

TRACK J ADVISORY BOARD & DESCRIPTION

The draft program lists papers accepted for presentation in Track J: Transportation Electrification, It includes . Advance Clean Trucks - AFV & ZEV & Fleets, Electric Trucks, Buses, Off-road & Fleet, Advanced Transportation Tech, Fuel Cell, H2, Ultra Clean LD/MD/HD, FLEET, Battery, Storage & Fast Charging Systems, CARB Regs, Incentives & Funding, AB739, FLEET Law, VW Funding, Battery Storage, Net Metering, Grid Management, Residential & Commercial Charging Station Infrastructure,



Monday | 1PM - 3PM

J1. SB350 TRANSPORTATION ELECTRIFICATION

- J1.1 UPCOMING CALIFORNIA ZEV REGULATIONS FOR HEAVY-DUTY VEHICLES**
Paul Armeja, Air Resources Engineer, California Air Resources Board (CARB)
- J1.2 CLEAN ENERGY PATHWAY EFFORTS IN THE PORT OF LONG BEACH**
Damon Hannaman, Sr. Advisor, Key Accounts, Southern California Edison
- J1.3 CLEAN AND ELECTRIC VEHICLES FOR BAY AREA DISADVANTAGED COMMUNITIES**
Ranyee Chiang, Technology Implementation Officer, BAAQMD; Tin Le

Monday | 3:30PM - 5:30PM

J2. ADVANCE CLEAN TRUCKS - AFV & ZEV & FLEETS

- J2.1 TROPUS ABLE - HOW DOWNSIZING TO AN ECUV CAN SAVE THOUSANDS**
Jeff Esfeld, Director National Fleet Sales & Business Devlpmnt, Tropus Technologies, Inc.
- J2.2 VIABILITY OF ELECTRIC VEHICLES IN THE LOGISTIC/TRANSPORTATION INDUSTRY**
Heidi Rous, Director, ESA; Jeff Caton
- J2.3 THE ELECTRIFICATION OF COMMERCIAL TRANSPORTATION**
Jim Castelaz, Co-Founder and CEO, Motiv Power Systems
- J2.4 IN-WHEEL ELECTRIFIED HUBS FOR TRAILERS AND TRUCKS**
Caleb Lander, Product Manager - Electrification, ConMet
- J2.5 MANAGING WITH ELECTRICITY**
Kenneth Williams, Fleet Asset Superintendent, City of Kansas City / Aviation Department

Tuesday | 7:30AM - 9:30AM

J3. EV, PHEV, HYBRID, FLEET SUSTAINABILITY

- J3.1 PRELIMINARY ROUTING FOR A NATIONAL LABORATORY COMMUTING PROGRAM**
Amy Moore, Transportation Planning Engineer, Oak Ridge National Laboratory
- J3.2 LOCAL GOVERNMENT'S ROLE IN INCREASING EV ADOPTION IN SAN FRANCISCO BAY**
Rebecca Fisher, Staff Specialist, Bay Area Air Quality Management District; Mark Tang
- J3.3 THE ELECTRIC VEHICLE DISCOVERY CENTRE - EV MARKET TRANSFORMATION**
Cara Clairman, President and CEO, Plug 'n Drive; Davorka Cvilkovic

Tuesday | 10AM - 12PM

J4. MICRO-GRIDS, NET METERING, UPS

- J4.1 INTEGRATING ELECTRIC VEHICLE CHARGING INTO MICROGRID OPERATION**
Azhar Ul Haq, Assistant Professor, National University of Sciences & Technology; Saifullah Awan, Aqib Perwaiz
- J4.2 FAST DC CHARGING WITH MINIMUM GRID UPGRADE**
Heesoo Lee, General Manager, Energy Systems, AVM

Tuesday | 1PM - 3PM

J5. FLEET O&M SOFTWARE & OFF-ROAD EQUIP

- J5.1 PRACTICAL BENEFITS AND LIMITATIONS OF ENERGY STORAGE**
Carl Salas, Founding Principal, Salas O'Brien
- J5.2 FUTURE OF ELECTRIC & HYBRID-DRIVE SYSTEMS IN COMMERCIAL & OFF ROAD EQUIP.**
Marilyn Tarbet, Director, New Business Development, Power Systems Research
- J5.3 FIVE LESSONS FROM A DECADE OF EV FLEET MANAGEMENT**
Matt Stevens, VP, Electric Vehicles, Geotab

