

2nd International E-meeting on

RENEWABLE ENERGY & SUSTAINABLE TECHNOLOGIES

October 28-29, 2021 | Virtual Conference



Coalesce Research Group

33 Market Point Dr,
Greenville, SC 29607, USA

Contact Us:

Phone: +1-718-543-9362

Whatsapp: +1-315-902-2237

Scientific Program

2nd International E-meeting on Renewable Energy & Sustainable Technologies

Thursday
October 28, 2021

Day 1 - October 28, 2021

11:00 - 11:15 Introduction

Keynote Presentations

11:15 - 11:45 Power Management of Microgrid Integrated with Wireless Sensor Network for Residential Parking Station
Dong Soo Har, Korea Advanced Institute of Science and Technology, South Korea

Oral Presentations

11:45 - 12:10 Food Waste, Organic Pollutants and Environmental Footprints: A Case for the Future Economy
Ikenna Elias Asogwa, University Sydney University, Australia

12:10 - 12:35 Graphene aerogel supported phase change materials (PCMs) for adjusting the thermo-electric energy harvesting
Chengbin Yu, Seoul National University, South Korea

12:35 - 13:00 A Hydrogen-focused Microgrid for Regional and Remote Community
GM Shafiullah, Murdoch University, Australia

Lunch Break (13:00 - 13:30)

Keynote Presentations

13:30 - 14:00 Solar energy for sustainable food supply
Nick Kanopoulos, Brite Solar Technologies, Greece

14:00 - 14:30 Annalise of adoption in practice of Performance Certification and alternative measures in the building in Albania
Atty. Lorenc Gordani, PhD, Tirana Business University, Albania

Oral Presentations

14:30 - 14:55 Breakthrough solution for seasonal energy storage enabling synthesize powders for reversible hydrogen and methane storage
Jaroslav Jerz, Slovak Academy of Sciences, Slovakia

14:55 - 15:20 Collagen, from supramolecular assembly to tissue reconstruction
Carole Aime, Sorbonne Université, CNRS, France

15:20 - 15:45 Investigation of thermal runaway in lithium-ion cells
Nikolay E. Galushkin, Don State Technical University, Russia

15:45 - 16:10 4D printing of PBS-based biomaterial scaffolds for bone tissue engineering
Geoffrey Ginoux, Université de Reims Champagne Ardenne, France

16:10 - 16:35 3D printing of PVC Bio parts with Thermal Baking in LCD 3D printing
Mohammadreza Riahi, K.N.Toosi University of Tech, Iran

16:35 - 17:00 Evaluation and Characterization of *Paenibacillus lactis* (MZ674207) derived Polyhydroxybutyrate and Possible utility as Alternate Biopolymer
Ambika Balasubramanian, Sri Paramakalyani College, India

17:00 - 17:25 Magnetic Energy Automaton Mechanical Oscillator for Multiple Uses
Gregory Spaulding, Magnetic Voltage Source, USA

17:25 - 17:50 Cellulose-based biodegradable films from lawn grass as an alternative to plastics
Mominul Hoque, South Dakota State University, USA

End of Day 1

Day-1
Keynote

2nd International E-meeting on

Renewable Energy & Sustainable Technologies

October 28-29, 2021 | Virtual Conference

SOLAR ENERGY FOR SUSTAINABLE FOOD SUPPLY

Nick Kanopoulos

Brite Solar Technologies, Greece

Abstract

The UN projects the world population to reach 9.7 billion by 2050. To feed this number of people at today's nutritional standards (where by the way 700 million people are malnourished) farm production has to increase 70% compared to today's volumes. This is clearly unsustainable using conventional farming because agriculture consumes 70% of water and 14% of energy globally. The solution is to use technologies that increase yield at low water usage. Greenhouse farming is a technology that can potentially solve the problem because it yields 10 times more per m² compared to traditional farming while using 10 times less water. However, the penalty is energy usage which is 10 times more than open field farming. To make this solution viable we need to solve the energy problem both in terms of cost but also in terms of environmental effects. This presentation focuses on the development of a transparent solar panel that produces clean energy for operating a greenhouse while allowing the plants in the greenhouse to grow without noticeable yield loss. The technology of the panel will be discussed along with quantitative data from pilot applications.

Biography

Dr. Nick Kanopoulos has many years of experience in creating and managing large teams of development, mass production, and marketing of semiconductor products for the global market. Before founding Brite he was Managing Director for Channel Development in Europe / Africa / Middle East for the Solar Business Unit of Applied Materials. He was Director of the Multimedia & Communications (MMC) business division of Atmel Corp. managing product development groups based in the U.S., Greece, Sweden and China. He was founder and CEO of Data Communications Technologies, which was acquired by Atmel, Director of the Integrated Electronics Group at RTI International (one of the largest independent research centers in the U.S.) and for 10 years adjunct professor at Duke University in North Carolina. He has been a special advisor to the Minister of Macedonia & Thrace in Greece for matters of technology and to various semiconductor companies. He graduated in Electrical Engineering from the University of Patras, Greece and holds MS and Ph.D. degrees from Duke University. He has published one book and over 100 papers in journals and conference proceedings, has ten patents (issued and pending) and is a member of several international trade and scientific organizations.