

World Smart Energy Week 2020

Consisting of 8 shows

Dates: **Feb. 26** (Wed) - **28** (Fri), 2020
10:00-18:00 (10:00-17:00 on the last)

16th **FC EXPO**

11th **BATTERY JAPAN**

8th **WIND EXPO**

4th **THERMAL POWER EXPO**

13th **PV EXPO**

10th **INT'L SMART GRID EXPO**

5th **INT'L BIOMASS EXPO**

2nd **RESOURCE RECYCLING EXPO**

Venue: Tokyo Big Sight, Japan [Access](#)

Organised by: Reed Exhibitions Japan

World Smart Energy Week: Conference Program >BJ-7: Session Details

World Smart Energy Week 2020

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Conference

Conference Venue

FAQs

Access

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[VIP Registration \(FREE\)](#)

Conference Advisory Committee Members

FC EXPO

BATTERY JAPAN

INT'L SMART GRID EXPO

WIND EXPO

Other Seminars

Exhibitors' Presentation

Offshore Wind Power Seminar

Official Website

FC EXPO

PV EXPO

Battery Japan Technical Conference Program

BJ-7

Outlook of Next-gen Materials for High Input-output Electricity Storage Device

Feb. 26 (Wed) 14:00 - 16:00

English/Japanese

Pre-registration Required

Course Leader : Kenji Tamamitsu, Nippon Chemi-Con Corp.
Sub Course Leader : Yasuki Tadokoro, New Energy and Industrial Technology Development Organization (NEDO)

Carbon-ion a New Category of Energy Storage

Improving the performance of supercapacitors with novel carbon materials and ionic electrolytes.



Stephen Voller
CEO & Founder,
ZapGo Ltd.

Speaker Profile

Stephen Voller is an experienced business leader and a recognised authority on energy storage technologies. He is the inventor of Carbon-Ion and he founded ZapGo Limited in 2013 to produce the next generation of energy storage devices based on this technology platform, with four core values: to be faster charging, safer, longer lasting and more recyclable than lithium batteries. Stephen has taken several technology businesses through concept, design and then into production. He launched the first ever CE-marked hydrogen fuel cell product. He previously ran a \$1bn business unit at IBM. He is a member of the Institute of Electrical and Electronic Engineers (IEEE) and is a Freeman of the Guild of Entrepreneurs in the City of London.

Hybrid Capacitors Using Intercalated Metal-organic Framework Electrode

Intercalated metal-organic frameworks have been created as novel electrode materials to realize next generation hybrid capacitors that achieve both safety and high energy density. In this presentation, I will introduce the material design, thick film electrode technology, and capacitor performance based on the development technologies.



*Speaker will not be presenting. Textbook will be available.
Nobuhiro Ogihara,
Senior Researcher, Battery Materials & Processing Lab.,
Toyota Central R&D Labs., Inc.

Speaker Profile

Nobuhiro Ogihara was received the Ph.D. in Electrochemistry Tokyo University of Agriculture & Technology, 2005. He was Assistant Professor at Department of Applied Chemistry, Graduate School, Tokyo University of Agriculture & Technology from June 2005 to May 2008. He is now Senior Researcher, Toyota Central R&D Lab, and in addition Associate Professor at Tokyo University of Agriculture and Technology from October 2017.

Developing Batteries from High Rate Niobium Tungsten Oxides - Fundamental Insights and Practical Studies

Stable cycling of the niobium tungsten oxide anode Nb₁₆W₅O₅₅ is demonstrated in full cells with cathode materials LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂ and LiFePO₄. Long-term stability under 5 - 10C rates with a conventional carbonate electrolyte without any additives and from 10 to 60 degrees C is demonstrated.



Clare Grey
Professor,
Dept. of Chemistry,
University of Cambridge

Speaker Profile

Clare P. Grey, FRS is the Geoffrey Moorhouse-Gibson Professor of Chemistry at Cambridge University and a Fellow of Pembroke College Cambridge; she holds a Royal Society Professorship. She was Director (2009-2010) and then Associate Director (2011-2014) of the Northeastern Chemical Energy Storage Center, a Department of Energy, Energy Frontier Research Center (2009-2010). She is currently Director of the EPSRC Centre for Advanced Materials for Integrated Energy Systems (CAM-IES). Her current research interests include the use of solid-state NMR and diffraction-based methods to determine structure-function relationships in materials for energy storage (batteries and supercapacitors) and conversion (fuel cells). She is currently exploring options for developing fast-charging batteries via start-up company CB2Tech.

You may also be interested in the following session(s).

- 【BJ-1】 [Latest Material Technologies Supporting the Evolution of Lithium Ion Batteries](#)
- 【BJ-2】 [Cutting-edge Analysis and Material Search Technologies Underpinning the Evolution of Lithium Ion Batteries](#)
- 【BJ-5】 [On the Frontlines of All-solid-state LIB Development](#)

Honorifics omitted. Please note that recording and photography are strictly prohibited. Speakers and programs are subject to change. Textbooks of some presentations might not be available.

 For any enquiries, please contact.



wsew-con@reedexpo.co.jp

Office Hours: 10:00-18:00 (JST) excluding weekends & holidays