

International Conference on Green Hydrogen 2023

5-7 July 2023 | Vigyan Bhawan, New Delhi

Agenda

<u>Day - 1: 5 July 2023</u>	
0700 - 0800 hrs	Registration
	(Outside the East Gate Entrance of Vigyan Bhawan)
0800 hrs	Delegates to be seated inside the Plenary Hall
0915 - 1015 hrs	Inaugural Session (Plenary Hall)
1015 - 1045 hrs	TEA / COFFEE BREAK
1045 - 1130 hrs	Plenary Session - 1: India Perspective (Plenary Hall) Chaired by Prof. Ajay K Sood
	Principal Scientific Advisor to the Government of India
	Mr. Bhupinder S Bhalla Secretary Ministry of New & Renewable Energy, Government of India

1130 - 1300 hrs Parallel Technical Sessions - I

Session 1A: Hydrogen Production - Electrolysis & Biopathways Hall No. 5

- Mr. Vivek Bhide, Regional President, John Cockerill Group (Session Chair)
- Prof. S Dasappa, Chair ICER, Indian Institute of Science, Bangalore
- Dr. Selvaraj Kaliaperumal, Catalysis Division, National Chemical Laboratory
- Mr. Kowtham Raj, Lead Green Technology Development, Larsen & Toubro Ltd

Session 1B: Hydrogen Storage, Distribution and Refuelling

Hall No. 2

- Mr. Ravindra Vasisht, Independent Consultant (Session Chair)
- Prof. Swati Neogi, Professor Chemical Engineering, IIT Kharagpur
- Prof. Pratibha Sharma, Department of Energy Science & Engineering, IIT Bombay
- Mr. Puneet Khurana, Managing Director, Everest Kanto Cylinder Ltd
- Mr. Anup S Shapeti, Hydrogen & LNG, INOX India Ltd



Session 1C: Hydrogen Energy Ecosystems & Assessment

Hall No. 4

- Mr. Aashish Maheshwari, Associate Business Director, Evonik (Session Chair)
- Mr. James Khong, Co-Founder and COO, Galaxy FCT
- Mr. Vijay Kumar Singh, Director Technical, REC
- Mr. Sachin Chugh, Dy. General Manager H2 & Fuel Cell, Indian Oil Corp. Ltd
- Mr. Loftur Thorarinsson, Project Lead New Energies, Mitsui O.S.K. Lines (U.K.)

Session 1D: Fuel Cells & Electrolyzers: Key Materials & Components Hall No.6

- Dr. Tata N Rao, Director, ARCI (Session Chair)
- Dr. N Rajalakshmi, Former Senior Scientist, Centre for Fuel Cell Technology, ARCI, IIT Madras (Virtual)
- Mr. R Balu, Head of New Projects, R&D, Thermax Ltd
- Dr. Sreekumar Kurungot, Physical & Materials Chemistry Division, NCL

1300 - 1400 hrs

LUNCH

1400 - 1445 hrs Plenary Session - 2: US Perspective (Plenary Hall)

<u>Chaired by:</u> **Dr. Ashish Lele** Director, CSIR-National Chemical Laboratory

Dr. Sunita Satyapal Director - Hydrogen & Fuel Cell Technologies Office and DOE Hydrogen Program Coordinator U.S. Department of Energy

1450 - 1620 hrs

Parallel Technical Session - II

Session 2A: Hydrogen Production - Thermochemical Nuclear / Other Hall No. 2

- Prof. G. D. Yadav, Green Chemistry and Technology, ICT Mumbai (Session Chair) (Virtual)
- Dr. Anjan Ray, Former Director, Indian Institute of Petroleum, Dehradun
- Dr. A Shriniwas Rao, Scientific Officer, Bhabha Atomic Research Centre
- Mr. Jasvant Singh, Head, Development Department, Haldor Topsoe India



Session 2B: Hydrogen in Mobility

Hall No. 5

- Prof. K A Subramanian, Professor, IIT Delhi (Session Chair)
- Mr. Ravi Pandit, Chairman & Co-Founder, KPIT Pune
- Mr. Sadagopan Krishnan, Sr. Vice President, Ashok Leyland
- Mr. Sudeep S Dalvi, Sr. VP & Director-Technical, Toyota-Kirloskar Motors

Session 2C: Integrated Hydrogen Systems

Hall No. 4

- Dr. J P Gupta, Managing Director, Green Hydrogen India (Session Chair)
- Mr. Venkatesh M, Chief Technology Officer, L&T
- Mr. Rajat Seksaria, Independent H2 Expert
- Mr Vishal Mehta, Managing Director & Partner, BCG

Session 2D: Hydrogen in Industries

Hall No. 6

- Dr. SSV Ramakumar, Director (R&D), Indian Oil Corp. Ltd. (Session Chair)
- Dr. Anurag Pandey, R&D Lead, Reliance Industries Limited
- Mr. Mohit Bhargava, Chief Executive Officer, NTPC Renewable Energy Ltd
- Mr. Sudhir Pathak, Head Engineering, Hero Future Energies
- Dr. Samik Nag, Chief Iron Making Research Group, R&D Division, Tata Steel

