



# SCIENTIFIC 23

Design of Next-gen Materials, Molecules, Bio & Energy Systems

October 4-5, 2023 | Bengaluru, India





























# Shell SCIENTIFIC '23 CONFERENCE

Meeting the ambitious target of net-zero emissions by 2050 while catering to increasing energy demand calls for a need to accelerate design of future energy systems, in alignment with accelerated development of materials/molecules and integration with biosciences. Focused experimentation, complemented by insights generated from computational sciences, recent progress on machine learning as well as artificial intelligence-based techniques and high-performance computing will fast-track the design of next-gen materials, molecules, bio and energy systems.

This conference aims to bring leading experts from domain sciences, experimentation, computations, and AI together to discuss and debate about the confluence of these emerging fields for accelerated energy transition.

Join us to be a part of this trailblazing collaboration!

### A Shell ai Sciences Initiative in association with



















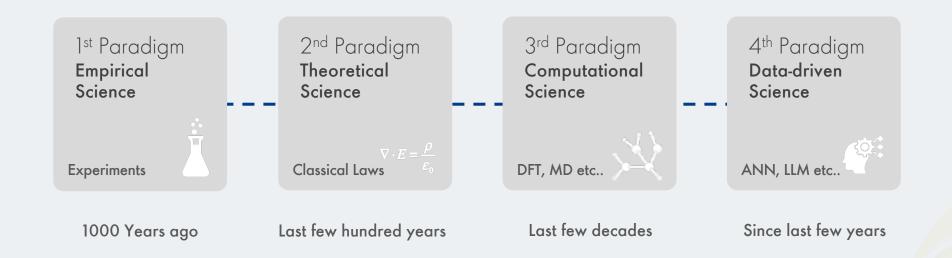








### Shell.ai Scientific Conference aims to usher in on the future of natural sciences



## Agenda Day 01 4 Oct



**SCIENTIFIC** CONFERENCE

Session 01 Materials & Molecular Design



Suchismita Sanyal General Manager, Computational Science, Shell

**Curtain Raiser** 8:45 AM

Lunch Break



**Daniel Jeavons** VP, Computational Science & Digital Innovation, Shell

**Opening remarks** 9:00 AM



Dirk Smit Corporate Chief Scientist, Shell

9:15 AM



Mathias B Steiner Manager & Senior Technical Staff Member, Sustainable Materials, IBM Brazil

9:30 AM



**Ananth Govind Rajan** Assistant Professor Indian Institute of Science



**Umesh V Waghmare** Dean, Faculty Affairs lawaharlal Nehru Centre for Advanced Scientific Research

Professor, State University of Campinas & Director, Center for Innovation of New Energies, Brazil



John Lockemeyer Chief Scientist, Catalysis, Shell

10:30 AM 11:00 AM

11:30 AM

Ana Flávia Nogueira

12:00 PM

#### Showcase Powering lives through Science



Siddharth Hande Founder/CEO. Kabadiwalla Connect

**Special Session** 

1:30 PM





Session 02

Rolf van Benthem Chief Scientist. Polymer Science, Shell



Berend Smit Professor, **École** polytechnique fédérale de Lausanne



Alexander van der Made Chief Scientist. Chemistry, Shell



Lalitha Subramanian Global Head Outcome Based Research. BIOVIA, Dassault Systèmes



**Panel Discussion** Future of Experimentation Moderator:

Marwa Al-Ansary General Manager, Next-gen Breakthrough Research, Shell

4:30 PM



Ed Ganja VP, Catalyst & Ánalytical Technology, Shell

Closing remarks

5:30 PM

2:00 PM

2:30 PM

3:00 pm

4:00 PM

12:30 PM

## Agenda Day 02 5 Oct



# SCIENTIFIC '23

Session 03 **Systems Design** 



Ajay Mehta Vice President, Engineering Technology, Shell

**Opening remarks** 9:00 AM



**Detlef Hohl** Chief Scientist, Computational & Data Science, Shell

Session 9:15 AM



**Prith Baneriee** Chief Technology Officer, ANSYS

9:30 AM



Elizabeth Endler Chief Scientist, Energy Storage & Integration, Shell

10:30 AM





Joe Powell Founding Director, **UH Energy Transition** Institute

11:00 AM



Deepak Subramani Assistant Professor. Indian Institute of Science

11:30 AM



Shivkumar Kalyanraman CTO, Energy Industry, Asia Microsoft

12:00 PM



Lunch Break

12:30 PM

Showcase Powering lives through Science



Chandrasekaran Nitin Akhade Jayaraman

Rural Electrification and Livelihoods. Solutions

Project Lead -

Founder

Director. Watsan Customized Energy Envirotech

#### 1:30 PM

**Special Session** 





**Jeremy Shears** Chief Scientist, Biosciences. Shell

Session

2:00 PM



K. VijayRaghavan Emeritus Professor and Former Director. National Centre for **Biological Sciences** 

2:15 PM



Paulo Artaxo Professor, University of Sao Paolo



Beena Rai Chief Scientist, Tata Consultancy Services

3:45 PM



Raghunathan Rengaswamy Professor. IIT-Madras



Panel discussion High Performance Computing Moderator: Subhasis Banerjee Principal Scientist, Shell

General Manager, Computational Science, Shell

Suchismita Sanyal

Closing remarks

2:45 pm

4:15 PM

4:45 PM

5:45 PM



# SCIENTIFIC '23



Suchismita Sanyal
General Manager,
Computational Science



**Detlef Hohl**Chief Scientist Computational
& Data Science



**Sharan Shetty**Principal Scientist
Computational Science



Indranil Rudra
Manager,
Computational Chemistry
& Material Science



**Nikhil Davies**Shell.ai
Manager



Amit Walia
Academic Partnerships
Manager, India



Sharanya Gopinath
Engagement
Lead



Ajith M S
Engagement
Analyst



**S Sangeetha**Associate Admin
Support



Anand Narayanan Krishnamoorthy Researcher, Computational Chemistry & Material Science