Tuesday | 3:30PM - 5:30PM

J6. ULTRA CLEAN LD/MD/HD

- J6.1 A MACROECONOMIC ASSESSMENT OF TRANSPORTATION ELECTRIFICATION**
Edward Carr, Senior Research Analyst, Energy and Environmental Research Associates; James Winebrake, Erin Green
- J6.2 DATA INSIGHTS: STAYING COMPETITIVE IN A CONNECTED VEHICLE WORLD**
Gary Schmidt, Vice President of Business Solutions, Zonar
- J6.3 HIGH EFFICIENCY, LOW EMISSIONS DRIVE MARKET ADOPTION OF THE OP ENGINE**
David Johnson, President and CEO, Achates Power
- J6.4 RETROFITTING CLASS 2 HYBRID VEHICLES WITH ELECTROCHEMICAL CAPACITOR**
Toshihiko Furukawa, Senior Manager / Global Engineering, United Chemi-Con, Inc.
- J6.5 NEAR-ZERO AND ZERO-EMISSION TRUCKS AT THE PORT OF LOS ANGELES**
Tim DeMoss, Air Quality Supervisor, Port of Los Angeles; Jacob Goldberg

Wednesday | 7:30AM - 9:30AM

J7. UTILITY FLEET

- J7.1 CHARGE THE NORTH: CHARACTERIZING ELECTRIC VEHICLE CHARGING PROFILES**
Eric Mallia, General Manager, FleetCarma
- J7.2 ELECTRIC FLEETS: MOVING BEYOND PILOTS FOR THE REAL BENEFITS**
Paul Stith, Director of Strategy & Innovation, Black & Veatch
- J7.3 GOVERNMENT VEHICLES - HOW TO AFFORD "GOING GREEN"**
Bob Crowe, Vice President Sales, Acme Auto Leasing; Joanne Cornier
- J7.4 THE ELECTRIFICATION CHECKLIST: MAKING THE RIGHT XEV DECISIONS**
Natalie Weimer, Marketing Manager, XL - The Fleet Electrification
- J7.5 LARGE FLEET ADOPTION OF ELECTRIC PROPULSION**
Michael McDonald, Sr. Director of Sustainability & Gov't Affairs, United Parcel Service (UPS)

Wednesday | 10AM - 12PM

J8. CARB REGS, AB739, FLEET LAW, VW FUNDING

- J8.1 VW FUNDING OPPORTUNITIES**
Eric Brown, Air Pollution Specialist, California Air Resources Board (CARB); Patrick Chen
- J8.2 DIVIDEND - ACCOUNT PARKING: FEASIBLE & ENFORCEABLE MITIGATION**
Michael Bullock, Transportation Committee Chair, Sierra Club, Evolved Wireless, Inc.
- J8.3 LEVERAGING LOCAL SUPPORT WITHIN A GLOBAL SUPPLY CHAIN**
Wesley Brandon, President, CTEMS, Engineering and Manufacturing Services
- J8.4 HYBRID AND ZERO-EMISSION TRUCK AND BUS VOUCHER INCENTIVE PROJECT - HVIP**
Patrick Chen, Air Pollution Specialist, California Air Resources Board

ADVISORY BOARD



This Track provides presentations on current technologies and strategies, concerning energy storage, batteries, charging, EV, and PHEV








Monday | 1PM - 3PM

J1. EV CHARGING HYBRID & FLEETS

-  **J1.1 HYBRIDIZATION OF COMMUTER PASSENGER RAIL**
Dave Cook, CTO, Rail Propulsion Systems
-  **J1.2 ELECTRIFYING FLEETS: CAN IT BE DONE?**
CO-CHAIR - Glenn Carver, VP of Sales, Green4U Technologies, Inc.; Tim Echols, State of Georgia
-  **J1.3 LARGE BATTERY ENERGY STORAGE: STATIONARY AND V2G**
Paul Scott, VP - Advanced Technologies, TransPower; Joshua Goldman
-  **J1.4 MODELING ENERGY- SAVING FREIGHT DELIVERY SCENARIOS**
Amy Moore, Postdoctoral Research Associate, Oak Ridge National Laboratory
-  **J1.5 EV TO GRID INTEGRATION - HOW IT WORKS. WHY IT MATTERS.**
Preston Roper, Chief Marketing & Operating Officer, eMotorWerks
-  **J1.6 DRIVE ON SUNSHINE WITH ENVISION SOLAR'S EV ARC**
Lucia Asbury, Marketing Manager, Envision Solar

