UNITED Scientific Group
A non-profit organization

GEM-2024
March 04-08, 2024 | Los Angeles, CA

Eighth Edition of

GLOBAL ENERGY MEET

March 4-6, 2024 | Los Angeles, CA

March 7-8, 2024 | Online

Four Points by Sheraton
Los Angeles International Airport

Supporting Sponsor

ASME DIGITAL COLLECTION

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www.globalenergymeet.com

MEETING JOINING LINK (LIVE STREAMING ON ZOOM PLATFORM)

March 4-8, 2024

Topic: 8th Edition of Global Energy Meet
March 04-08 | Los Angeles, CA | Hybrid | Pacific Standard Time

Join Zoom Meeting
https://us06web.zoom.us/j/85824161595?pwd=poy42i8apz4cOhS9rzaqawFlcBU9g7.1
Meeting ID: 858 2416 1595
Passcode: 969526

ZOOM PLATFORM VIRTUAL MEETING INSTRUCTIONS

Join the Zoom Meeting

Join the meeting by clicking on a Zoom meeting link provided by the meeting host => follow the prompts to download and run Zoom => enter the meeting ID if prompted => click to join the audio (OR)
if you already have Zoom software installed in your system, simply open Zoom application, click 'join' and enter the meeting code.

Mute/Unmute & Audio Settings

Except for the chairman/moderator and the speaker, all attendees microphones will be muted by the host.

Q&A - Chat Function

The participants will submit their questions through the chat function and the moderator / chair of the session will pick the questions for the discussion.
To direct your question, tag the speakers name to the questions as you submit them to the chat (e.g., For Dr. Will Torres – Question 1).

Audience

We are anticipating over 250+ attendees who will come from a range of professional backgrounds with a varied level of knowledge and expertise in technical and commercial aspects across the subject area.

For Speakers

You will be allowed to share your screen during your presentation.
Session chair will pick the questions from the participants and asks the speaker depending on the time available. In case if more questions are left in the chat box, we encourage speakers to answer via chat and continue the discussion.

Recording

The session will be recorded for training purpose and some for the video library. Most of the speakers have already consented to recording their presentation but please inform us otherwise if you have some content which should not be recorded.

If you have trouble in login or any technical issues, please write to contact@uniscigroup.net or call us at 469-854-2281.

DAY-1

In-Person

Monday, March 4, 2024

@ California B, C

Join the meeting
https://us06web.zoom.us/j/85824161595?pwd=poy42i8apz4c0hS9rzaqawFlcBU9g7.1
Meeting ID: 858 2416 1595
Passcode: 969526

07:30-07:45	Registrations & Badge Pickup	@ Foyer Area
07:45-08:00	Opening Remarks & Introduction	

Plenary Presentations

Moderator: Charles E. Sprouse III, Benedictine College, Atchison, KS

08:00-08:35

Transforming Energy Demands: AI and Optimization Tools

Panos M. Pardalos, University of Florida, Gainesville, FL

Panos M. Pardalos is a Distinguished Emeritus Professor in the Department of Industrial and Systems Engineering at the University of Florida, He is a Fellow of AAAS, AAIA, AIMBE, EUROPT, and INFORMS and was awarded the 2013 Constantin Caratheodory Prize of the International Society of Global Optimization. In addition, He has been awarded the 2013 EURO Gold Medal prize bestowed by the Association for European Operational Research Societies. This medal is the preeminent European award given to Operations Research (OR) professionals for "scientific contributions that stand the test of time." He has been awarded a prestigious Humboldt Research Award (2018-2019). The Humboldt Research Award is granted in recognition of a researcher's entire achievements to date – fundamental discoveries, new theories, insights that have had significant impact on their discipline.

08:35-09:10

Hybrid Solar PV, CSP and Thermal Energy Storage for Baseload Power, Industrial Process Heat and Solar Fuels

Yogi Goswami, University of South Florida, Tampa, FL

D. Yogi Goswami is a Distinguished University Professor and Director of the Clean Energy Research Center at the University of South Florida. He has published as an author or editor 23 books and more than 400 scientific papers. He is the editor-in-chief of Solar Compass, Journal of the International Solar Alliance. He also holds 34 patents and has been inducted in the Florida Inventors Hall of Fame. He is a recipient of the highest energy related awards of ASME, ASES, ISES and AAES and more than 50 other awards and certificates from major engineering and scientific societies. He has served as President of the International Solar Energy Society (ISES), a Governor and Senior Vice President of ASME International, and President of the International Association for Solar Energy Education (IASEE).

