

# FINAL PROGRAMME

2nd International Conference on

## RENEWABLEENG-2024

Renewable and Sustainable Energy


NOVEMBER 25 - 26, 2024 | WEBINER



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# DAY 1 | NOVEMBER 25, 2024

**Time Zone: Beijing, Asia (GMT+8)**

**09:00-09:30 Opening Ceremony**

## Plenary & Keynote Session

**Conference Chair: Michael Patt, Germany**

09:30-10:10	P	<b>Title: Environmental, Social and Corporate Governance Management of K-Water with the Goal of RE100 in South Korea</b> Hyung-Man Kim, INJE University, South Korea
10:10-10:50	P	<b>Title: Carbon Negativity Achieved with a Novel Microalgal Cultivation Platform</b> Duu-Jong Lee, City University of Hong Kong, Hong Kong
10:50-11:30	P	<b>Title: Metal–Organic Architectures for Cascade Enzyme-Photocoupled Transformations for Renewable Energy</b> Chunying Duan, Nanjing University, China
11:30-12:05	K	<b>Title: Spectral Modelling of Typhoon Winds Considering Nexus between Longitudinal and Lateral Components</b> Tianyou Tao, Southeast University, China
12:05-12:40	K	<b>Title: Electrocatalytic Selective Removal of Lignin in Bamboo and Synergistical Generation of Green Hydrogen</b> Cai Junzhuo, Sichuan Agricultural University, China
12:40-13:15	K	<b>Title: From Oil Riches to Renewable Frontrunners: Norway and the UAE's Paths to Sustainable Energy Leadership</b> Matteo Chiesa, Khalifa University of Science & Technology, United Arab Emirates

## Invited Session

13:15-13:40	I	<b>Title: Research on Joint Operation of Cascade Hydropower Station Group and Wind Power Photoelectric</b> Liu Fengshuo, Wuhan University, China
13:40-14:05	I	<b>Title: Research on Joint Operation of Cascade Hydropower Station Group and Wind Power Photoelectric</b> Yu Yangxin, Wuhan University, China
14:05-14:30	I	<b>Title: Improvement of Oxygen Evolution Selectivity at Ampere-Level Current Density by Mo Doping and MnOx Anti-Corrosion Coating in Seawater Electrolysis</b> Caihong Feng, Beijing Institute of Technology, China
14:30-14:55	I	<b>Title: Zero-Carbon Development of Typical Rural Areas in China Based on LEAP Model</b> Yuquan Wei, China Agricultural University, China
14:55-15:20	I	<b>Title: Construction Methods and Key Technologies of Knowledge Graph for Coordinated Symbiosis of Urban Geological Environment and Ecological Water Replenishment</b> YanJun Guo, Peking University, China
15:20-15:45	I	<b>Title: Sandwich-Like Lithium Battery Separators Enhanced with ESpun Nanofiber-Nanoparticle Hybrid Materials</b> Yanbo Liu, Wuhan Textile University, China
15:45-16:10	I	<b>Title: Machine Learning Tailored Anodes Exhibiting Synergistic Improvements in Proton Conduction and Catalytic Activity for Proton-Conducting Solid Oxide Electrolysis Cells</b> Fangyuan Zheng, Guangzhou University, China
16:10-16:35	I	<b>Title: Information Decoupling and Efficiency Assessment of Electro-Mechanical Systems</b> Zhang Qing, Xi'an Jiaotong University, China
16:35-17:00	I	<b>Title: Heat Extraction Performance of Coaxial Heat Exchanger Applied to Hot Dry Rock Resources Exploration: A Case Study in Matouying Uplift, China</b> Qinghe Niu, Shijiazhuang Tiedao University, China
17:00-17:25	I	<b>Title: Intelligent Optimization of Energy Efficiency and Control Parameters in the Production of Electronic Circuits</b> Xiaohan Wei, Xi'an Jiaotong University, China
17:25-17:50	I	<b>Title: The Application of Industrial Waste Heat Recovery in an Iron Foundry</b> Weijen Chen, National Taiwan Normal University, Taiwan
17:50-18:15	I	<b>Title: Study on the Variation Law of Water Consumption Rate of Cascade Hydropower Station under Different Conditions</b> Xueshan Ai, Wuhan University, China
18:15-18:40	I	<b>Title: Research on Re-development And Utilization Of Hydropower Under the New Energy System</b> Gao Shichun, Wuhan University, China
18:40-19:05	I	<b>Title: Solutions for Cesium Immobilization: Glass Activation and Viscous Flow Synergy</b> Diana Lago, Alexander Dubcek University of Trencin, Slovakia
19:05-19:30	I	<b>Title: Emergetic Dynamics of Energy in Latin America and the Caribbean: Challenges for Strategic and Sovereign Energy Planning</b> Marlei Scariot, Federal University for Latin American Integration, Brazil
19:30-19:55	I	<b>Title: Emergetic Dynamics of Energy in Latin America and the Caribbean: Challenges for Strategic and Sovereign Energy Planning</b> James Humberto Zomighani Junior, Federal University for Latin American Integration, Brazil