Monday | 3:30PM - 5:30PM

J2. BATTERY, ENERGY STORAGE & TRANSPORTATION

-  **J2.1 HEAVY RAIL WAYSIDE ENERGY STORAGE SYSTEMS FOR PASSENGER AND FREIGHT**
Brian Yanity, Research Engineer, Rail Propulsion Systems
-  **J2.2 ELIMINATING THE HARM OF BUNDLED-COST OR BUNDLED-BENEFIT CAR PARKING**
CO-CHAIR - Michael Bullock, Transportation Advisor, Evolved Wireless, Inc.
-  **J2.3 OPTIMIZING POWER PLANTS USING ENERGY STORAGE SYSTEMS**
Dalia El Tawy, Director, Thermal Power Solutions, Siemens Energy Inc.
-  **J2.4 LITHIUM ION BATTERY SAFETY MONITORING**
Steve Cummings, Sr. Applications Engineer, Nexceris; Nick Frank, Scott Swartz, William Dawson
-  **J2.5 ROLLING ENERGY STORAGE-ELECTRIC VEHICLES * CHARGING**
Kevin Wood, Transportation Specialist, Center for Sustainable Energy
-  **J2.6 HIGH UTILIZATION LOCAL ACCESS, (HULA) DEPLOYING THE TRANSPORTATION AS A SERVICE MODEL**
Peder Norby, and Angus Clark, CEO HulaCar,
-  **J2.7 ELECTRIFYING THE FUTURE: ELECTRIC VEHICLE CHARGING INFRASTRUCTURE**
Nicole Lewandowski, Sales Manager, SemaConnect

Tuesday | 7:30AM - 9:30AM

J3. ENERGY STORAGE SYSTEMS

-  **J3.1 IMPLICATIONS DUE TO THE ABSENCE OF USE CASE TESTING STANDARDS**
Cory Schaeffer, Senior Consultant, Leidos Engineering
-  **J3.2 THE VALUE OF OPTIONALITY IN DEPLOYING GRID STORAGE**
Co-Chair - Max Henrion, CEO, Lumina Decision Systems; Kimberly Mullins
-  **J3.4 RECENT ENERGY STORAGE PROJECTS COMPLETED AT SOUTHERN CALIF. EDISON**
Jennifer Lee, Principal Manager, Emerging Technology & Valuation (ET&V), Southern California Edison
-  **J3.5 PLANNING FOR INTELLIGENT DISPATCH OF ESS**
John H. Holmes, Industry Alliance Officer, University of California San Diego
-  **J3.6 SOLAR BATTERY PACK - DEMAND SIDE MANAGEMENT PROGRAM**
Jimmy Kim, CEO, SolarBox®, Irvine, Ca







Tuesday | 10AM - 12PM

J4. BATTERY PACK DSM GRID & STORAGE

-  **J4.1 CHALLENGES IN LIB MATERIAL DEVELOPMENT FOR ENERGY STORAGE APPLICATIONS**
CO-CHAIR - Dee Strand, Chief Scientific Officer, Wildcat Discovery Technologies
-  **J4.2 OPERATIONAL CHANGES ON LIFE AND PERFORMANCE**
Taylor Kelly, Director of Energy Storage, Intertek
-  **J4.3 MODELING AND EVALUATING HYBRID SOLAR-HYDROGEN FUEL CELLS**
Ehsan Kamel, Assistant Professor, New York Institute of Technology; Nicolas Vizcaino
-  **J4.4 DEPLOYMENT OF EOS' ZNYTH BATTERY & REAPING ECONOMIC BENEFITS IN CA**
Philippe Bouchard, SVP, Business Development & Marketing, Eos Energy Storage
-  **J4.5 EV CHARGING STATIONS IN SAN DIEGO BUILDINGS**
David Gatcha, Relations Ambassador/Multifamily Properties, Verdani Partners
-  **J4.6 TESLA POWER WALL - FEASIBILITY WITH DEMAND CHANGES**
John Perkins, Perk Solar