09:10-09:45

Jump Starting Hydrogen Economy with Seven Hubs Awarded

David Blekhman, Technical Director - Hydrogen Research and Fueling Facility, California State University, Los Angeles, CA

David Blekhman has been recognized as a Cal State LA Outstanding Professor and as the Fulbright Distinguished Chair in Alternative Energy Technology at Chalmers University of Technology in Sweden. and he led Cal State LA's EcoCAR team in international competitions for seven years, garnering the Green Leadership Award from the County of Los Angeles, the National Science Foundation Diversity in Engineering Award and the South Coast Air Quality Management District's 2018 Clean Air Award, among others. He is an internationally renowned author and presenter, He holds bachelor's and master's degrees in thermal physics and engineering from St. Petersburg State Polytechnic University in Russia, as well as a Ph.D. in mechanical engineering from the University of Buffalo in New York. When the Cal State LA Hydrogen Research and Fueling Facility opened in 2014, David Blekhman was named its technical director. The station was the first in the world to be certified to sell hydrogen by the kilogram directly to drivers, and it has hosted more than 10,000 students and industry professionals.

Keynote Presentations

09:45-10:15

Benefits and Challenges of California Offshore Wind Electricity

Adam Zachary Rose, University of Southern California, Los Angeles, CA

Adam Rose is a Research Professor in the University of Southern California Sol Price School of Public Policy, and Director Emeritus, Senior Research Fellow of USC's Center for Risk and Economic Analysis of Threats and Emergencies (CREATE). Previously, he held faculty and department chair positions in applied economics departments at The Pennsylvania State University and West Virginia University, as well as a faculty position at the University of California, Riverside. He received his PhD in economics from Cornell University, but has worked on interdisciplinary topics throughout most of his career.

10:15-10:35 Coffee Break @ Foyer Area

10:35-11:05

A Novel System for Transportable Green Hydrogen Production Utilizing Waste Heat in a Thermochemical CuCl Cycle

Kamiel Gabriel, Ontario Tech University, Canada

Kamiel Gabriel holds a Bachelor of Science (honors degree), and a Master of Science degree in Mechanical Engineering from the University of Alexandria, Egypt, and a Ph.D. degree from the University of Manitoba, Canada. He holds a diploma in Space Science from the International Space University (Strasburg, France), and an M.B.A. from the Edwards School of Business. He is an elected fellow of the Canadian Academy of Engineering (C.A.E.), a fellow of the Balsillie School of International Affairs (BSIA), and a Senior Fellow of the Institute for Science, Society and Policy (ISSP).

11:05-11:35

Harmonic Frequency Cascade: Oil Refining to Water Purification

Richard Coffin, Texas A&M University - Corpus Christi, College Station, TX

Richard Coffin is geochemist with a focus on evaluation of geochemical field data and seismic profiles related to; gas hydrate and oil exploration, carbon sequestration, environmental restoration and climate change. His experience includes lead and co-lead field and laboratory development and operations on all continents with colleagues from over 15 countries since 1989 from basic science to industrial focuses. Currently, he serves as Full Professor and Chair of the Department of Physical and Environmental Sciences at Texas A&M University Corpus Christi. Previously, USA. He earned a doctoral degree in oceanography from the University of Delaware, Lewes, Delaware, USA.

11:35-12:05

Advanced Materials Engineering for Next-generation Solid-state Energy Storage Technology

Alevtina White Smirnova, South Dakota School of Mines & Technology, Rapid City, SD

Alevtina White Smirnova is a tenured Professor at the South Dakota School of Mines and Technology. She serves as the Director of the NSF IUCRC Center for Solid State Electric Power Storage (www.GreenCEPS.com) and the Director of the South Dakota Governor's Research Center for Electrochemical Energy Storage. She co-authored over 100 peer-reviewed articles, 10 patents or patent disclosures, and 17 book chapters. She co-edited two books, one of them is focused on solid oxide fuel cell technology (ISBN:1-4020-3496-2) and the second one - on solid-state battery technology "Next-generation solid-state energy storage technology-a path to environmental sustainability" (ISBN: 978-0-323-90635-7).

