

## **Press Releases on National Workshop**

### **About of GCSD-2017**

The Department of Chemistry, National Institute of Technology Jamshedpur is organizing a two day national workshop on Green Chemistry & Sustainable Development during 17<sup>th</sup> -18<sup>th</sup> March 2017, sponsored by TEQIP-II. In this national workshop the presentation will include invited lectures by renowned experts from academia. The workshop will focus on the following main themes:

- the design of processes to maximize the amount of raw material that ends up in the product
- the use of renewable material and energy sources
- the use of safe, environmentally benign substances, including solvents, whenever possible
- the design of energy efficient processes
- avoiding the production of waste, which is viewed as the ideal form of waste management

Green chemistry also called sustainable chemistry is focused on the designing of products and processes that minimize the use and generation of hazardous substances. Sustainable technologies in the area of chemistry and chemical engineering provide benefits, including safer products, reduced use of energy, resources and waste, and improved competitiveness within the market.

In this course the resource person will discuss how green chemistry and sustainability ideas can impact society. This event is intended to assist the student, researcher, and professional mainly from academia institutions such as, surface science engineering, environmental management, field engineers, scientific organizations, academic researchers and industrial professionals who are involved in green chemistry and technologies for sustainable development. This intensive 2-Day national workshop provides the theoretical information and practical hands-on training on current green chemistry & sustainable development with an emphasis on the emerging trends in the major field specializations such as: green catalysis, green solvents and reagents, Green chemicals and energy produced from renewable resources (biomass, carbon dioxide etc.), Novel materials and technologies for energy production and storage (bio-fuels and bioenergies, H<sub>2</sub>-O<sub>2</sub> fuel cells, solar cells, lithium-ion batteries etc.), Green chemical engineering processes (process integration, materials diversity, energy saving, waste minimization etc., Green technologies for environmental sustainability (CO<sub>2</sub> capture, waste and harmful chemicals treatment, pollution prevention etc.), Food and water safety, Global healthcare, energy provision and environmental protection etc.

The workshop will start on 17<sup>th</sup> March, 2017 morning and concludes on 18<sup>th</sup> March, 2017.

**Inaugural Function Date, Time & Venue:** 17/03/2017, 9:00 AM, Conference Hall, Computer Centre of NIT Jamshedpur

**Chief Guest:** Professor Gurdeep Singh, Vice Chancellor, Vinoba Bhave University, Hazaribag

**Presiding the inaugural function:** Prof. Rambabu Kodali, Director, NIT Jamshedpur

**Sponsored by:** Technical Education Quality Improvement Programme, Phase –II (TEQIP-II), MHRD, Govt. of India

**Coordinator:** Dr. Balram Ambade, Assistant Professor, Department of Chemistry

**Advisor:** Dr. S. K. Prasad, Head of the Department of Chemistry

### **The programme schedule and experts/resource persons**

During the 2 Day long sessions, the organizers have planned a total of 09 invited expert lectures followed by one software demonstration through hands-on training with field examples/case studies. The organizers have arranged two sessions in the morning and two sessions in the evening daily. Each session is of 90 minutes duration.

The organizer have invited 8 resource persons. Out of which 1 from Vice Chancellor, HBU, 2 are from IITs such as from IIT Patna, IIT-ISM Dhanbad respectively, 3 are from NIT Rourkela, 1 from Central University GGDU Bilaspur and 1 from NIT Jamshedpur

#### **List of Resource Persons:**

1. Prof. Gurdeep Singh Vice-Chancellor, Vinoba Bhave University, Hazaribag
2. Dr. Garudadhvaj Hota, Associate Professor, NIT Rourkela
3. Dr. Raj Kishore Patel, Associate Professor, NIT Rourkela
4. Dr. Dillip Kumar Bisoyi, Associate Professor, NIT Rourkela
5. Dr. Sahid Hussain, Associate Professor, IIT Patna
6. Prof. Biswajit Chowdhury, Professor, IIT-ISM Dhanbad
7. Dr. Santosh Singh Thakur, Ass. Professor, Central University GGDU Bilaspur
8. Dr. Chintalacheruvu Madhusudana Rao, Assistant Professor, NIT Jamshedpur
9. Dr. Balram Ambade, Assistant Professor, NIT Jamshedpur

#### **Target audience**

The target groups attending the national workshop are well-selected researchers and professionals mainly from academic professional, scientific organizations, R&D labs, paint technologies, Environment manager, Safety officers, defence official and public health agencies etc. This national workshop is intended for people with Surface Science and Engineering and Chemistry background and need for instruction in the techniques and applications of experimental and soft computing techniques. In addition, this workshop provides a common platform for transferring the knowledge about the recent trends in green chemistry & environmental sustainability.

The target strength is 60 nos., but the organizer received many applications from various places of the country. Out of which a total of 100 participants list is prepared.

#### **Outcomes of the workshop**

The participants will learn the basics of the following technical areas:

- Explores sustainable development through green engineering
- Design of new, greener and safer chemicals and materials
- sustainable resources
- Biotechnology alternatives to chemistry-based solutions
- Environmental pollutants
- Bio-fuels and bioenergies
- Energy saving
- Waste minimization
- Food and water safety,
- Global healthcare
- Environmental protection
- Water quality modelling

The accommodation is available for the delegates/outstation participants in Hostel – K for boys and RLB Hostel for girls participates of the Institute.

The coordinator of the workshop are in the opinion that, this 2-Day national workshop is certainly fulfil its objectives and outcomes by the end of the day which are very much useful to the target groups as this programme is blended with highly qualified resource persons and talented young participants.

#### **Coordinator, GCSD-2017**

(Balram Ambade)

Department of Chemistry, NIT Jamshedpur