**End of Day 1**



# DAY 2 | NOVEMBER 26, 2024

**Time Zone: London, UK (GMT+1)**

**09:00-09:30 Opening Ceremony**

## Plenary & Keynote Session

09:30-10:10	P	<b>Title: Towards Net Zero: Opportunities and Challenges from a Materials Scientist's Perspective</b> Li-Chyong Chen, National Taiwan University, Taiwan
10:10-10:50	P	<b>Title: The Control of Thermal Solar Plants</b> Eduardo Fernandez Camacho, University of Seville, Spain
10:50-11:30	P	<b>Title: The Four Horsemen of the Anthropocene: Unveiling the Drivers of Human-Induced Global Change</b> Avi Gottlieb, Tel Aviv University, Israel

## Invited Session

11:30-11:55	I	<b>Title: The Comprehensive Performance Investigation of Green Ammonia-Hydrogen Fuel Powered Solid Oxide Fuel Cell Hybrid System</b> Yang Du, Xi'an Jiaotong University, China
11:55-12:20	I	<b>Title: Improved Sustainability and Reduced Environmental Impact of an Integrated Biomass-Driven System</b> Amirmohammad Behzadi, KTH Royal Institute of Technology, Sweden
12:20-12:45	I	<b>Title: TBA</b> Fosca Conti, University of Padua, Italy
12:45-13:10	I	<b>Title: Power Electronics for Renewable Energy</b> Michael Patt, Kempten University of Applied Sciences, Germany
13:10-13:35	I	<b>Title: Sustainability Potential of the Valorization of Black Liquor for Biofuel Production</b> Arias Calvo Ana, University of Santiago de Compostela, Spain
13:35-14:00	I	<b>Title: Evaluation Of The Real Performance Of A Fresnel Solar Plant Under Different Radiation And Temperature Conditions</b> David Larra, University of Extremadura, Spain
14:00-14:25	I	<b>Title: Production and Conversion of Hydrogen into Electricity: some Technological Achievements and Remaining Challenges</b> Annie Legal, Jean Rouxel Institute of Materials in Nantes, France
14:25-14:50	I	<b>Title: Optimizing the Devulcanization of NR-based Rubber Wastes Using Diverse Diphenyl Disulfide Reagents</b> Tao Zhang, INSA National Institute and School of Applied Sciences of Centre Loire Valley, France
14:50-15:15	I	<b>Title: GRTgaz's Feedback on Its one MW Power-to-Gas Industrial Demonstrator</b> Brissaud Delord Florent, GRTgaz Research & Innovation Centre for Energy (RICE), France
15:15-15:40	I	<b>Title: Review of Power Transmission Options for Offshore Wind Complemented with Energy Storage</b> Zahra Baniamerian, University of Nottingham, UK
15:40-16:05	I	<b>Title: The Heterogeneous Effect of Innovation on the Energy Transition in Africa: The role of Education and Bank Credit to the Private Sector</b> Mara Madaleno, University of Aveiro, Portugal
16:05-16:30	I	<b>Title: Polyrotaxane Based Phase Change Materials</b> Amos Guangzhong Yin, Francisco de Vitoria University, Spain
16:30-16:55	I	<b>Title: Potential of Renewable Hydrogen Production: A Case Study of Poland</b> Aleksandra Komorowska, Mineral and Energy Economy Research Institute of the Polish Academy of Sciences, Poland
16:55-17:20	I	<b>Title: Vertical Expansion of Existing Buildings in 19th Century and Early 20th Century Expansions of Western Cities</b> Ivan Cabrera i Fausto, Valencia Polytechnic University, Spain
17:20-18:00	P	<b>Title: A Carbon-Oriented Framework with Cross Disciplinary Technologies</b> Zhu Han, University of Houston, USA
18:00-18:35	K	<b>Title: Solid-State Batteries for Integration with Solar</b> Quinn Qiao, Syracuse University, USA
18:35-19:10	K	<b>Title: Hydrogen Production from Water or Hydrogen Sulfide via Modified Bunsen Reaction and Direct Electrolysis of Bunsen Product Solution</b> Hui Wang, University of Saskatchewan, Canada
19:10-19:35	I	<b>Title: Nature-Based Solutions to Tackle the Impacts of Urban Heat Islands and Save Energy</b> Zahra Jandaghian, National Research Council Canada, Canada
19:35-20:00	I	<b>Title: The Future of Sustainable Energy</b> Susane Isabelle Dos Santos, Federal University of Pernambuco, Brazil
20:00-20:25	I	<b>Title: The Impact of Renewable Portfolio Standards and Land-Use Governance on CO2 and Gross Total Emissions in Four U.S. Regions</b> Abdul Khaliq, New Mexico State University, USA

**End of Day 2**