why is California investing in LDES and flow batteries?</i> Andrew Deadman, <i>Faraday Institution, Looking for the next generation LDES Technology</i> Lara Ottendorfer, <i>Austrian Federal Ministry of Economy, Energy and Tourism</i>
13:00	LUNCH BREAK - Foyer and Exhibition Area
14:00	Present and future operational deployment of flow batteries (1) <ul style="list-style-type: none"> Chris Basinski, <i>European Bank for Reconstruction and Development (EBRD), Finance for renewables and storage in the EU</i> Gill Davies, Richard Campbell, <i>UK Department for Energy Security and Net Zero (DESNZ), The GB example of a cap and floor for LDES</i> Massimo Guarnieri, <i>University of Padua, Flow battery share of the LDES market</i> Conrad Nichols, <i>IDTechEx: The Global view of the flow battery market</i> Johannes Haentzschel, <i>Prolux Solutions: The flow battery markets in DACH (Germany, Austria, and Switzerland)</i>
15:00	Panel Discussion: Flow battery development and deployment in Australia <ul style="list-style-type: none"> Jens Noack, <i>Fraunhofer Institute-ICT</i> Caroline Stott, <i>Energy Transformation - The University of Queensland</i> Fraser Hughson, <i>Allegro Energy</i> Jeremy Peters, <i>Veeco Gp</i>
15:30	TEA BREAK - Foyer and Exhibition Area
16:00	The market potential for flow batteries <ul style="list-style-type: none"> Jeremy Peters, <i>Veeco Gp: Supporting mining operations in Australia</i> Jeehyang Huh, <i>H2 Inc: Insights into the design and operation of a LDES VFB in Spain</i> Yannick Bachirou Seiler, <i>Fraunhofer ICT: Update on the VFB at Fraunhofer-ICT</i> Arjun Bhattarai, <i>VFlowTech: Opportunities in Singapore</i> Andrii Bodnar, <i>R-Flow Ukraine: Flow batteries as a tool for rebuilding Ukraine's energy grid</i> Ahmad Hammad, <i>Saudi Aramco: Technologies and development of flow batteries in Saudi Arabia</i>
19:00	CONFERENCE DINNER - Palais Ferstel <div> <p>Sponsored by:</p>  </div> <p>IMPORTANT: A separate ticket is needed for the IBBF Conference Dinner. The conference dinner is sponsored by AvCarb.</p>



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

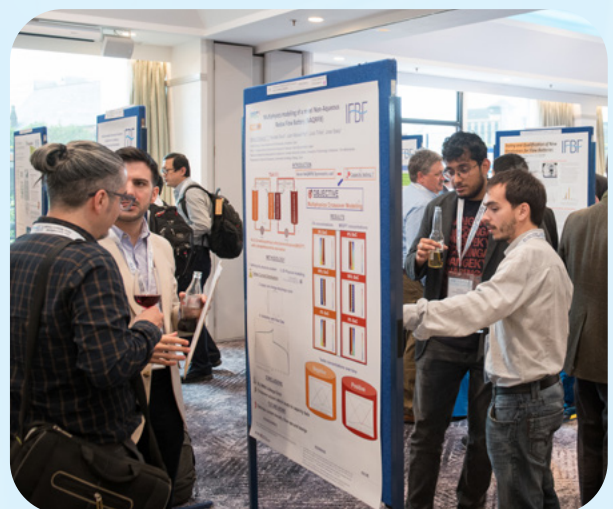
- Status of research projects, (including the US National Labs, American states initiatives, European Framework Programmes and other national support)
- Policy support for flow battery R&D and investment in flow battery manufacturing and project development

POSTER SPEED PITCH "JUST A MINUTE!"

As a prelude to the IBBF 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.

IBBF POSTER SESSION AND NETWORKING RECEPTION

Our popular IBBF 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!



Sponsored by: 

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 • Daisaku Taguchi, <i>Sumitomo Electric</i>: Development and modelling of large scale vanadium flow batteries
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"> • Eleonora Natale, <i>Politecnico di Milano</i>: Scaling Zn-Mn flow batteries: performance & economic assessment • Norah Alghamdi, <i>The University of Queensland</i>: Optimizing Zn-Ion Solvation Structures for Improved Durability and Performance in Zinc-Bromine Flow Batteries • Erlantz Villar, <i>KTH Royal Institute of Technology</i>: A systematic study on the performance and stability of hydrogen-manganese flow battery • Jiajun Cen, <i>Aquabattery</i>: Aquabattery at Deltares: scaling sustainable, cost-effective, behind-the-meter energy storage using water and table salt • Andreas Podias, <i>TNO</i>, Project TULIP: Flow batteries at Schiphol Airport • 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
13:00	LUNCH BREAK (SPONSORED BY QUINO ENERGY) - Foyer and Exhibition Area 
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 • 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 • Bin Luo, <i>University of Queensland</i>: Advancing aqueous zinc- and iron-based flow battery systems • Fraser Hughson, <i>Allegro Energy</i>: Microemulsion flow battery at Australia's largest power station • Shail Godiwala, <i>UNSW</i>: Model predictive control of vanadium flow batteries for optimised economic benefit during power arbitrage • 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
16:00	Poster Speed Pitch "Just a minute!" <p>As a prelude to the IBBF 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	IBBF POSTER SESSION AND NETWORKING RECEPTION - Foyer and Poster Area <p>Our popular IBBF 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> <p>Sponsored by:</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

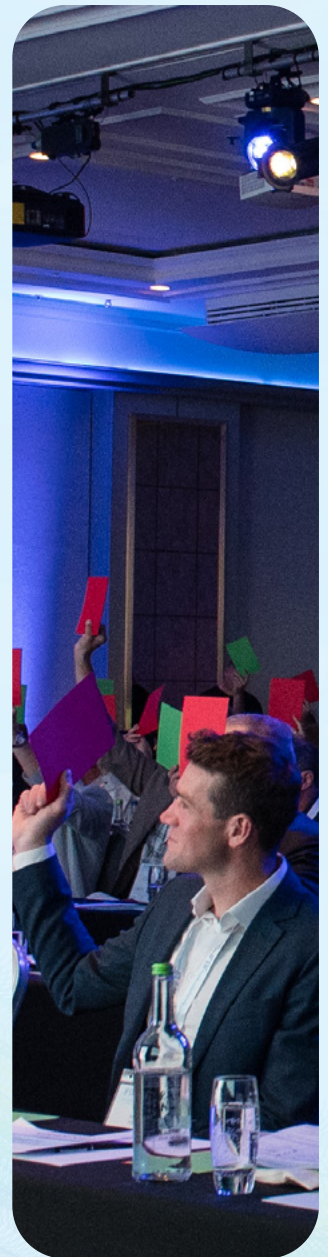
- Cyber security and operational security
- Supply chain security
- Environmental responsibility and safety

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 • Laura Giorgia Rizzi, <i>Flow Nano</i>: Nanostructured carbon electrodes • James Han, <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 • Rick Winter, <i>Enduro</i>: How can flow battery manufacturers achieve a breakthrough?
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 • Kees van de Kerk, <i>Volterion / Flow Batteries Europe</i>: Policy objectives for flow batteries • Christoph Stelzer, <i>CellCube</i>: The growth of the flow battery industry • Jan Girschik, <i>Fraunhofer UMSICHT</i>: Project Spaceflow
12:15	Conference Closing Summary and Presentation of Awards Our short summary of the proceedings will follow the presentation of awards for the poster session. <ul style="list-style-type: none"> • Patrick Clerens, <i>Director, International Flow Battery Forum</i>
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