Wednesday, May 12, 2021

| AM Session | Plenary & Keynote Session Chairs: Jim McCarthy, PhD Chief Engineer Eaton Hank Sullivan Director Tenneco | PM Session | Storage & Infra-Structures Session Chairs: Kevin Fok Director, Operations <i>LG Energy Solutions</i> Kent Snyder Leader, Energy Storage Ford |
|------------|--|------------|--|
| Time | Live - Virtual Classroom | Time | Live - Virtual Classroom |
| 8:30 am | Lihua Li, PhD Director of Propulsion Systems General Motors | 1:00 pm | Summarizing our work over the years on redox flow battery cost/performance model, various grid-scale energy storage testing/analysis, and our Li-ion SOH model Alasdair Crawford, PhD Pacific Northwest National Laboratory |
| 9:00 am | A Look at Commercial Powertrains Through 2030 Mihai Dorobantu, PhD Eaton | 1:30 pm | Automated battery-package optimization using cloud simulation and data-driven design Anatol Dammer, PhD, Sophie Petraman, PhD, Naghman Khan, PhD SimScale GmbH, Noesis Solutions |
| 9:45 am | Bob Gaylen Chairman <i>Gaylen Energy LLC</i> | 2:00 pm | Energy Storage Systems in the Field Kevin Fok LG Energy Solution |
| 10:15 am | Break | 3:00 pm | Break |
| 10:30 am | Kent Snyder Leader, Energy Storage Development Group <i>Ford</i> | 3:30 pm | Quantitative Characterization Enabled Materials Design for High-Performance Energy Storage Chengcheng Fang, PhD Michigan State University |
| 11:00 am | Stacey McCarthy Vice President of Programs Xcelaero | 4:00 pm | The Slow Journey to Fast Charging Mark Main, PhD Ford |
| 11:30 am | Thomas Körfer, Group Vice President Michael Görgen, PhD, Dept. Manager Verena Huth, PhD Technical Expert/Project Manager Mufaddel Dahodwala, PhD, Technical Expert/Project Manager FEV | 4:30 pm | Battery Storage, its integration to the electric grid and how it will contribute to the smart grid reliability. Vivian Sultan, PhD California State University |
| 12:00 pm | Warren Parsons Chief Architect Advanced Vehicle Development (AVD) General Motors | 5:00 pm | Energy Storage Integration Council and its utility and industry stakeholder Erin Minnear Electric Power Research Institute |
| 12:30 pm | Session Adjourned & Break | 5:30 pm | Adjournment |

Battery 2021 Congress May 12-13, 2021 www.gamcinc.com (734) 997 – 9249

Virtual Sessions

Waiting Room Opens 8:55 AM

ONLINE REGISTERATION OPEN NOW

Start Time 9:00 AM (EST)

Thursday, May 13, 2021

| AM Session | Materia & Recycling Session Chair: Xingcheng Xiao, PhD Staff Research Scientist Jin Liu, PhD, Researcher General Motors | PM Session | Manufacturing & Supply Chain Management Session Chairs: Mark Boyle, PhD Product Manager, AMADA WELD TECH INC. Teresa Rinker, PhD Senior Researcher, General Motors |
|------------|--|--------------|---|
| Time | Live - Virtual Classroom | Time | Live - Virtual Classroom |
| 9:00 am | Synthesis of Li7La3Zr2O12 Nanofibers for Solid- State Electrolyte Applications Yuepeng Zhang, PhD Argonne National Laboratory | 2:00 pm | Driving Toward a Domestic Battery Supply Chain for e-Mobility Renata Arsenault Ford |
| 9:30 am | Theoretical analysis on the criticality of Li-ion battery thermal runaway Peng Zhao, PhD University of Tennessee | 2:30 pm | CFD Simulations for Laser Welding Paree Allu <i>Flow Science, Inc</i> |
| 10:00 am | Developing Reduced-order Physical Based Model to Estimate the SOC of Li-Ion Batteries Zhibang Xu, Xia Wang, PhD, Zissimos Mourelatos Oakland University | : 3:00 pm | Integrating battery pack welding equipment into a production system Mark Boyle, PhD AMADA WELD TECH |
| 10:30 am | The Challenge of Sustainable Battery Recycling Thomas Bjarnemark Battery Solution | 330 pm | Electrochemical generation of liquid and solid sulfur on two-dimensional layered materials with distinct areal capacity Ankun Yang, PhD |
| 11:00 am | Artificial intelligence for rapid cycle life evaluations of Li-Ion Sue Babinec, PhD Argonne National Laboratory | | Oakland University Yi Cui, PhD Stanford University |
| 11:30 am | Break | 4:30 pm | Break |
| 12:15 am | NMC Cathode Materials with Outstanding Performance Generated by a closed-loop recycling process Mengyuan Chen, PhD General Motors | 4:15 pm | Battery Manufacturing Christopher Pawlak, Christy Landrigan LG Energy Solution |
| 12:45 am | MC Cathode Materials with Outstanding Performance Generated by A Closed-Loop Recycling Process Sherman Zeng, PhD General Motors | 4:45 pm | The universal tool for Laser welding of electrical contacts for E-Mobility Sebastian Moser Precitec |
| 1:15 pm | Breaking the Energy-Power Tradeoff in Li-ion Batteries with Advanced Electrode Architectures Adrian Yao EnPower, Inc | 5:15 pm | Latest Developments in High Brightness Blue Lasers enable high quality, high productivity Battery Welding Andrew Dodd Nuburu |
| 1:45 pm | Session Adjourned & Break | 5:45 pm | Adjournment |