

**SCALE 2024**  
**Date: 4<sup>th</sup> – 6<sup>th</sup> March 2024**  
**Bombay Exhibition Centre Goregaon (East), Mumbai**  
**EXHIBITION HALL NO 3**  
**Day 1: Monday, 4<sup>th</sup> March 2024**

**9:00 am: INAUGURATION ChemTECH World Expo 2024**  
**HALL NO 1, GATE NO 2**

|   |   |
|---|---|
| <b>Inaugural Session</b>  |   |
| <b>12:00 pm - 1:15 pm</b>   |   |
| <b>Welcome &amp; Chairman's Address</b>   | <b>Mr. Mirik Gogri, Head of Corporate Strategy, Aarti Industries Ltd &amp; Chairman SCALE 2024</b>                      |
|   | <b>Chemtech 50 Years Video</b>  |
| <b>Keynote Address</b>  | <b>Dr. Gaurav Sant, Professor &amp; Pritzker Chair in Sustainability, UCLA</b>  |
| <b>Guest of Honour</b>  | <b>Dr SSV Ramakumar. former Director R&amp;D, IndianOil</b>   |
| <b>Chief Guest</b>  | <b>Dr Anil Kakodkar, Former Chairman Atomic Energy Commission of India and the Secretary to the Government of India</b> |
| <b>Networking Lunch: Break: 1:15pm – 2:00 pm</b>  |   |
| <b>SESSION I: Baseload Clean Energy/ Coal Plant Reuse &amp; Industrial Heat</b>                           |   |
| <b>2:00 pm – 3:30 pm</b>  |   |
| <b>Session Chair</b>  | <b>Mr. P K Gupta, GM-Energy Transition, NTPC</b>  |
| <b>Commercialising Drilling Technology to Access Super-Hot Geothermal</b>                                 | <b>Mr. James Benesatos, Business Development Head, Quaise Energy</b>  |
| <b>Increasing Power Plant efficiency with Supercritical Carbon Dioxide (sCO<sub>2</sub>) power cycles</b> | <b>Mr. Markus Lesemann, Director-Business Development, GTI sCO<sub>2</sub></b>  |
| <b>Aneutronic Nuclear Fusion using Hydrogen &amp; Boron</b>   | <b>Mr. Jan Kirchhoff, Co- Founder, HB-11 Energy</b>   |
| <b>Digital Platform for Bioenergy Supply Chain</b>  | <b>Mr. Suhas Baxi, Founder, BiofuelCircle</b>   |
| <b>Converting Agri &amp; Food Waste to CBG &amp; Bio-CNG</b>  | <b>Mr. Rajesh Ayyapasur, Business Development Head, GPS Renewables, Optimaxx, Biourja</b>                               |
| <b>Zero Emissions Industrial Heat</b>   | <b>Mr. Ranjeet Mankikar, Head of Product Operations, Antora Energy</b>  |
| <b>Q&amp;A</b>  |   |

Tea/ Coffee Break : 3:30 pm – 3:45 pm

**SESSION II: Long Duration Energy Storage**

**3:45 pm – 4:45 pm**

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|---|---|
| Session Chair   | Mr. J C Kakoti, General Manager and HOD (Hydro Engineering), NTPC |
| High Density Pumped Hydro Storage   | Mr. Stephen Crosher, CEO, RheEnergise Limited                     |
| Energy Management Software & Integration of Energy Storage Systems for Power sector applications. | Mr. Ayush Misra, Founder, Amperehour Energy                       |
| Sustainable, Safe and Scalable Energy Storage by Organic SolidFlow Battery                        | Ms. Nastaran Krawczyk, CTO, CMBlu Energy                          |
| High density Li-ion batteries with proprietary Silicon Anode Technology                           | Mr. Animesh Jha, Founder, Volt14 Solutions                        |

