

# International Conference

# "Natural/Applied Sciences, Environmental Engineering and Clean Energy Technologies for Sustainable Development" (SYNERGY-2016)



*Organized* by "Krishi Sanskriti Publications" on 4<sup>th</sup> June, 2016 Venue: Jawaharlal Nehru University, New Delhi

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#### **CALL FOR PAPERS AND CONFERENCE THEMES:**

The Organizer cordially invites abstracts and full length research papers for oral/poster presentation from all over the World to participate in the International Conference on "Natural/Applied Sciences, Environmental Engineering and Clean Energy Technologies for Sustainable Development". (SYNERGY-2016) is the premier forum for the presentation of new advances and research results in the fields of theoretical, experimental, applied aspects. The conference will bring together leading researchers, Entrepreneurs and Academicians in the domain of interest from around the world. Topics of interest for submission include various subthemes, but are not limited to the conference aims at providing an opportunity for exchange of ideas and dissemination of knowledge among Scholars for Sustainable Development. All contribution should be of high quality, Original and not published elsewhere or submitted for publication. During the review period, Papers will be reviewed by eminent scholars in the respective areas. All Selected papers will be published as chapters in edited book/conference proceedings having ISBN and few high-end papers will be published in international Journal having ISSN which will be issued to authors after publication.

# The list of Expected Speakers:

- 1) Porf.(Dr.) S. N. Naik C.R.D.T., IIT Delhi
- 2) Dr. Pramod Kumar, University of Delhi
- 3) Dr. B. B. Singh, University of Delhi
- 4) Dr. Atul Kumar Johri J.N.U., New Delhi
- 5) Dr. R. P. Singh J.N.U., New Delhi
- 6) Dr. D. S. Khatri Vembsys Technovation (P) Ltd, Gurgaon
- 7) Dr. V. Venkat Ramanan I.G.N.O.U, New Delhi

# Conference Themes **Natural/Applied Sciences**

- Astronomy
- Chemistry
- Earth sciences
- Environmental sciences
- Physics
- Ecology
- Electrodynamics
- Mathematics
- Mathematics for Chemistry
- Meteorology
- Nuclear Physics
- Geometric
- Algebra Quantum
- Statistics
- Statistical Mechanics
- Computational Physics
- Electromagnetic
- Marine Hydrodynamics
- Mechanical Vibration
- Multibody Mechanics
- Nuclear Fusion
- Physics and Technology
- Optics
- Atomic
- Molecular and optical physics
- Aeroacoustics
- Engineering Acoustics
- Inorganic Chemistry
- Biochemistry
- Soil Science
- Solar System
- Stellar Astrophysics

- Stellar Scintillation
- String Theory
- Urban Forestry
- VCE Chemistry
- Volcanoes
- Geology
- Paleontology
- Affective neuroscience
- Anatomy
- Biomedical science
- Biocomputers
- Biocontrol
- Biodynamics
- Bioinformatics
- Biology
- Biomaterials
- Biomechanics
- Biomonitoring
- Biophysics
- Biopolymers
- Biotechnology
- Botany
- Cell biology
- Cognitive neuroscience
- Computational neuroscience
- Conservation biology
- Developmental biology
- Ethology
- Environmental science
- Evolutionary biology
- Evolutionary genetics
- Food science
- Genetics
- Genomics
- Health sciences
- Immunogenetics
- Immunology
- Immunotherapy
- Marine biology
- Medical devices
- Medical imaging
- Microbiology
- Molecular biology
- Neuroethology
- Neuroscience
- Oncology
- Optometry
- Parasitology
- Pathology

- Pharmacogenomics
- Pharmacology
- Physiology
- Population dynamics
- Proteomics
- Sports science
- Structural biology
- Systems biology
- Zoology

#### **Environmental Engineering**

- Architectural Environment & Equipment Engineering
- Carbon Abatement Technologies[CATs]
- Carbon capture technologies, CO2 transport, storage and use
- Catalytic converters
- Clean Production Process
- Co-firing with a CO2-neutral biomass
- Contaminated land management and site remediation
- Cultivation and Conservation of Forest
- Designer shopping Cloth bags
- Electrostatic precipitators
- Environmental Analysis and Monitoring
- Environmental Chemistry and Biology
- Environmental impact assessment and mitigation
- Environmental Materials
- Environmental Planning and Assessment
- Environmental policy and regulation development
- Environmental Protection
- Environmental Safety and Health
- Floating, ecological, multi-power source desalination plant
- Geographic Information and Remote Sensing Science
- Global Environmental Facility
- Global Practices of Environmental engineering law
- Green IT concept
- Hazardous waste management
- Honey bucket systems
- Hydrology and Water Resources Engineering
- Hyper-sound water-purifying system
- Land Resources Environment and Urban Planning
- Noise and Vibration Control
- Organic production of high-value products from seaweed
- Plant Protection
- Pollution Control Project (Air, Water, Solid)
- Reactive organic gases (ROG)
- Recycled container housing
- Reusing instead of recycling packaging
- Saline aquifers
- Scrubbers
- Soil and Water Conservation and Desertification Control

