

# WEBINAR Program

# V-Renewable2021

Renewable and Sustainable Energy Virtual

September 24 | 07:00 – 12:55 GMT

September 25 | 07:00 – 13:10 GMT

September 26 | 12:30 – 18:10 GMT



September 24, 2021

GMT 07:00 – 12:55

07:00 – 07:10

Introduction



## Plenary Sessions

Webinar  
Time ZoneSpeakers  
Time Zone

07:10 – 07:50

09:10 – 09:50

Title: New solutions for storing and using surplus electricity in Methanol

**Edgar Harzfeld**, Stralsund University, Germany.

07:50 – 08:30

16:50 – 17:30

Title: Innovative desalination of seawater and waste water treatment by liquid columns and decompression boiling

**Toshihiko Shakouchi**, Mie University, Japan.

08:30 – 09:10

10:30 – 11:10

Title: Hydrogen-rich gas from biomass, catalytically enhanced water splitting under non-thermal plasma conditions

**Marek Wisniewski**, Nicolaus Copernicus University, Poland.

09:10 – 09:20

Networking and Refreshments Break



## Keynote Sessions - 1

09:20 – 09:55

18:20 – 18:55

Title: Economically-feasible Green Hydrogen Production

**Michihisa Koyama**, Shinshu University, Japan.

09:55 – 10:30

19:55 – 20:30

Title: Printed and low embodied energy solar cells

**Almantas Pivrikas**, Murdoch University, Australia.

10:30 – 11:05    14:30 – 15:05

Title: High Temperature Thermochemical Energy Storage

**James Klausner**, Michigan State University USA & United Arab Emirates University UAE.

11:05 – 11:40    13:05 – 13:40

Title: Molecularly imprinted photocatalysts for selective degradation of emerging water contaminants

**Giuliana Impellizzeri**, CNR-IMM, Catania, Italy.

11:40 – 12:15    20:40 – 21:15

Title: Stereolithographic Additive Manufacturing of Ceramic Geometries for Energy Conversion and Storage

**Soshu Kiriwara**, Osaka University, Japan.



## Invited Sessions

12:15 – 12:35    21:15 – 21:35

Title: Renewable Hydrogen Supply Chain Utilizing LNG Cold Heat

**Akira Nishimura**, Mie University, Japan.

12:35 – 12:55    13:35 – 13:55

Title: The role of HVAC and UPS in the deployment of Demand

**Rodriguez Sergio**, Teesside University, United Kingdom.

**End of Day One**



September 25, 2021

GMT 07:00 – 13:10

07:00 – 07:10

Introduction

Webinar  
Time ZoneSpeakers  
Time Zone

## Plenary Sessions

07:10 – 07:50

09:10 – 09:50

Title: Step-Change in Solar Energy Conversion Schemes

**Dirk Guld**, University Erlangen Nuremberg, Germany.

07:50 – 08:30

03:50 – 04:30

Title: Simulations for Energy Storage

**Wei Lu**, University of Michigan, USA.

08:30 – 08:40

Networking and Refreshments Break

## Keynote Sessions

08:40 – 09:15

18:40 – 19:15

Title: A Hydrogen-focused Microgrid for Regional and Remote Community

**GM Shafiullah**, Murdoch University, Australia.

09:15 – 09:50

13:15 – 13:50

Title: Impact of Dynamic Thermal Conductivity Change of EPS Insulation on the Heat Transfer through Building Envelope

**Maatouk Khoukhi**, United Arab Emirates University, UAE.

09:50 – 10:25

17:50 – 18:25

Title: Energy Efficient High Speed Network for in-Building Application

**Mohd Syuhaimi Ab Rahman**, Universiti Kebangsaan Malaysia, Malaysia.

10:25 – 11:00      18:25 – 19:00

Title: Properties of Solution-Immersion Grown ZnO Nanorod Arrays for Solar Cell Applications

**Mohamad Hafiz Mamat**, Universiti Teknologi MARA, Malaysia.

11:00 – 11:35      19:00 – 19:35

Title: The Extended Galerkin/Rayleigh-Ritz Method for Approximate Solutions of Nonlinear Vibration Equations

**Ji Wang**, Ningbo University, China.

11:35 – 12:10      19:35 – 20:10

Title: Current Progress and Challenges of Wind Energy in Malaysia

**Albani Aliashim**, Universiti Malaysia Terengganu, Malaysia.

## Invited Sessions

12:10 – 12:30      22:10 – 22:30

Title: Operating Temperature of Non-Fullerene Acceptor Based Bulk Heterojunction Organic Solar Cells

**Kiran Sreedhar Ram**, Charles Darwin University, Australia.

12:30 – 12:50      20:30 – 20:50

Title: Impact of Ar Flow Rates on Micro-structural Properties of WS<sub>2</sub> Thin Film by RF Magnetron Sputtering

**Sobayel K**, The National University of Malaysia, Malaysia.

12:50 – 13:10      15:50 – 16:10

Title: Thermoresponsive Reactions and Energy Storage in Shape Memory Alloys

**Osman Adiguzel**, Firat University, Turkey.

## End of Day Two



September 26, 2021

GMT 12:30 – 18:10

07:00 – 07:10

Introduction

Webinar

Speakers

Time Zone

Time Zone



## Plenary Sessions

12:40 – 13:20

07:40 – 08:20

Title: Advances in Materials and Technologies for Renewable Fuel Production

**Oomman K Varghese**, University of Houston, USA.

13:20 – 14:00

08:20 – 09:00

Title: Solar Cells and Optoelectronic Devices with Solution-processed Perovskites and Two-dimensional Layered Materials

**Anupama B Kaul**, University of North Texas, USA.

14:00 – 14:40

08:00 – 08:40

Title: Advanced Concepts for Ultra- High Conversion Efficiency of Solar Photons into Photovoltaics and Solar Fuels Based on Nanostructures and Molecular Singlet Fission

**Arthur J Nozik**, University of Colorado Boulder, USA.

14:40 – 14:50

Networking and Refreshments Break



## Keynote Sessions

14:50 – 15:25

10:50 – 11:25

Title: Understanding the Working Mechanisms of Comb-Type Superplasticizers in Cement Hydration and Setting

**Hendrik Heinz**, University of Colorado Boulder, USA.

15:25 – 16:00

20:55 – 21:30

Title: Battery Storage for Sustainable Transportation: Progress, Challenges and Mitigation

**Ankur Bhattacharjee**, Birla Institute of Technology and Science, India.

16:00 – 16:35      12:00 – 12:35

Title: Systemic Implications of Renewable Energy (RE)

**Yohannes Haile**, The Pennsylvania State University-Behrend College, USA.

16:35 – 17:10      12:35 – 13:10

Title: SiC Based Clean Energy Applications: Status and Opportunities

**Victor Veliadis**, North Carolina State University, USA.



## Invited Sessions

17:10 – 17:30      13:10 – 13:30

Title: Leveraging algal omics to accelerate cost-competitive biofuels and bioproducts

**Neha Arora**, University of South Florida, USA.

17:30 – 17:50      14:30 – 14:50

Title: Photocatalytic conversion of lignin model compounds using g-C<sub>3</sub>N<sub>4</sub> photocatalyst

**Susana Rojas de la Fuente**, Pontifical Catholic University of Chile, Chile.

17:50 – 18:10      23:20 – 23:40

Title: SEM Critiques of Sri Lankan Vein Graphite for Some Specific Water Pollution Control Aspects

**Suresh Aluvihara**, University of Peradeniya, Sri Lanka.

## Closing Ceremony