Tuesday | 1PM - 3PM

J5. EV, STORAGE & ONSITE POWER

-  **J5.1 MAINTAINING SYSTEM VOLTAGE WITH BATTERY STORAGE**
Ashley Johnson, Business Development Director, GP Strategies; Gary Tindall, AES Corporation; Craig Dalziel
-  **J5.2 ENERGY GENERATION AND STORAGE USING FLOATING PV PLANT ON LAKE MEAD**
CO-CHAIR - Ehsan Kamel, Assistant Professor, New York Institute of Technology; Peter Baron
-  **J5.3 TRUE LONG DURATION ENERGY STORAGE**
Matthew Barnett, Business Development Director, Highview Power
-  **J5.4 C-FREE HYDROGEN FUEL EFFICIENCY STORED AND DELIVERED FOR TRANSPORT**
Bill Leighty, Director, The Leighty Foundation; Jack Swearingen, David White, Matthew Kern, WindToGreen, LLC
-  **J5.5 LINKER-CONTROLLED POLYMERIC PHOTOCATALYST FOR HIGHLY EFFICIENT HYDROGEN**
Yiou Wang, PhD Student, University College London
-  **J5.6 ENABLING LARGE SCALE RENEWABLES IN THE WESTERN U.S.**
Robert Schulte, Principal, Schulte Associates; Fredric Fletcher

Tuesday | 3:30PM - 5:30PM

J6. ENERGY STORAGE TECHNOLOGIES

-  **J6.1 ENERGY STORAGE < \$ 1.00 / KWH CAPEX: HYDROGEN & AMMONIA FUELS**
CO-CHAIR - Bill Leighty, Director, The Leighty Foundation
-  **J6.2 LIFE AND SAFETY OF LITHIUM-ION**
Taylor Kelly, Director of Energy Storage, Intertek
-  **J6.3 ENERGY STORAGE AT GROUNDWATER BANKS**
Mark Beuhler, General Manager, Willow Springs Water Bank; Lon W. House, Water and Energy Consulting
-  **J6.4 HYDROGEN AS ENERGY STORAGE MEDIUM AND FUEL FOR SIGT**
Joshua Partheepan, Assistant Professor, West Texas A&M University, Emily Hunt
-  **J6.5 ECONOMIC DISPATCH OF LIQUID AIR POWER & STORAGE**
William Conlon, President, Pintail Power LLC;
-  **J6.6 INCREASE GRID RESILIENCY AND COMBAT EXPENSIVE PEAK DEMAND CHARGES**
Carl Mansfield, General Manager & Founder, Sharp's Energy Systems and Services Group

Wednesday | 7:30AM - 4:30 PM

Workshop 3 - Room 3:
Fundamentals and Practical Aspects of Waste Heat Recovery
Wednesday March 7, 2018 (7:30 to 4 pm)

Clement Joly, SoftInWay
Email: Clement.joly@Softinway.com
Phone: 316-680-0839



This workshop will provide engineers working in the energy and utility space with a better understanding of what waste heat recovery systems are in the context of nuclear, fossil and renewable energies. The workshop will cover everything from assessment, opportunities, development and challenges for waste to energy processes to fluid properties and selection while diving into thermodynamic cycles and design of waste heat recovery system components using both theoretical and real-life examples.

TO REGISTER FOR THIS WORKSHOP

CONTACT : info@euec.com

COST \$300 for EUEC registrants

Wednesday | February 8 | 1PM - 3PM

J1. CHARGING & TRANSPORTATION

J1.1 DEPARTMENT OF ENERGY'S WORKPLACE CHARGING CHALLENGE

Co-Chair - Carrie Giles, Manager, ICF International



J1.2 CLIMATE-STABILIZING, CALIFORNIA LIGHT-DUTY VEHICLE REQS & ARB GOALS

Co-Chair - Mike Bullock, Transportation Committee Chair, Sierra Club



J1.3 SAFETY AS A SERVICE: INNOVATIONS IN CLOUD-BASED VIDEO

Blake Gasca, CEO, MuHu



J1.4 HYBRIDIZATION OF INTERCITY PASSENGER RAIL

Dave Cook, CTI, Rail Propulsion Systems



J1.5 A NEW FUELING NETWORK - CHALLENGES, OPPORTUNITIES AND APPLICATIONS

Michael Jones, Vice President Sales, NA West, ChargePoint

Wednesday | February 8 | 3:30PM - 5:30PM

J2. EV & PHEV

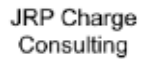
J2.1 ELECTRIC VEHICLES: THE KEY TO ENERGY INDEPENDENCE AND SECURITY

Co-Chair - Alex Wong, Sr. Structure & Pricing Analyst, The Energy Authority; Enes Hosgor, EEme