Oral Presentations

Hydrogen Energy & Storage | Bio-energy

Chair: Yao Yu, North Dakota State University, Fargo, ND

12:05-12:25 **Salt Hydrate-based Thermochemical Energy Storage in Buildings**
Yao Yu, North Dakota State University, Fargo, ND

12:25-12:45 **H-Mat: Polymeric Materials for Hydrogen Technologies**
Wenbin Kuang, Pacific Northwest National Laboratory, Richland, WA

12:45-12:50 Group Photo

12:50-13:30 Lunch @ California A, D

13:30-13:50 **Thermal Desorption of Hydrogen from Water-soaked Lithium-cobalt Oxides at Room Temperature**
Bun Tsuchiya, Meijo University, Japan

13:50-14:10 **Effect of Current Collector thickness on Contact Resistance and Performance of a Cylindrical PEMFC**
Amit Bhosale, Indian Institute of Technology Roorkee, India

14:10-14:30 **Advancements in Temperature Estimation for Conventional Lithium-Ion Batteries and All-solid-state Batteries**
Shuxia Tang, Texas Tech University, LUBBOCK, TX

14:30-14:50 **A Trivalent Indium Metal as a High-capacity, High-efficiency, Low-polarization, and Long-cycling Anode for Aqueous Batteries**
Xianyong Wu, University of Puerto Rico-Rio Piedras Campus, San Juan, PR

14:50-15:10 **Breakthrough Zero-CO_2 Distributed Power Source**
Randell L. Mills, Brilliant Light Power, Cranbury, NJ

15:10-15:30 **Experiment and Modeling of Ice Energy Storage for Grid-interactive Efficient Buildings (GEB)**
Hailei Wang, Utah State University, Logan, UT

15:30-15:50 **Efficient Strategies to Accelerate Anodic Reactions in Electrolysis Systems for Hydrogen Production**
Rong He, National Renewable Energy Laboratory, Golden, CO

15:50-16:10 **Valorization of Animal Manures and Plastic Wastes through Wet and Dry Pyrolysis**
Kyoung Ro, USDA, Florence, SC

16:10-16:20 Coffee Break @ Foyer Area

16:20-16:25 **(E-Poster)**
Mechanically Refuellable Zinc-air Battery: A Safe and Sustainable Alternative for Large-scale, Long-duration Energy Storage
Akhil Kongara, Indian Institute of Technology Madras, India

16:25-16:45 **Forging a Path to Sustainable Bioproducts: Innovations in Microbial Engineering and Carbon Capture**
Nawa Baral, Lawrence Berkeley National Laboratory, Berkeley, CA

16:45-17:05 **Integration of Layered Unstacking Graphene for High Energy Density Li-ion Batteries (LIB)**
Tereza Paronyan, HeXalayer LLC, Louisville, KY

17:05-17:25 **Renewable Liquid Fuels from Woody Biomass**
Hemant Pendse, University of Maine, Orono, ME

17:25-17:45 **Develop an Efficient and Cost-effective Novel Anaerobic Digestion System Producing High-purity of Methane**
Liang Yu, Washington State University, Pullman, WA

17:45-18:05 **Performance Evaluation of a Clean Hydrogen Production System**
Ehsan Hosseini, Arkansas Tech University, Russellville, AR

18:05-18:25 **Potential Strains of Cyanobacteria in Biotechnology: Advances and Applications in Biofuels**
Bolatkhan Zayadan, Al-Farabi Kazakh National University, Kazakhstan

18:25-18:45 **Decarbonizing Hydrogen Supply Chain *via* Electrifying Endothermic Production Processes**
Ram R. Ratnakar, Shell International Exploration & Production, Houston, TX

18:45-19:45 Drinks @ California A, D

End of Day-1

DAY-2

In-Person

Tuesday, March 5, 2024

@ California B, C

Join the meeting
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Oral Presentations

Renewable Energy

Chairs: **Metin Turkay**, Koc University, Turkey
Ram R. Ratnakar, Shell International Exploration & Production, Houston, TX

08:10-08:30 **Performance Evaluation of a Novel Loop Heat Pipe-based BTMS Systems: An Experimental Investigation**
Vipul Mangalbhai Patel, Sardar Vallabhbhai National Institute of Technology Surat, India

08:30-08:50 **Renewable Energy Deployment in the Europe: Identifying Driving Factors and Bridging the Performance Gap**
Giacomo Di Foggia, University of Milano, Italy

