中国国际钒液流储能大会2024

CHINA INTERNATIONAL VANADIUM FLOW BATTERY ENERGY STORAGE CONFERENCE 2024

11.20-22 安徽・合肥



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Background

In recent years, the global Vanadium Redox Flow Battery (VRFB) industry has experienced rapid development.

In China, the 100MW VRFB energy storage peak shaving power station connected to the grid in 2022; the production capacity of VRFB projects planned In 2023 exceeded 32GW per year; In the first half of 2024, the production capacity of new VRFB projects exceeds 6GW per year, and the new energy storage projects are about 1000MW/5000MWh. It is expected that the grid connected scale of VRFB energy storage will exceed 600MW in 2024. Overseas, Sumitomo Electric's 17MW/51MWh VRFB project in Hokkaido, Japan was put into operation in 2022; Invinity's 8.4 MWhVRFBproject in Alberta, Canada was put into operation in 2023; In March 2024, Largo announced the promotion of its VRFB business, bringing innovation and scalability to the North American VRFB market.

What new changes will there be in global energy storage industry policies in future? What are the new opportunities for investment in VRFB energy storage projects? In the face of competition from new energy storage technologies such as lithium-ion battery and sodium-ion battery, how can the VRFB industry develop to occupy more market share? How to further reduce costs and increase efficiency under the high cost pressure of VRFB? How can enterprises in the industrial chain deepen cooperation and further develop? What opportunities does the growth of the flow battery industry bring to the capital market?

The International Energy Storage and Vanadium Flow Battery

Conference 2024 will be held in Hefei, Anhui from November 21st to 22nd , 2024. The conference will be held by Asiachem, will explore energy storage industry policies and markets, VRFB technology and processes, cost control of VRFB, VRFB electrolyte, stack and its key materials, investment and financing, and **organize a visit to VRFB Production Base of Shanghai Electric Energy Storage Technology Co., Ltd. in Hefei.**

Topics

Industry policies, markets, and applications

- 1. International energy storage industry policies and market prospects
- 2. Policy and market analysis of flow battery industry
- 3. Comparative analysis and development path exploration of long-term energy storage technologies
- 4. New power systems and energy storage
- 5. Analysis of global major energy storage safety accidents
- 6. Cost control of flow battery and energy storage systems
- 7. Grid connected operation technology of flow battery system

Process and equipment of VRFB

- 1. Global VRFB Technology and Applications
- 2. Development of the Industry Chain for VRFB
- 3. Innovation and operation practice of VRFB system
- 4. Energy storage application of VRFB
- 5. Flow battery production equipment
- 6. Development and cost control of VRFB
- Industrial investment funds support the development of the flow battery industry

Vanadium raw material and VRFB electrolyte

- 1. The importance of vanadium raw material for VRFB energy storage system
- 2. Clean and low-cost processes for vanadium raw material and electrolyte
- 3. Latest progress in short process preparation of vanadium electrolyte
- 4. Clean vanadium extraction: technical and economic comparison of stone coal, steel slag, vanadium titanium magnetite routes
- 5. Vanadium extraction process from stone coal and industrial application
- 6. Fire process, wet process and supporting equipment of stone coal vanadium extraction

Flow battery stack and materials

- 1. VRFB stack technology and energy storage system optimization
- 2. Battery stack, electrolyte, and key materials of flow batteries
- 3. Low cost bipolar plate manufacturing process
- 4. Latest progress in industrialization of proton membranes for flow batteries
- 5. Technological progress and prospects of membrane materials and bipolar plate materials
- 6. Progress and development of carbon electrode technology for flow batteries

Visit and Inspection: Hefei VRFB production base of Shanghai Electric Energy Storage Technology Co., Ltd

<u>Agenda</u>

November.20 14:00-20:00 Meeting attendance

November.

21-22	09:00-12:00	Presentations
	12:00-14:00	Networking Lunch
	14:00-18:00	Presentations
	18:00-20:00	Reception Banquet
November.23	09:00-12:00	Industrial Visit