J2.2 PLUG-IN HYBRID VEHICLE IMPROVEMENT WITH COMBINED OF BATTERY WITH DLCAP

Toshihiko Furukawa, Senior Manger, United Chemi-Con; Naoki Akiba, Takahiro Kikuta & Shin Watanabe Nippon Chemi-Con Corp



J2.3 "EMPOWER THE PEOPLE" - EV CHARGING TOOLKIT FOR APARTMENTS AND CONDOS

Joel Pointon, Principal, JRP Charge Consulting



J2.4 ENERGY STORAGE & MGMT FOR TRANSPORTATION & STATIONARY ENERGY USE

Andrew Frank, CTO, Efficient Drivetrains Inc.



J2.5 EV TO GRID INTEGRATION - HOW IT WORKS? WHY IT MATTERS?

Chris Neff, Director of Marketing, eMotorWerks; Val Miftakhov



J2.6 NAVIGATING THE CONNECTED LANDSCAPE IN ELECTRIC VEHICLES

Session Sponsor & Co-Chair - Safiyah Khan, Product Mkt Mgr., CLEARresult; Thor Hinckley

Thursday | February 9 | 7:30AM - 9:30AM

J3. BATTERY & STORAGE SYSTEMS

J3.1 ENERGY STORAGE AND AUTOMATED DEMAND RESPONSE

Co-Chair - Barry Haaser, Managing Director, OpenADR Alliance



J3.2 GRID SCALE ENERGY STORAGE PROSPECTS AT ISO/RTO

Co-Chair - Rao Konidena, Principal Advisor, Midcontinent ISO



J3.3 FUELING THE ENERGY STORAGE REVOLUTION

Andrew Miller, Analyst, Benchmark Mineral Intelligence



J3.4 IMPACT OF ELECTRIC VEHICLES ON COMMERCIAL DISTRIBUTION SYSTEMS

Sungwoo Bae, Assistant Professor, Yeungnam University; M. Arias, J. Kim & S. Jeon

Thursday | February 9 | 10AM - 12PM

J4. BATTERY & STORAGE

J4.1 RISK ASSESSMENTS FOR BATTERY STORAGE SITES

Co-Chair - Jane Besch, Principal, Geosyntec; Dr. Eric Peterson, MMI Engineering



J4.2 OPTIMIZING THE DESIGN OF TURNKEY SOLUTIONS

Mike Tripodi, Principal Engineer, Girtz Industries; Brent Beissler



J4.3 ASSURANCE IN ENERGY STORAGE SYSTEMS: IDENTIFYING AND MINIMIZING RISK

Haiwen (Howard) Liu, Sr. Staff Engineer/Engineering Team Lead, Intertek Testing Services NA, Inc.; Brad Affeldt



J4.4 BATTERY SYSTEM DEVELOPMENT: ADDRESSING KEY TOPICS IN TERMS OF SAFETY

Co-Chair - Greg Maguire, Founder & VP of Sales & Marketing, Adara Power; Neil Maguire



J4.5 FREQUENCY REGULATION ENERGY STORAGE SYSTEM IN KOREA

David Nickerson, Director of Business Development, LSIS Co., Ltd.; Joowon Yoon

Thursday | February 9 | 1PM - 3PM

J5. BACK-UP POWER & ENERGY STORAGE

J5.1 ENERGY STORAGE APPLICATIONS IN COGENERATION POWER PLANTS

Co-Chair - Joel Wilson, Senior Engineering Manager, MMR Power Solutions



J5.2 MEDIUM VOLTAGE HEATING SYSTEMS ENABLE THERMAL ENERGY STORAGE SOLUTIONS

David Taylor, Energy Market Sales Manager - Americas, Chromalox



J5.3 MODULAR LNG: ALTERNATIVE BACK-UP ENERGY SUPPLY FOR POWER GENERATORS

Co-Chair - Michael Nicoloro, Senior VP, Sanborn, Head & Associates; Joan Fontaine