08:50-09:10 **Additive Manufacturing for Advanced Thermal Management for Aerospace Propulsion Systems**
Zekai Hong, The University of Ottawa, Canada

09:10-09:30 **Integral Ecology Approach to Life Cycle Assessment: A Case Study on Energy and Building Systems Upgrades at a Benedictine Monastery**
Charles E. Sprouse III, Benedictine College, Atchison, KS

09:30-09:50 **Optimizing Solar Policy Support**
Anil Hira, Simon Fraser University, Canada

09:50-10:10 **The High Price U.S. Green Economy: A Specific Factors Modeling**
Osei Agyeman Yeboah, North Carolina A&T State University, Greensboro, NC

10:10-10:30 **Energy Saving during Washing due to Ultrasound (Online)**
Tobias Kimmel, Niederrhein University of Applied Sciences, Germany

10:30-10:50 Break @ Foyer Area

10:50-11:10 **Patented Snow/Ice Melting System with Solar Vacuum Tube**
Zuhal ER, Istanbul Technical University, Turkey

11:10-11:30 **Photovoltaic Penetration in the Island of Ikaria, Greece**
Dimitrios Rakopoulos, Centre for Research & Technology Hellas (CERTH), Greece

11:30-11:50 **Two-sided Electricity Auction Mechanism Incorporating X2G**
Christopher J. Sepka, University of California, Berkeley, CA

11:50-12:10 **Economic Pre-feasibility of Metarhizium Anisopliae Production by Solid-state Fermentation from Agroindustrial Residues in a Novel Tray Bioreactor**
Lina Maria Grajales, Federal University of Tocantins, Brazil

12:10-12:30 **Reinforcement Learning for Optimizing Energy Efficiency of Industrial Systems**
Metin Turkay, Koc University, Turkey

12:30-12:50	**Designing Metal Oxide-based Thermochemical Redox Materials and Processes: Solar Fuels and Energy Storage** **Ellen B. Stechel**, Arizona State University, Tempe, AZ	
12:50-13:30	Lunch Break	@ California A, D
13:30-13:50	**High Efficiency C2ZnSn(S,Se)4 Solar Cells *via* Ag and Li Co-alloying** **Edgardo Saucedo**, Polytechnic University of Catalonia · Barcelona Tech – UPC, Spain	
13:50-14:10	**Oilseeds and Products – Emerging Oil Processing Techniques, Current Trends and Contribution towards Renewable Energy Efficiency** **Abraham Kabutey**, Czech University of Life Sciences Prague, Czech Republic	
14:10-14:30	**Advanced Robust Control of Dynamic Virtual Power Plants for Renewables Contribution to Grid Ancillary Services** **Bogdan Marinescu**, Ecole Centrale Nantes-LS2N, France	
14:30-14:50	**Effectiveness of the Energy Efficiency Regulations on Electricity Saving and Co2 Emission Reduction in the Household Sector: An ARDL Model with Time-varying Coefficients and Synergistic Effects** **Chung Huang Huang**, National Tsing Hua University, Taiwan	
14:50-14:55	**(E-Poster)** **CoNi Bimetallic Engineering on Porous Carbon for High Energy Density Hybrid Supercapacitors** **Sang W. Joo**, Yeungnam University, South Korea	
15:00-18:00	**Tour to Cal State LA Hydrogen Research and Fueling Facility**	

End of Day-2

DAY-3

In-Person

Wednesday, March 6, 2024

@ California B, C

Join the meeting
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Meeting ID: 858 2416 1595
Passcode: 969526

Oral Presentations

Fossil Energy & Environmental Issues

Chair: Samy A. Alkhayat, Wayne State University, Detroit, MI

08:40-09:00 **Urban Heat Island and Pollutant Correlations in Bangalore, India using Geospatial Techniques (Online)**
Aneesh Mathew, National Institute of Technology, India

09:00-09:20 **Global Monitoring of Gas Flaring using VIIRS Nightfire Satellite Remote Sensing**
Tamara Sparks, Colorado School of Mines, Golden, CO

09:20-09:40 **Combustion Modeling of Hydrotreated Vegetable Oil (HVO) in a Compression Ignition Engine**
Samy A. Alkhayat, Wayne State University, Detroit, MI

09:40-10:00 **Enhanced Electrocatalytic Hydrogenation of Biomass-derived Organics at Solid/Liquid Interface**
Mal Soon Lee, Pacific Northwest National Laboratory, Richland, WA