Q&A

**Session III : Solar**

**4:45 pm – 5:45 pm**

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| Session Chair  | Mr Arun Appadurai, Head of Technology , Computational Sciences, Adani Solar |
| Electroplating process for replacing silver with copper for solar cells contacts.                                  | Mr. Markus Glatthaar, CEO, PV2plus  |
| Developing Photon Multiplier Materials increase the performance of existing Silicon Solar Panels by as much as 15% | Prof. Akshay Rao, Cambridge Photon  |
| Developing innovative Solid State Coatings to address solar panel efficiency, high maintenance cost                | Mr. Harsh Sethi, Founder & CEO, TriNANO Technologies Pvt Ltd                |
| Using photochromic Molecules to Store Solar Energy   | Dr. Jacob Elholm, Molecular Solar Thermal                                   |

Q&A

**Day – 2: Tuesday, 5<sup>th</sup> March 2024**

**SESSION IV: Chemical Separation**

**10 am - 11 am**

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| <b>Session Chair</b>  | <b>Mr. Bhaskaran Rajagopalan, CTO, Aarti Industries Ltd</b>   |
| <b>Commercializing Ion-Specific Membranes for Critical Mineral Recovery</b>                   | <b>Professor David Jassby, SpecifX</b>  |
| <b>Membrane Nano filtration Technology to reduce Chemical Separation CO2 Emissions by 90%</b> | <b>Mr. Chunfeng Wan, CEO, SOLV8 Technology Pte Ltd<br/>Mr Kunal Daga , Founder &amp; Director, MolSynth – Daga Global</b> |
| <b>Single Walled Carbon Nanotubes Coated Membranes for Efficient Desalination</b>             | <b>Mr. Gangadhar Reddy, CEO, NoPo Nanotechnologies</b>  |
| <b>Need for separation-less manufacturing protocol</b>  | <b>Dr. Nilesh Mali, Scientist, NCL Pune</b>   |
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**Q&A**

**SESSION V Renewable Chemicals**

**11:00 am – 12: 00 pm**

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| <b>Session Chair</b>   | <b>Dr. Satish Chandra Pandey, Staff Scientist, External Manufacturing, SABIC</b> |
| <b>Technology Solutions for Conversion of Carbon Into Fuels, Polymers &amp; other Chemicals.</b> | <b>Mr. Raghubir Gupta, President &amp; Co-founder, Susteon Inc</b>               |
| <b>Production of Renewable LPG (propane)</b>   | <b>Mr. Markus Lesemann, Director-Business Development, GTI Energy</b>            |
| <b>Next Generation Catalysts for SAF, Chemicals</b>  | <b>Ms. Aruna Ramkrishnan, CTO, Coppernic Catalyst</b>                            |
| <b>Engineered Microbes to Efficiently Extract Lithium</b>  | <b>Mr. Jacob Roberts, Co-Founder, Alkali Labs</b>                                |
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**Q&A**

**Session VI : Carbon Capture**

**12:00 pm – 1:00 pm**

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| <b>Session Chair</b>   | <b>Mr. J P. G. Dobriyal, GGM, Head GEOPIC, ONGC</b>   |
| <b>Joint Session Chair</b>                                   | <b>Mr R K Srivastava, former CMD, ONGC</b>  |
| <b>CO2 Removal Using Seawater Electrolysis</b>               | <b>Mr. Gaurav Sant, Professor at UCLA and Co-founder, Equatic Inc. and Mr. David Jassby, Professor UCLA</b> |
| <b>Advanced Molecules to Capture Carbon More Efficiently</b> | <b>Mr. Raghubir Gupta, President &amp; Co-founder, Susteon Inc.</b>   |
| <b>Advanced Catalyst of Energy Efficient Carbon Capture</b>  | <b>Dr. Piyali Mujumdar, Chief Scientific Officer, UrjanovaC Pvt. Ltd.</b>                                   |
| <b>Commercializing Hybrid Direct Air Capture Technology</b>  | <b>Mr. Ben McCool, Sr. VP Technology, Avnos</b>   |
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**Q&A**