- Solid waste management
- Supercritical and IGCC coal-fired power plant
- Treadmills that convert the rotation of the belt into electricity
- Underpinning technologies
- Volatile organic compounds (VOC)
- Waste Disposal and Recycling
- Wastewater conveyance and treatment
- Water Supply and Drainage Engineering
- Water supply and treatment

#### **ADVANCEMENT IN ENERGY**

- Advances in Green Energy
- Energy Harvesting and Conservation
- Energy Conversion Techniques
- Energy Storage Batteries and other Storage Devices
- Future Energy Technologies
- Recent Advances In Renewable Energy Generation
- Conservation (Tidal and Wave)

### **Energy and materials**

- Advanced materials for coal fired thermal power plants
- Surface Engineering of Materials
- Materials for energy Saving-Thermoelectrics
- Novel illumination sources for efficient lighting & Materials
- modeling and theoretical aspects

#### **Greening the Fossil Fuels**

- Sustainable coal use and clean coal technologies
- Natural gas research and development
- Carbon and Methane capture, storage and utilization
- Enhance oil/gas recovery
- Petroleum engineering

#### **Green Energy in Transport**

- Advance bio-fuel for a sustainable heavy-duty transport and aviation
- Bio-fuels in developing economies
- Hybrid vehicles and its integration

#### **Optimization for energy markets**

- Identify your risk exposure on the market and enhance portfolio management
- Gain practical insights into the application of new regulations in place
- Assess the role of renewable production and its impact on the portfolio

#### **Renewable Energy**

- New Perspectives of Renewable Energy
- Biomass Industries
- Heating and Cooling Applications

- Hydro power
- Geothermal, Hydraulic
- Energy and heat transfer
- Energy storage & management
- Thermal Energy
- Algorithms, complexity and stability
- Solar cell technology, Solar cell materials, testing and efficiency
- Nanotechnology applications to RE
- Biogas and biomass
- Integrated energy systems
- Regional issues, economics and policy

#### Hydrogen & Fuel Cell

- Hydrogen Energy Systems
- Hydrogen Supply and Storage
- Hydrogen End-Use Technology
- Hydropower Development and Utilization

# **Lighting Quality & Energy Efficiency**

- Right Lighting and Energy Efficiency
- International energy saving initiatives
- National and regional energy saving programs
- Cost effectiveness of lighting installations
- Ecological footprint of lighting

#### • Interior applications

- Efficiency and visual perception quality
- Day lighting and Visual Comfort

## • Light and Vision

- Mesopic vision
- Lighting for the elderly and visually impaired
- Colour rendering

#### Photobiological Effects

- Circadian photoreception and responsivity
- Lighting and photobiological safety

#### • Photometry and Measurements

- Luminance measurement with emphasis on imaging measurement devices
- Mesopic photometry
- Measurements of photobiological effects
- Colorimetry

# • Energy Innovation for the Development of New Energy Sources

- Fossil fuel applications
- IT solutions for energy sector

#### • Modeling and Simulation of Energy Systems

- Operations research applications on energy systems
- Decision making in energy systems

### • Energy Markets and Demand Response

- Energy market liberalization; progress on grid operators
- Unbundling
- The internal energy market where are we, what needs to be done
- Power market design (e.g. Capacity Markets)
- Cross border trade and developments- energy exchange
- Competition in wholesale, retail and balancing markets
- Carbon markets

## • Energy Management

- Intelligent energy management : technologies and Challenges
- Natural gas distribution sector
- Future customer services
- Energy efficiency and management
- Operation and maintenance in energy plants

# • Energy Economics

- Finance of energy
- Financial support, pricing, and regulation schemes (e.g. Feed-in tariffs)
- · Risk management

#### **Energy Systems**

- Low carbon heat and power (CCS, Nuclear, Wind, Solar, etc.)
- Energy storage and network balancing
- · Carbon pricing and emissions trading
- Computing, data and energy system modelling
- Energy Transmission and Distribution
- Regional Integration Projects
- Energy-Environment Interaction
- Energy and Exergy Analyses
- Clean coal technology and IGCC, fluidized bed systems
- CO2 Capture and Storage, CO2 and Emission Issues,
- Combustion system modeling and analysis, clean combustion
- Greenhouse cultivation, renew-able energy in agriculture
- Remote sensing of hazard Warnings and mitigation
- Waste to energy and its management
- Natural gas water table content of basic research
- Alternative energy technologies and sources
- Energy process and system modeling and optimization

# Green technology, Renewable energy and Environmental protection

- Climate and climatic changes
- Corporate Responsibility and Sustainable Development
- Economic and Social aspect of Sustainable Development
- Energy and Environment Energy Policy, Planning & Management
- Entrepreneurship, Management and Sustainable Development
- Environmental policy in developing countries
- Environmental restoration and ecological engineering
- Global warming Green Energy Options
- Health and the Environment
- Nuclear Energy Fission & Fusion
- Renewable Energy Standards
- Sustainable Development and Education