10:00-10:20 **FEED Study of Carbon Capture Inc. DAC and Carbon Cure Utilization Technologies Using United States Steel's Gary Works Plant Waste Heat**
Leslie M. Gioja, University of Illinois at Urbana Champaign (UIUC- ISTC), Champaign, IL

10:20-10:40 Coffee Break @ Foyer Area

10:40-11:00 **Flash Chemistry Guided by Flow Microreactor Research**
Aiichiro Nagaki, Hokkaido University, Japan

11:00-11:20 **Production of Zeolites by Conversion of Kaolin for Application in the Process of Catalytic Cracking in Fluidized Bed**
Teresa Matoso Manguangua Victor, ISPTEC, Angola

11:20-11:40 **Long-term Impact of the Extraction of Fossil Energy Sources on the Surface Environment**
Andre Vervoort, KU Leuven, Belgium

11:40-12:00 **Development of Off Grid Charging Stations for Electric Vehicles**
Matthew Smith, University of Sheffield, UK

12:00-12:20 **A Combined Application of Solar and Wind Energy towards Decarbonization in the Philippines**
Ruth Anne Tanlioco Gonocruz, National Institute of Advanced Industrial Science and Technology, Japan

12:20-12:25 **(E-Poster)**
Techno-economic Feasibility Assessment of Lipases Production by Solid-state Fermentation from Agroindustrial Residues in a Pilot Tray Bioreactor
Lina Maria Grajales, Federal University of Tocantins, Brazil

12:25- Lunch & Departures @ California A, D

End of Day-3

DAY-4

Virtual

Thursday, March 7, 2024

Pacific Standard Time

Join the meeting
https://us06web.zoom.us/j/85824161595?pwd=poy42i8apz4c0hS9rzaqawFlcBU9g7.1
Meeting ID: 858 2416 1595
Passcode: 969526

08:15-08:30 Opening Remarks & Introduction

Keynote Presentations

Moderator: Steven G. Greenbaum, Hunter College of CUNY, New York, NY

08:30-09:00

Analysis of Thermodynamic Irreversibility Levels and Distribution for Enhancing Efficiency in Power Cycles with Application to SCO2 System

John O'Connell, University of Virginia, Charlottesville, VA

John P. O'Connell is Professor Emeritus of Chemical Engineering at the University of Virginia. He has been active in AIChE for more than 50 years. An AIChE Fellow for more than 25 of those years, he served as Fellows Chair from 2004 to 2011, and became founding Chair of the Fellows Council. He is currently the Fellows Council Secretary and Editor of the Fellows Newsletter. He served on AIChE's Board of Directors from 2015 through 2017. He has been involved in all levels of Institute programming — as a chair of many meeting sessions, He is the Chair of Group 1 and Area 1A (Engineering Sciences and Fundamentals; Thermodynamics and Transport Properties), and as a member of the Executive Board of the Program Committee.

09:00-09:30

Spectral Modulated Solar Harvesting *via* Transparent Nano Hybrids for Synergistic Photothermal-thermoelectric-photovoltaic Energy Generation

Donglu Shi, University of Cincinnati, Cincinnati, OH

Donglu Shi is currently the Chair of the Materials Science and Engineering Program at the University of Cincinnati. His research encompasses a wide range of fields, including nanoscience, energy materials, nano medicine, and condensed matter physics, resulting in more than 300 peer-reviewed journal publications including ones in Nature, Physical Review Letters, Advanced Materials, and ACS Nano. He is currently the Editor-in-Chief of Nano LIFE, Editorial Board of Biomaterials Advances, and Associate Editor of J. of Nanomaterials. He has received 2023 Rieveschl Award for Distinguished Scientific Research, SIGMA XI Research Recognition Award, and Neil Wandmecher Teaching Award. He is a Fellow of ASM International.

09:30-10:00

Numerical Simulation of Swelling Behavior of Elastomers in Oil and Gas Wells

Sayyad Zahid Qamar, Sultan Qaboos University, Oman

Zahid Qamar, Sayyad is a Professor of Mechanical Engineering Department at Sultan Qaboos University (SQU), Muscat, Oman. He has over 30 years of academic and research experience in different international universities. He has also worked as a professional mechanical engineer in the field for over 6 years in the heavy engineering and fabrication industry (Manager Research and Development; Deputy Manager Design; Production Engineer; Quality Control Engineer).

