



Online Faculty Development Programme  
on

## **Green Technology and Sustainability**

**February 21-25, 2022**

Sponsored by  
**ATAL Academy - AICTE**

**Organized by:**

**Metallurgical and Materials  
Engineering Department**



**National Institute of  
Technology Durgapur**

## **ORGANIZING COMMITTEE**

### **PATRON**

**Prof. Anupam Basu**  
Director, N.I.T Durgapur

### **COORDINATOR**

**Dr. Susanta Pramanik**  
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### **PROGRAMME DURATION**

**21<sup>st</sup> -25<sup>th</sup> February, 2022**

### **WHO CAN ATTEND**

- (i) Faculties from AICTE approved Institutions
- (ii) Research Scholars from AICTE approved Institutions

### **REGISTRATION FEE**

Faculty and Students from AICTE approved Institutions – NIL  
Registration is required to be done in *ATAL Academy Portal*.  
Link: <https://www.aicte-india.org/atal>

### **RESOURCE PERSONS**

Resource persons include faculties from IIT Kharagpur, Jadavpur University, N.I.T. Durgapur and professionals from SAIL and other relevant industries.

## **THEME OF THE WORKSHOP**

❖ The requirement of industry is producing products adopting green technology with minimal harm to environment accompanying with profit.

❖ Sustainable green technologies have to be thought over to tide over the crisis before time runs out.

❖ The Green Technology which is used now in places utmost important in terms of economic and environment friendly process that minimize the harm to the environment, conserve energy, natural resources and product safety.

❖ The sustainability not only reduce the cost and waste but also helps to achieve the eco-friendly demand of society.

❖ The proposed short term AICTE sponsored course will be devoted to review the recent advances and the new research and development initiatives in this direction. Special emphasis will be laid on Indian scenario and policies.





## COURSE CONTENT

- **Municipal Solid waste management**
  - **E-waste management**
  - **Water Resources and Effect of Climate Change**
  - **Hazardous Waste Management**
  - **Circular Economy-a New Paradigm of Waste Management**
  - **Analysis of Hydro-climatic Extremes and Flood Management**
  - **Conversion of Biomass to Bio reserve**
  - **Sustainability of Waste to Energy**
  - **Recycling and Utilization of Integrated Industry Waste Materials**
  - **Carbonaceous Waste Materials for the treatment of Waste Water**
  - **Innovation in Environmental Management**
- Special Lecture on:** *Happiness and Mental Well Being*

## ABOUT NIT Durgapur

Durgapur- A city hard and strong, the home to SAIL-DSP, SAIL-ASP, DVC-DTPS, Secondary Steel Units, is situated on the banks of River Damodar. National Institute of Technology Durgapur (NITD) is a leading technical institute offering undergraduate, postgraduate and doctoral programs in various disciplines of engineering, science, social science and management studies. NITD was established as a Regional Engineering College Durgapur (RECD) in 1960 as a joint venture of the Government of India and Government of West Bengal. REC Durgapur was converted to NIT Durgapur under the full administrative and financial control of the Ministry of Human Resource Development of Government of India with a Deemed University status on 3rd July, 2003. The Institute was declared an Institute of National Importance by the Government of India on August 15, 2007. In this year the institute is celebrating Diamond Jubilee.

## TENTATIVE SPEAKERS

- ❖ **Prof. Sudha Goel**, Associate Professor, Civil Engineering Department, IIT Kharagpur
- ❖ **Prof. Brajesh Kumar Dubey**, Associate Professor, Civil Engineering Department, IIT Kharagpur
- ❖ **Prof. Priyadarshi Patnaik**, Professor, Humanities and Social Science Department, IIT Kharagpur
- ❖ **Prof. Pankaj Kumar Ray**, Professor, Department of Water Resource Engineering, Jadavpur University
- ❖ **Dr. Anupam Debsarkar**, Associate Professor, Department of Civil Engineering, Jadavpur University
- ❖ **Prof. Alok Bajpai**, MBBS, MD, Psychiatrist, SEHAT Kanpur
- ❖ **Prof. Papita Das**, Professor, Department of Civil Engineering, Jadavpur University
- ❖ **Prof. Gopinath Halder**, Professor, Chemical Engineering Department, NIT Durgapur
- ❖ **Dr. Jaya Sikder**, Associate Professor, Chemical Engineering Department, NIT Durgapur
- ❖ **Dr. Susanta Pramanik**, Associate Professor, MME Department, NIT Durgapur
- ❖ **Mr. Subhra Dhara**, RDCIS, SAIL.
- ❖ **Mr. Ankit Tripathi**, Unaeko Industry

## ABOUT MME DEPARTMENT

The Department, which started its journey in the year 1960, presently offers B.Tech. (Metallurgical and Material Engineering), M.Tech. (Metallurgy and Materials Technology) and Ph.D Programme. The Department maintains high level of interactions with other academic institutes such as IIT Kharagpur, Jadavpur University, IEST Shibpur and NIFFT Ranchi, CSIR Laboratories, and SAIL.

ATAL Academy, Government of India Sponsored Short Term Online Course

*Green Technology and Sustainability, February 21-25, 2022*

*Organized by MME Department, NIT Durgapur*

**Schedule of Lectures Online Lectures through MS Teams**

<b>Day</b>	<b>Morning Session</b>		<b>Break</b>	<b>Afternoon Session</b>	
<b>21/02/2022</b>	<b>09:30AM-11:30AM</b>	<b>11:45AM- 01:30PM</b>		<b>2:30PM-04:00PM</b>	<b>04:15PM-5:45PM</b>
	<b>Inauguration</b>	Session 1 <i>Innovation in Environmental Management</i>		Session 2 <i>Sustainable Air Quality Management for Urban Metropolis</i>	
<b>22/02/2022</b>	Session 3 <i>Plastic Waste Management</i>	Session 4 <i>Happiness and Mental Well Being</i>		Session 5 <i>Presentation from Unaeko Industry</i>	
<b>23/02/2022</b>	Session 6 <i>Psychology of Everyday</i>	Session 7 <i>E-Waste Management</i>		Session 8 <i>Wealth out of Waste- Recycling of Industrial Waste through Iron Ore Agglomeration</i>	
<b>24/02/2022</b>	Session 9 <i>Integrated Waste Management for Smart Cities</i>	Session 10 <i>Green Synthesis of Nano-Particles and its Application</i>		Session 11 <i>Green Technology and Sustainability in Water Engineering</i>	
<b>25/02/2022</b>	Session 12 <i>Environmental Risk Assessment - methodology and case studies</i>	Session 13 <i>Bio-catalytic Transformation of Inedible Feed Stock towards Green Fuel Generation- An Approach of Energy Crisis Mitigation</i>		Session 14 <i>Holistic Approach for Bioethanol Production from Lignocellulosic Biomass</i>	<b>Discussion , Evaluation and Valedictory Session</b>