NETWORKING LUNCH : 1:00 pm – 2:00 pm

**SESSION VII: HYDROGEN**

**2:00 pm – 3:15 pm**

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| Session Chair   | Dr. V Ravikumar, CGM CRDC, BPCL  |
| Membrane Less Hydrogen Electrolysers                  | Mr. Rochan Sinha, Co-founder, Newtrace   |
| Green Hydrogen Using Photo-Electrochemical Technology | Ms. Ritika Gaur, Project Head Marketing, CEO, SoHhytec   |
| Producing Hydrogen while capturing CO2                | Mr. Gaurav Sant, Professor at UCLA and Co-founder, Equatic Inc. and Mr. David Jassby, Professor UCLA |
| Clean Hydrogen Production with Integrated CO2 Capture | Mr. Markus Lesemann, Director-Business Development, GTI Energy                                       |
| Low Cost Alkaline Exchange Materials Process          | Mr. Jeremy Brewer, Investor, Ecoelectro  |
| Electroactive Microbial BioHydrogen                   | Mr. Kamar Suhail Basha, CTO and Co-founder, Ossus Biorenewables                                      |

Q&A

Tea / Coffee : 3:15 pm – 3:30 pm

**Session VIII : Resource Efficiency ( Water & Energy Efficiency)**

**3:30 pm – 5.00pm**

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| Session Chair   | Mr Ajay Popat, President , Ion Exchange (India) Pvt Ltd.<br>Mr. Shyam Dhekekar, Chief Technical and Sustainability Officer, Aarti Industries Ltd |
| Molecular Filters for Effluents & Emissions Reduction in Manufacturing Industries                 | Dr. Prerna, Founder & CEO, Exposome  |
| Insulating Nanomaterial, Aerogels in Multi-Faceted Forms to Serve Thermal Insulation Applications | Dr. Gayathri Natarajan, Founder, KrossLinker   |
| Water Sustainability Solution Provider for Industrial & Commercial Establishments                 | Ms. Dhvani Mehta, Fluxgen Technologies   |
| Cutting Energy Consumption of HVAC Systems With Innovative Business Models & IOT+AI               | Mr. Vivek Nair, Brand and Marketing, Smart Joules Pvt. Ltd   |
| IoT Software that Drives Ops Excellence in Water Management                                       | Ms. Mansi Jain, Founder &CEO, Digital Paani  |
| Increasing Passive Cooling Efficiency Using Material Innovations                                  | Mr. Bhimashankar Wangaskar, Founder & CEO, Thermistance Technologies Pvt. Ltd.   |
| Next Generation Water Treatment technologies  | Mr. Krunal, Co-founder, COO, Indra Water   |

Q&A

**Day 3: Wednesday, 6<sup>th</sup> March 2024**

**SESSION IX: AMMONIA / FERTILIZER**

**10:00 am – 11:00 am**

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| <b>Session Chair</b>  | <b>Dr. Prashant Puri, Head R&amp;D, Deepak Fertilizers &amp; Chemicals Ltd</b> |
| <b>Advanced Catalyst to Reduce Energy Requirement of Haber Bosch Process</b>            | <b>Ms. Aruna Ramkrishnan, CTO &amp; Co-founder, Copernic Catalyst</b>          |
| <b>Innovating Bio-Solutions for Agricultural, Aqua &amp; Environmental Applications</b> | <b>Mr. Tejas Gathani, CEO, Team One Biotech</b>                                |
| <b>Modular &amp; Decentralized Ammonia Generator</b>                                    | <b>Mr. Parikshit Sharma, Investor, Nitrofix</b>                                |
| <b>Biochar as Fertilizer</b>  | <b>Mr. Vidyut Mohan, Co-Founder, Takachar</b>                                  |