1620 - 1715 hrs HIGH - TEA

1715 - 1745 hrs <u>Summary of Technical Sessions</u> (Plenary Hall) Dr Ashish Lele Director, CSIR-National Chemical Laboratory

1745 - 1845 hrs Panel Discussion on Disruptive Science & Technology (Plenary Hall)

- Dr. N Kalaiselvi, Director General, CSIR and Secretary DSIR (Session Chair)
- Prof. Swati Neogi, Indian Institute of Technology, Kharagpur
- Prof. Suddhasatwa Basu, Indian Institute of Technology, Delhi
- Prof. Pratibha Sharma, Indian Institute of Technology, Bombay
- Prof. Prakash Vaidya, Institute of Chemical Technology, Mumbai
- Prof. Uttam Kumar Ghorai, Ramakrishna Mission Vidyamandir, Kolkata
- Dr. R. Nandini Devi, Senior Principal Scientist, CSIR-National Chemical Laboratory



Day - 2: 6 July 2023

0930 - 1015 hrs Plenary Session - 3: Japanese Perspective (Plenary Hall)

<u>Chaired by:</u> **Mr. Atul Kumar Tiwari** Secretary Ministry of Skill Development and Entrepreneurship

Dr. Eiji Ohira (Virtual) Strategy Architect - Fuel Cell & Hydrogen, Advanced Battery & Hydrogen Technology Department NEDO, Japan

1015 - 1100 hrs Plenary Session - 4: Australian Perspective (*Plenary Hall*)

<u>Chaired by:</u> **Mr Pankaj Agrawal** Secretary Ministry of Power, Government of India

Ms. Sarah Storey Chargé d'affaires Australian High Commission

1100 - 1130 hrs

Tea / Coffee Break

1130 - 1300 hrs

Parallel Technical Sessions - III

Session 3A: Hydrogen Infrastructure & Compatibility

Hall No. 2

- Mr. Sunil Kumar, Joint Secretary, MoPNG, Government of India (Session Chair)
- Mr. Rajiv Agarwal, Director Technical, Engineers India Ltd
- Dr. C Kannan, Executive Director R&D, Indian Oil Corporation Ltd
- Mr. Abhinav Arora, Vice President EPC Projects, HAL Offshore Ltd
- Dr. Hubert Mäncher, Managing Director, Magnum



Session 3B: Hydrogen Economy - Logistics and Infra

Hall No. 4

- Mr. K R Jyothilal, Principal Secretary, Transport Dept., Govt. of Kerala (Session Chair)
- Mr. Ghanshyam Prasad, Chairperson, Central Electricity Authority
- Mr. Kapil Maheshwari, Executive Director & CEO, Welspun New Energy Ltd
- Mr. Anirudh Gautam, Executive Director, RDSO Indian Railways
- Mr. Shardul Kulkarni, Chief Executive Officer, Deesha Power Solutions

Session 3C: Codes, Standards & Regulations Hall No. 5

- Mr. P K Tiwari, Director General, Bureau of Indian Standards (Session Chair)
- Mr. Arun Mittal, Executive Director, Oil Industry Safety Directorate
- Dr. S S Thipse, Sr. Deputy Director, Automotive Research Association of India
- Dr. R Venugopal, Joint Chief Controller of Explosives, PESO
- Mr. Jonas Moberg, CEO, Green Hydrogen Organisation, Switzerland

Session 3D: Hydrogen Valleys/ Hubs/ Clusters Hall No. 6

- Mr. Nikunj Bihari Dhal, Addl. Chief Secretary, Dept. of Energy, Govt. of Odisha (Session Chair)
- Mr. Parag Sharma, Founder & CEO, O2 Power
- Dr. R K Malhotra, President, Hydrogen Association of India
- Mr. Rolf Behrndt, Senior Hydrogen Advisor, The Deutsche Gesellschaft für Internationale, Zusammenarbeit (GIZ), Germany
- Ms. Malini Dutt, Acting Trade and Investment Commissioner India, Investment NSW, India

1300 - 1400 hrs LUNCH

1400 - 1445 hrs Plenary Session 5 - Perspective of the International Energy Agency (Plenary Hall)

> <u>Chaired by:</u> **Mr. Rajat Kumar Mishra** Secretary Department of Fertilizer, Government of India

Dr. Uwe Remme

Head, Hydrogen and Alternative Fuels Unit Energy Technology Policy Division International Energy Agency, Germany





1450 - 1620 hrs

Parallel Technical Session - IV

Session 4A: Start-ups in Hydrogen

Hall No.6

- Ms. Manmeet K Nanda, Joint Secretary, DPIIT, Government of India (Session Chair)
- Mr. Siddharth Mayur, Founder & Managing Director, H2e Power
- Mr. Sunil S. Nair, Co-Founder and Director, Magic Myna Pvt Ltd
- Mr. Vamsi Krishna, Chief Executive Officer, Vyara Green Energy
- Dr. Suruchi Rao, Chief Executive Officer & Co-Founder, Ossus Biorenewables
- Dr. Satyajit Phadke, Co-Founder, Hydrovert Energy