J5.4 DESIGN AND CONTROL OF AN INTERLEAVED POWER CONVERTER

Woonki Na, Assistant Professor, Cal St Univ-Fresno; Min-Keuk Kim, KDSYTEK; Joonghoon Kim, Chungnam National University

Thursday | February 9 | 3:30PM - 5:30PM

J6. ENERGY STORAGE TECHNOLOGY

J6.1 JCESR - A NEW PARADIGM FOR ENERGY STORAGE RESEARCH

Devin Hodge, Deputy Director for Operations, Argonne National Laboratory



J6.2 GWH ENERGY STORAGE AT < \$ 1.00/KWH CAPEX: HYDROGEN & AMMONIA FUELS

Co-Chair - Bill Leighty, Director, The Leighty Foundation



J6.3 VANADIUM FLOW BATTERY - LONG TERM ENERGY STORAGE ASSET

Matthew Maiers, Business Development - North America, Gildemeister Energy Storage



J6.4 EARLY STAGE CAPITAL FOR DISRUPTIVE ENERGY

Co-Chair - Marilyn Waite, Senior Manager, Village Capital




J1. FLEET

-  **J1.1 A CLIMATE-STABILIZING CALIFORNIA FLEET, VERSUS AIR RESOURCE BOARD GOALS**
Co-chair - **Michael Bullock**, Transportation Committee Chair, Sierra Club
-  **J1.2 HOW CITY FLEETS CAN BECOME A CATALYST FOR A NATIONAL EV TRANSIT**
Amy Lopez, Director of Corporate Engagement, Electrification Coalition
-  **J1.3 MAKING FLEET TELEMATICS DATA ACTIONABLE AND MATTER**
Co-chair - **Norma Havens**, Co-National Sales Manager, USA Fleet Solutions; Bob Belknap
-  **J1.4 COMING CHALLENGE TO US SUBURBIA, GROWING CHINESE CAR FLEET**
Alexandra Malazdrewicz, Burns School of Management; Stephen Sewalk & Lydia Patton






J2. EV, PHEV & CHARGING

-  **J2.1 INTELLIGENT ELECTRIC VEHICLE CHARGING SYSTEM**
Prateek Saxena, Director, Tech Mahindra
-  **J2.2 COMPREHENSIVE EV FAST CHARGING SOLUTIONS FOR 21ST CENTURY UTILITIES**
Co-chair - **Paul Glenney**, Director, Products & Services, NRG EVgo; Michael Krauthamer
-  **J2.3 ZERO-EMISSION VEHICLE MARKETS: DISADVANTAGED COMMUNITIES & CALIFORNIA**
Brett Williams, Sr. Project Manager, EV Initiatives, CSE; John Anderson & Ria Langheim, CSE
-  **J2.4 VEHICLE-GRID INTEGRATION USING ISO/IEC 15118 GLOBAL INTEROPERABILITY STANDARD**
Stephen Davis, CEO, KnGrid; Mike Ferry & Michelle Bogen, Center for Sustainable Energy
-  **J2.5 USING THE FLEET OF PHEVS FOR ENERGY STORAGE OF BOTH SOLAR AND WIND**
Co-chair - **Andrew Frank**, CTO, Efficient Drivetrains Inc.; Andrew A Frank & JJ DeMauro
-  **J2.6 INFORMATION CHANNELS FOR REACHING PLUG-IN ELECTRIC VEHICLE CONSUMERS**
Clair Johnson, Transparency Specialist, Center for Sustainable Energy; Brett Williams

J3. BATTERY & STORAGE SYSTEMS

-  **J3.1 ACTIA EV SOLUTIONS**
Co-chair - **Greg Fritz**, EV Business Unit Manager, ACTIA Corp
-  **J3.2 ENERGY STORAGE + EV CHARGING - DRIVING ELECTRIC VEHICLE ADOPTION**
Vic Shao, CEO, Green Charge Networks; Anne Smith
-  **J3.3 BUSTING MYTHS & BREAKING GROUND: VEHICLE TO GRID STORAGE FRONTIER**
Co-chair - **Scott Fisher**, Director of EV to Grid, NRG EVgo; Niki DeLeon
-  **J3.4 IMPROVE FUEL CONSUMPTION WITH ENVIRONMENTAL FRIENDLY DLCAP**
Toshihiko Furukawa, Senior Manager/Engineer, United Chemi-Con