Oral Presentations

Renewable Energy

10:00-10:20 **Temperature Derived Fe Dissolution of a LiFePO4/Graphite Cell under Fast Charging Condition**
R. Prakash, ARCI, India

10:20-10:40 **Hydrogen Technology for Supply Chain Sustainability: The Mexican Transportation Impacts on Society**
Marisol Rico Cortez, Jonkoping University, Sweden

10:40-11:00 **Bioelectrodes and Light-activated Devices based on [FeFe] Hydrogenases**
Francesca Valetti, University of Torino, Italy

11:00-11:20 **Facile Synthesis of a Binder-free 3D Ni/NiO Microwire Network for Li-ion Batteries**
Mikhail Morozov, Kazan National Research Technical University named after A.N. Tupolev-KAI, Russia

11:20-11:40 **Geologic Energy Storage – Past Present and Future**
Avinoam Rabinovich, Tel Aviv University, Israel

11:40-12:00 **Smart Grids as Enabler of the Energy Transition: Future Trends**
Samuel Borroy Vicent, CIRCE, Spain

12:00-12:20 **Fault Diagnosis of PV Systems based on Percentage Scatter Plot by Standard Neural Network**
Cherifa Kara Mostefa Khelil, Blida University 1, Algeria

12:20-12:40 ***In-silico* Prediction of the Organic Solar Cell Performances**
Alessandro Landi, University of Salerno, Italy

12:40-13:00 **Keg Wine, A Sustainable Innovation**
Stephanie Pougnet Rozan, EHL Hospitality Business School, HES-SO, University of Applied Sciences and Arts Western Switzerland

13:00-13:20 Break

Chair: Jianchuan Tan, Pacific Northwest National Laboratory, Richland, WA

13:20-13:40 **Leveraging IoT Technology for Enhanced Microgrid Control: A General Analysis**
Jianchuan Tan, Pacific Northwest National Laboratory, Richland, WA

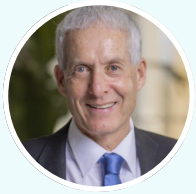
13:40-14:00 **Hydrogen Production and Value-added Chemical Recovery from the Photo-reforming Process using Waste Plastics**
Huiyao Wang, New Mexico State University, Las Cruces, NM

Plenary Presentation

14:00-14:35

The Fastest Energy Change in History

Andrew Blakers, The Australian National University, Australia



Andrew Blakers is Professor of Engineering at the Australian National University. In the 1980s and 1990s he was responsible for the design and fabrication of silicon solar cells with world record efficiencies. He was co-inventor of the PERC silicon solar cell, which has 90% of the global solar market, cumulative module sales of US$100 billion and is mitigating 1.5% of global greenhouse gas emissions through displacement of coal. Prof Blakers engages in analysis of energy systems with 50-100% penetration by wind and photovoltaics. His team developed a comprehensive global atlas of 616,000 off-river pumped hydro energy storage sites.

Oral Presentations

14:35-14:55 **Advanced Sodium Ion Batteries for E-mobility & Energy Storage**
Darren H. S. Tan, UNIGRID Battery, San Diego, CA

14:55-15:15 **Nuclear Magnetic Resonance Studies of Structure and Ion Transport in Novel Battery Electrolytes**
Steven G. Greenbaum, Hunter College of CUNY, New York, NY

15:15-15:35 **Decarbonization of Urban Water, Energy and Solids Management with Hydrogen Technologies**
Vladimir Novotny, Northeastern University, Boston, MA

15:35-15:55 **Deciphering the Solar Extreme Overirradiance Events**
Marco Antonio Zamalloa Jara, UNSAAC, Peru

15:55-16:15 **Towards 26% Efficient Solar Cells in Mass Production with Doped Poly-silicon Passivating Contacts**
Daniel Macdonald, The Australian National University, Australia

16:15-16:35 **Switchable Giant BODIPY-Fullerene Dyads with Single Crystal**
Selina X. Yao, Rivian, Newark, CA

16:35-16:55 **A Comprehensive Introduction of the World First Elevated and Conventional Turbine-generators Layout Design Double-reheat Coal-fired Power Unit**
Li Li, Shanghai Shenergy Power Technology Co., Ltd, China

16:55-17:15 **Production of Sustainable Aviation Fuel through a Biorefinery Scheme**
Claudia Gutierrez Antonio, Autonomous University of Querétaro, Mexico