#### **Advanced Energy Technologies**

- Nuclear Energy Application: Power Generation, Desalination
- Nuclear Materials and Fuels
- Energy From the Space, Dark Energy

#### **Fuels and Combustion**

- Emissions from ICE and their control
- Alternative fuels
- NG as fuel for rural transportation
- Bio-diesel fuels
- Fuel additives

#### **Solar Photovoltaic Devices and Systems**

- Next Generation (Nano) Photonic and Cell Technologies
- Laser Material Processing for Solar Energy Devices

#### Wind Energy

- Wind Power Development Challenges:- Intermittency, RPS, PPAs
- Wind Credits & Incentives (PTCs)
- Managing a Wind Farm
- Connecting Wind to the Grid
- Offshore Wind Power
- Optimizing Wind Power Resources

#### **International Convergence on energy**

- International Organization and Energy Convergence
- Transmission Networks and Regional Convergence
- Regional and International Energy Flows
- Energy Diplomacy and National Security
- Global Crisis and Energy-Dependent-Economies

#### **Abstract Submission:**

Abstracts not exceeding 250-300 words on any of the aforesaid themes should be sent to the Organizing Secretary through email at <a href="mailto:info.energyconference@gmail.com">info.energyconference@gmail.com</a> on or before 28<sup>th</sup> May, 2016.

# **Submission of Full Length Research Paper**

Full length research paper, maximum in 6 pages and copyright form should be submitted together as separate attachment latest by  $30^{th}$  May, 2016 through email at

info.energyconference@gmail.com

# **Submission of Registration form:**

Submission of Registration fees latest by 1<sup>st</sup> June, 2016.

Registration process can be initiated after receiving acceptance letter of full paper.

#### Accommodation

Free one day Accommodation will be available to the limited no. of out station non N.C.R. Delegates at JNU guest house and nearby other guest houses/hotels around conference venue.

The Tariff rate for next day and subsequent day accommodation is as follows: Double-bed Room @ Rs.800/per person (Indian non N.C.R. delegates) and 35 USD for Foreign delegates on sharing basis per day (check out time noon to noon). To and fro transportation facility from guest house to the conference Venue will be provided by the organizer.

**NOTE:** In case Research article is accepted by the editorial committee it will be published and released on the day of conference. In case the delegates are not able to physically present their paper due to some or other reason his/her research paper will be published (in absentia) and published copy along with certificate will be dispatched to his/her correspondence address by post just after the conference at no extra cost. **All communication should be by e-mail/online only (no hard copy is required to be posted).** 

### Mandatory steps to be followed:-

- **1.** In case of multi authored research paper, at least one Registration is mandatory.
- **2.** In case other author/co-author wish to physically attend the conference they need to pay full Registration fees individually, separate publication of research article as chapter/Journal & Certificate along with the conference kit will be issued to them. Co- Authors are requested to fill & submit separate Registration forms in case they are physically attending the conference.
- **3.** Charges for extra copy of publication of research article as chapter/Journal & Certificate for other Co-author (if required) should be paid along with preliminary Registration by the corresponding author.
- **4.** Listener/Accompanying person are not eligible for free accommodation even for one night. However if they require they have to pay Accommodation charges even for one day.

**5.** All Selected papers will be available online after 15 to 20 days of conference date over, in order to download the papers the authors need to go\_in the publication section of Krishi Sanskriti website.

#### Registration

The participants are requested to register by sending the duly filled Registration form through e-mail along with their research paper and registration fees (through RTGS/ Wired Transfer or Online Transfer)

Bank Details mention below for RTGS/ Wired Transfer or

**Online Transfer:** 

**Beneficiary Name** : Krishi Sanskriti Publications

Bank Name : Canara Bank

Bank Address : Jit Singh Marg, New Delhi

Account No. : 1484201003088

**Account Type : Current** 

IFSC Code : CNRB0001484 Swift Code : CNRBINBBBID

**Registration Charges:** 

		SAARC/	
		African	Rest of
	Indian	Country	the
Categories	Delegates	Delegates	countries
Academic faculty/ Industrial			
Delegates	4000 INR	125 USD	250 USD
Research Scholars			
(M. Phil/Ph.D) / NGO			
Representative	3500 INR	100 USD	200 USD
Students(B.Tech/./M.Tech			
/M.Sc etc)	2500 INR	75USD	150 USD
Printing of Additional Page			
in Books /Journals	300 INR	15 USD	20 USD
Listener / Accompanying			
Member(only Indian			
Delegates)	1500 INR	**	**
Book/Journal & Certificate			
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Only Books/Journal			
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Co-Authors in absentia)	500 INR	15 USD	25 USD
Only Certificates			
(Co-Authors in absentia)	300 INR	10 USD	20 USD
Additional Research paper			
for same authors	1500 INR	25 USD	35 USD
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\*\*Foreign Participants as listener are not allowed, only authors from foreign country/countries will be allowed in this conference.

For further information visit our website: http://www.krishisanskriti.org/synergy.html

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**Organizing Secretary** 

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