Session 4B: Hydrogen Strategies & Polices

Hall No. 5

- Mr. Sanjay Dubey, Principal Secretary Energy & NRE, Govt of Madhya Pradesh (Session Chair)
- Mr. Ajay Yadav, Joint Secretary, Ministry of New & Renewable Energy
- Mr. Ruud Kempener, Office of Kadri Simson, Commissioner Energy, EU (Virtual)
- Dr. R. K Malhotra, President, Hydrogen Association of India
- Mr. Rajnath Ram, Adviser- Power and Energy, NITI Aayog
- Dr. Deepak Yadav, Council on Energy Environment & Water (CEEW)

Session 4C: Green Financing

Hall No.4

- Mr. Tobias Winter, Director, Indo-German Energy Forum (Session Chair)
- Mr. Pradip Kumar Das, Chairman & Managing Director, IREDA
- Mr Ajoy Choudhury, Director Finance, REC
- Ms. Surbhi Goyal, Senior Energy Specialist, World Bank
- Mr. Mudit Jain, Head Research, Tata Cleantech Capital Ltd
- Mr. Kumar Bibhu, Vice President, SBI Capital Markets Limited

Session 4D: Strengthening R&D Ecosystem Hall No.2

- Mr. S Bharathan, Director Refineries, HPCL (Session Chair)
- Dr. Chitra Rajagopal, Director, Center of Excellence Process Safety, IIT Delhi (Virtual)
- Dr. C S Gopinath, Outstanding Scientist, National Chemical Laboratory
- Mr. Andrew Stokes, Senior Adv.- Innovator Support, Energy System Catapult, UK

1620 - 1700 hrs HIGH - TEA





Summary of Technical Sessions by (Plenary Hall) Dr. SSV Ramakumar Director - R&D, Indian Oil Corporation Ltd

1745 - 1915 hrs Panel Discussion on Carbon Emission Associated with Green Hydrogen Production (Plenary Hall)

- Dr Vibha Dhawan, Director General, The Energy and Resources Institute (TERI) (Session Chair)
- Mr. Pulak Prakash, Director Sales & Strategy, Bureau Veritas, CIF South Asia Region
- Mr. Amrit Singh Deo, Senior Managing Director, FTI Consulting
- **Mr. Uwe Remme**, Head, Hydrogen and Alternative Fuels Unit, Energy, Technology Policy Division, IEA
- **Dr. S Venkata Mohan**, Chief Scientist, Department of Energy & Environmental Engineering, CSIR-Indian Institute of Chemical Technology (CSIR-IICT)
- Mr. Jonas Pferdekemper, Project Manager, Global Hydrogen Competence Centre, TUV
- Mr. Frank Wouters, Senior Vice President New Energy, Reliance Industries Ltd
- Mr. Vish lyer, Global Chief Commercial Officer, Jakson Group

Day - 3: 7 July 2023

0915 - 1000 hrs Plenary Session 6 - European Perspective (Plenary Hall)

<u>Chaired by:</u> Mr. T K Ramachandran Secretary Ministry of Ports, Shipping & Waterways, Government of India

Dr. Jürgen Friedrich (Virtual) Ministerial Envoy for International Hydrogen Projects Federal Ministry for Economic Affairs and Climate Action

1000 - 1045 hrs Plenary Session 7 - African Perspective (Plenary Hall)

<u>Chaired by:</u> Dr. Ajay Mathur Director General, International Solar Alliance (ISA)

Mr. Cosmas Chiteme Director - Power, Department of Science and Technology South African Government





1045 - 1145 hrs

Industry Panel 1 (Plenary Hall)

Moving Towards a Domestic Green Hydrogen Market

- Mr. R P Gupta, Chairman & Managing Director, SECI (Session Chair)
- Mr. Anish De, Partner, KPMG (Moderator)
- Mr. Abhay Bakre, Director General, Bureau of Energy Efficiency
- Mr. Parag Sharma, Founder and CEO, O2 Power
- Dr. S. Nand, Adviser, The Fertiliser Association of India
- Mr. C P Tiwari, Head-Technology & Process Engineering(G), Tata Power

1145 - 1245 hrs

Industry Panel 2 (Plenary Hall)

Export of H2 & Derivatives and International Trade Laws

- Mr. Nagendra Nath Sinha, Secretary, Ministry of Steel, Government of India (Session Chair)
- Mr. Anish Mandal, Partner, Deloitte (Moderator)
- Mr. Vineet Mittal, Chairman, Avaada Group
- Mr. Vikram Kapur, Group President, New & International Business (Green H2, Carbon, Digital), ReNew
- Mr. Sandeep Kashyap, COO, ACME
- Mr Agnel Cheruvathoor, Head of Business Development, India & Middle East, Sustainable Energy Systems, Siemens Energy

1245 - 1330 hrs Valedictory Session (Plenary Hall)

1330 Hrs Lunch and Event Concludes