**Q&A**

**SESSION X: AGRITECH**

**11:00 am – 11:45 am**

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| <b>Session Chair</b>  | <b>Mr. Ankit Ladha, Marketing, UPL</b>          |
| <b>Biotech Company Shaping the Future of Natural, Non-Toxic Bio-Pesticides.</b> | <b>Mr. Parikshit Sharma, Investor, Pyrone</b>   |
| <b>Reducing Emissions from Rice Farming via Tech Interventions</b>              | <b>Mr. Devdutt Dalal, Co-Founder, Mittilabs</b> |
| <b>Agricultural Tools and Services for Sustainable Farming</b>                  | <b>Mr. Vivin Rana, CEO, Leher</b>               |

**Q&A**

**Session XI: BIOMASS VALUE CREATION**

**11:45 am – 1:00 pm**

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| <b>Session Chair</b>   | <b>Mr. B. Ramji, EHS Lead, Godrej Agrovet</b>                                      |
| <b>Affordable, Animal Free Growth Media for Cultivated Meat</b>                            | <b>Mr. Cai Linton, CO- Founder &amp; CEO, Multus Biotechnology</b>                 |
| <b>Alternate Materials Company Manufacturing Biomaterials &amp; Bio-Chemicals</b>          | <b>Mr. Apoorv Garg, Founder, Alt Material Innovations Pvt Ltd</b>                  |
| <b>Offers a Modular, Scalable System For Conversion Of Organic Waste to Green Hydrogen</b> | <b>Mr. Abhijeet Borole, Co-Founder &amp; CTO, Electro-Active Technologies, Inc</b> |
| <b>Ethanol to High Value Chemicals Like Jet Fuel</b>                                       | <b>Mr. Parikshit Sharma, Investor, Via Fuels</b>                                   |

**Q&A**

**NETWORKING LUNCH : 1:00 pm – 2:00 pm**

**SESSION XII: Cement****2 pm – 3.15 pm**

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| <b>Session Chair</b>  | <b>Mr. Yagyesh Gupta, Chief Manufacturing Officer, JK Cement</b>                     |
| <b>A Scalable Solution to Reduce Clinker Quantity</b>                           | <b>Prof. Shashank Bishnoi, IIT D Professor, Limestone Calcined Clay Cement (LC3)</b> |
| <b>AI Platform that Develops Optimum Mix Designs &amp; Predicts Performance</b> | <b>Mr. Alex Hall, CEO, Concrete.ai</b>   |
| <b>Automated Admixture Dosing to Reduce Concrete Wastage at Site</b>            | <b>Mr. Abhimanyu Raja, MD, JanyuTechnologies Pvt Ltd</b>                             |
| <b>Clinker Free Cement</b>  | <b>Mr. Michel Gutkin Steinberg, CEO, Circula</b>                                     |
| <b>Embedded Industrial CO2 in Concrete</b>                                      | <b>Mr. Rahul Shendure, CEO, Carbon Built</b>   |

Tea / Coffee : 3:15pm – 3:30 pm

**SESSION XIII: CHEMICAL RECYCLING 3:30 pm – 5:00 pm**

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|---|--|
| <b>Session Chair</b>  | <b>Mr. Rajesh Gauba, SVP Sustainability &amp; Circularity, Reliance Industries Ltd</b> |
| <b>Transforming 'Hard to Recycle' Plastics Into High-Quality Chemical Feedstock</b>               | <b>Mr. Amit Tandon, Co-Founder, Polycycl</b>   |
| <b>Technology that Chemo-Mechanically Recycles "Impossible-To-Recycle" Plastic Waste Like MLP</b> | <b>Mr. Anish Malpani, Founder, Without (Ashaya)</b>                                    |
| <b>Chemical-Free Lithium-Ion Battery Recycling Technology</b>                                     | <b>Mr. Shubham Vishvakarma, Founder, Metastable Materials</b>                          |
| <b>Innovative Additives to Ease Plastic Recycling</b>   | <b>Mr. Ross Baglin, CEO, Interface Polymers Limited</b>                                |
| <b>Carbon Offset &amp; ESG Benefits of Hazardous Waste Disposal Technology</b>                    | <b>Mr. Mihir Dixit, Co-Founder, Malhari Projects</b>                                   |

**Q&A**