J4. BATTERY & STORAGE

-  **J4.1 GRID-SCALE ENERGY STORAGE PROVIDING COST-EFFECTIVE PEAKING CAPACITY**
Co-chair - **Kiran Kumaraswamy**, Director, AES Energy Storage; Kate McGinnis
-  **J4.2 ENERGY STORAGE USED FOR FREQUENCY REGULATION & GRID FIRING**
Co-chair - **Paul B. Scott**, VP Tech., Transpower; David Rosewater, Sandia Corporation
-  **J4.3 LEGAL ISSUES AND OPPORTUNITIES FOR ENERGY STORAGE SYSTEM PROJECTS**
Chris Locke, Farella Braun + Martel LLP; Steven Branoff, Ramboll Environ, Inc.
-  **J4.4 AN ADVANCED LEAD-ACID BATTERY FOR INTEGRATION WITH RENEWABLE ENERGY**
Collin Mui, Lead Nanofabrication Engineer, Gridtential Energy, Inc., Daniel Moomaw, Steve Hinojosa & Christiaan Beekhuis
-  **J4.5 HIGHER LEVELS OF RENEWABLES W/ GRID-SCALE COMPRESSED AIR ENERGY STORAGE**
Lincoln Bleveans, Pwr. Resources Mgr., Burbank Water & Power; R. Schulte, Schulte & Asso.

J5. BACK-UP PWR & THERMAL ENERGY STORAGE

-  **J5.1 THERMAL ENERGY STORAGE - "VIRTUAL BATTERIES"**
Co-chair - **Guy Frankenfield**, Manager - TES & Biofuels, DN Tanks
-  **J5.2 BACK-UP POWER: ADVANCED FUEL CELL TECH. PROTECTING 21ST CENTURY APPLICATIONS**
Vito Coletto, Director of Sales, Alteryx Systems
-  **J5.3 HYDROGEN AS ENERGY STORAGE & FUEL FOR STEAM INJECTED GAS TURBINE PLANT**
Co-chair - **Joshua Partheepan**, Research Assistant, West Texas A&M University; William Jim Rogers, West Texas A&M University; Edward Hinders, Paramount Energy West
-  **J5.4 ANODE MATERIAL USING HIERARCHICAL MICRO-LAMELLA 3D POROUS CU CURRENT**
Hyeji Park, Student, Kookmin U; Um & Sung, Seoul National U; Choi & Choe, Kookmin U
-  **J5.5 VANADIUM REDOX FLOW BATTERIES - UTILITY AND DISTRIBUTED ENERGY VALUE**
Matthew Maier, Business Development - North America, GILDEMEISTER energy storage

J6. UPS, FLOW & LI-ION BATTERIES

-  **J6.1 DEVELOPMENT OF LITHIUM ION BATTERY MATERIALS FOR GRID APPLICATIONS**
Co-chair - **Dee Strand**, Chief Scientific Officer, Wildcat Discovery Technologies; Ye Zhu
-  **J6.2 FIRE SAFETY AWARENESS OF LITHIUM ION BATTERIES**
Matt Dunn, Principal, AECOM
-  **J6.3 COST REDUCTIONS FOR LITHIUM ION BATTERIES THROUGH TECHNOLOGY**
Co-chair - **Dr. Rajshekar DasGupta**, Vice President Technology, Electrovaya
-  **J6.4 BEYOND BATTERY MGMT: ENABLING ESS INTEGRATION IN GRID ECOSYSTEMS**
Michael Worry, President and CEO, Nuvation Engineering
-  **J6.5 SEAWATER FLOW BATTERY FOR CLEAN COLD-IRONING & FLEET VEHICLE FUELING**
Peter Schubert, Professor, Indiana University-Purdue University Indianapolis
-  **J6.6 SGiM ADVANCED BATTERIES**
Pavel Bulai, CEO, SGiM; Boksha, Tompa, Ziegenbalg, Jewell, Chow, Foster, Hogan, Progler, Salagaj, Ryjov, Zavorotnyi, Saeed, AlDamer, Molchanov, Strukov, Golubeva & Pitlik