#### Registration Form (Department of Chemistry)

International Symposium on Technologies and Materials for Renewable Energy, Environment and Sustainability

6-7 February 2019

Department of Chemistry, University of Agriculture, Faisalabad 38040, Pakistan Tel:+92419200161, ext 3309

Signature\*

РНОТО

Name:			
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Registration	1 fee* (Tick the approp	oriate box)	
Registration	ı status	By 15 January, 2019	After 15 January, 2019
☐ Faculty /Researchers		Rs. 2500	Rs. 3000
Students (Certificate Require		ed) Rs.1500	Rs. 2000
Accompanying Person		Rs. 2000	☐ Rs. 3000
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Foreign Delegate		☐ US\$. 100	□US\$. 150
Deadline for full leng	th article submission to		ner, tea and cultural shows
		CHEMICAL SCIENCES is 31" January 2	2019.
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### **INTERNATIONAL SYMPOSIUM ON**

Technologies and Materials for Renewable Energy, Environment and Sustainability



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FULL LENGTH ARTICLES WILL BE PUBLISHED IN

### INTERNATIONAL JOURNAL OF CHEMICAL AND BIOCHEMICAL SCIENCES

(<a href="http://www.iscientific.org/instruction-to-authors/">http://www.iscientific.org/instruction-to-authors/</a>), without any processing cost after review. The deadline of submission for full length article is 31st January 2019.

Venue: Department of Chemistry,
University of Agriculture
Faisalabad, Pakistan.

# This symposium will cover three broad topics

### (I) RENEWABLE ENERGY

Depleting fossil fuels, global warming and environmental pollution is key challenges world is facing today. Renewable energy is Holy grail to tackle these issues. This symposium will provide an excellent opportunity to share recently developed renewable energy technologies including direct power production technology, photovoltaic, hydro, wind, and renewable fuel production technologies such as biofuels, H<sub>2</sub> and fuel cells technologies.

Following topics regarding energy will be covered in this part of symposium:

- > Solar power
- Wind power
- Hydro-electric energy
- Biomass
- Hydrogen and fuel cells
- Geothermal power
- Catalysis of biofuels

### (II) SUSTAINABLE TECHNOLOGIES

The use of renewable energy for power production and chemical storage of energy are the key elements to move to a low-carbon economy, sustainable society and to foster energy transition. For this reason, there is a fast-growing scientific interest on this subject.

This symposium aims to provide a multi-disciplinary forum for scientists, engineers and industry experts to break new ground in the discussion, and realize a cross fertilization and progress in the understanding of the design criteria for the development of solar technologies in Pakistan and other developing countries for energy and sustainable environment for CO<sub>2</sub> reduction.

- Recent developments in zero emission fuel (H<sub>2</sub>)/Artificial photosynthesis
- Recent developments in waste-sourced biofuel production
- Biomimicry for sustainable fuel
- Electric automobiles
- Carbon capture
- Energy storage
- Artificial photosynthesis

## (III) ENVIRONMENTAL PROBLEMS AND SOLUTIONS

The main theme of second day of this symposium will be "How does pollution affect all living things? And what are solutions". The other theme of this part of symposium is about seasonal and environmental variations in phytochemicals.

Pollutants and contaminants can have dire effects on entire ecosystems, making life more difficult for humans, plants and animals. Children and the elderly are particularly susceptible to the health effects from these toxins. In many cases, exposure to pollution has a cumulative effect on the body.

Air pollution consists of solid particles and gases. Many pollutants are carcinogens. Humans are not the only living creatures affected by toxic air pollutants. Some toxins, like mercury, settle onto plants and into water sources that are then consumed by animals. Water pollution is one of major causes of increase death worldwide. Contaminants like solvents, pesticides, radium and arsenic are more sinister. This type of pollution can cause long-term health problems for people. Wildlife can also die from exposure. Plants grown in contaminated soil take up the hazardous substances through their roots. Humans or animals that ingest these plants may get sick. People and animals can also inhale soil contaminants through dust that is present in the air or absorb these hazardous chemicals through their skin.

- Techniques for air purification
- Technologies for water treatment
- Methodologies for pollution control
- > Recent developments in CO<sub>2</sub> reductions
- Environmental/seasonal variations in phytochemicals
- Control of soil, air, water, and food contaminants
- Environment friendly transport