17:15-17:35 **Novel Bioenergy Production Process from Industrial Waste through Acetic Acid Fermentation**
Harifara Rabemanolontsoa, Kyoto University, Japan

17:35-17:55 **Comprehensive Evaluation of Solar Electric Power for Industrial Applications**
Guillermo Martinez Rodriguez, University of Guanajuato, Mexico

End of Day-4

DAY-5

Virtual

Friday, March 8, 2024

Pacific Standard Time

Join the meeting
https://us06web.zoom.us/j/85824161595?pwd=poy42i8apz4c0hS9rzaqawFlcBU9g7.1
Meeting ID: 858 2416 1595
Passcode: 969526

06:30-06:40 Opening Remarks & Introduction

Oral Presentations

Fossil & Sustainable Energy

06:40-07:00 **Leveraging Palm Kernel Shells Gasification for Sustainable Decentralized Small-capacity Dual-fuel Power Generation**
Sunu Herwi Pranolo, Sebelas Maret University, Indonesia

07:00-07:20 **Multifunctional Catalysts for Selective Hydrocracking of Polypropylene to Liquid Hydrocarbons in Jet Fuel Range under Mild Condition**
Gillian Goh, A*STAR,ISCE2, Singapore

07:20-07:40 **Reduction in Limit of Detection of Fluorobenzoic Acids by Methyl Esterification Using UiO-66-NH2 as Heterogeneous Catalyst**
Anuj Kumar, Indian Institute of Technology Roorkee, India

07:40-08:00 **Role of Energy Efficiency in Energy Transition: A Decomposition Analysis of Energy Use**
Pooja Sharma, University of Delhi, India

08:00-08:20 **Friction Reducer in Water-based Mud: A Catalyst for Improved Drilling Efficiency in Extended Horizontal Well**
Mohamed Metwally, New Mexico Institute of Mining and Technology, Socorro, NM

08:20-08:40 **The Generation of Energy as a Result of Action of Spin Super Current**
Liudmila Borisovna Boldyreva, State University of Management, Russia

08:40-09:00 **Advancing Lubrication Technologies: Unleashing the Potential of Nanoparticles for Enhanced Tribological Performance and Moisture Detection**
Alfonso Fernandez Gonzalez, University of Oviedo, Spain

09:00-09:20 **Development of a new type of Glass-ceramic Electrolytes with the Improved Operation Parameters**
Anna V. Potapenko, Joint Department of Electrochemical Energy Systems, Ukraine

09:20-09:40 **Strategies for Future Sustainable Energy Systems**
Louise Odlund, Linkoping University, Sweden

09:40-10:00 Break

10:00-10:20 **An Innovative Approach to Transform Sour Saudi Natural Gas into Blue Hydrogen and Ammonia through Optimal Process Design, Simulation, and Optimization**
Abul Hassan Ali Quddusi, University of Jeddah, Saudi Arabia

10:20-10:40 **Accelerating Urban Road Transportation Electrification: Planning and Implementation Strategies for Connected Automated Shuttle Services**
Ata M. Khan, Carleton University, Canada

10:40-11:00 **Evaluation of Secondary Porosity Type in Carbonate Oil and Gas Fields using Acoustic Logging Data**
Irina Markova, Mexican Petroleum Institute, Mexico

11:00-11:20 **High-frequency Operation of an Aqueous Nano Capacitor**
Dusan Bratko, Virginia Commonwealth University, Richmond, VA

11:20-11:40 **Developing a Data-driven Framework for Regional Emission Budgeting**
Vania Sena, The University of Sheffield, UK

11:40-12:00 **Optimizing Design and Control in Tandem: Unleashing the Performance Potential of Energy Systems**
Himanshu Sharma, Pacific Northwest National Laboratory, Downers Grove, IL

12:00-12:20 **Social Impact of COVID-19 Electricity Subsidy on the Lifeline Citizen's Welfare in Ghana: Sharp Regression Discontinuity Design**
Ewurasi Boafowa Mensah, Hiroshima University, Japan

12:20-12:25 **(Poster Presentation)**
Determination of Radiological Stressors in Petroleum Drilling, Bitumen Exploration and Coal Mining Site in Southern Nigeria
Olalekan Olatunji, Keele University, UK

End of Day-5

Notes

We wish to see you again

Global Energy Meet

GEM-2025

March 03-05, 2025

Houston, TX

UNITED SCIENTIFIC GROUP

(A non-profit organization)

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