

**TEQIP-3**

Technical Education Quality Improvement Programme

**TEQIP-III SPONSORED ONLINE  
WORKSHOP**

**on**

# **Importance of Environmental Engineering and Climate Change**

**March 12-16, 2021**



**Organized by**

**Department of Civil Engineering**

**National Institute of Technology Meghalaya, India**

**Bijni Complex, Laitumkhrah, Shillong,**

**Meghalaya-793003**

**Coordinator**

**Dr. Ganesh Chandra Dhal**

**Assistant Professor**

**Department of Civil Engineering**

**NIT Meghalaya**

## About NIT Meghalaya

The National Institute of Technology (NIT) Meghalaya is one among the thirty NITs in India established under the NIT Act 2007 (Amended 2012) of the Parliament of India as Institutes of National Importance with full funding support from the Ministry of Human Resource Development, Government of India. The nearest railway station is Guwahati. From the railway station, one can travel by bus or shared taxi to Shillong. It takes about 3 hours to reach Shillong. After reaching Shillong, one can hire local taxi to reach the campus at Bijni Complex, Laitumkhrah.

## About The Department

NIT Meghalaya, Department of Civil Engineering began its session from July 2012. The Department offers B.Tech, M.Tech in structural Engineering and PhD programs with different specializations. The Department is well equipped with laboratories; computational facilities with latest numerical modeling software where our students are exposed to recent technologies development. The Department has well experienced and dedicated faculty members spanning all specializations.

## Co-Coordinator

**Dr. Hriday Mani Kalita**  
Assistant Professor, CE,  
NIT Meghalaya

**Dr. Susmita Sharma**  
Assistant Professor, CE  
NIT Meghalaya

## Broad Scope

The proposed online workshop is aimed at creating an effective forum for exchange of innovative ideas and research works in the areas of Environmental Engineering and climate change. Eminent speakers from Academia and Industry will be delivering lectures on the following thematic areas of the workshop.

## Target Audience

The course is suitable for Faculty Members, Research Scholars, Students and Industry Professionals.

## Mode

The workshop will be organized through online platform. The joining link will be shared with the participants, well in advance.

## Certificate

E-Certificate will be provided to all the participants satisfying the attendance criteria.

## How to apply

### Click here for registration

<https://forms.gle/1mZ95RsV1Rjn4yiz6>

### Join with Google Meet

<meet.google.com/owj-qeud-dkp>

**More Info:** <https://www.nitm.ac.in>

**Last Date for Registration:** 10<sup>th</sup> March, 2021.

Registration will be considered on a First cum First serve basis. There will be no registration fee.

## Course Contents

- ❖ Introduction to Environmental Engineering
- ❖ Introduction to climate change
- ❖ Current scenario of Environmental Engineering & Climate change
- ❖ Environmental Pollution and Management
- ❖ Application of Environmental Engineering
- ❖ Solid Waste Management
- ❖ Waste Water Treatment for Enhanced Sustainability
- ❖ Industrial Waste Treatment
- ❖ Biological Waste Treatment
- ❖ Air Pollution Control
- ❖ Automobile Pollution Control
- ❖ Green Energy
- ❖ Waste to Energy
- ❖ Environmental Impact Assessment
- ❖ Disaster Management

## Resource Person

1. Talks by eminent academicians from IIT, NIT and other Research Institutes
2. Talks by eminent academicians from other TEQIP Institute
3. Other reputed Institutes & Industry

## Patron

**Prof. B. B. Biswal**  
Director, NIT Meghalaya

## Coordinator

**Dr. Ganesh Chandra Dhal**  
Assistant Professor  
Department of Civil Engineering  
NIT Meghalaya  
Email: [ganeshdhal@nitm.ac.in](mailto:ganeshdhal@nitm.ac.in)  
Mobile: 9438122573  
Whatsapp: 7077661114

# Session Plan

Five days online workshop  
on

## Importance of Environmental Engineering and Climate Change

12<sup>th</sup> -16<sup>th</sup> March 2021 Organized by:

Department of Civil Engineering

National Institute of Technology Meghalaya

<b>Day 1</b>	<b>12.03.2021 (Friday)</b>
10:30- 10:40	<b>Welcome Address by Coordinator</b> Dr. G C Dhal, Assistant Professor, CE
10:40- 10:45	<b>Address by HOD, Department of Civil Engineering</b> Dr. M. Longshithung Patton, HOD (CE)
10:45- 10:50	<b>Address by TEQIP coordinator</b> Prof. Ayon Bhattacharjee, Professor, Department of Physics
10:50- 11:00	<b>Presidential Address by Chief Patron Prof. B. B. Biswal</b> <b>Director, NIT Maghalaya</b>
11:00- 11:05	<b>Vote of Thanks by</b> Dr. Susmita Sharma, Assistant Professor, CE
11:05- 12:00	<b>High Tea</b>
<b>Lunch Break</b>	
2:30- 3:45	<b>Lecture 1</b> <b>“Industrial Wastewater Treatment”</b>  <b>Dr M CHANDRA SEKHAR</b> <b>Professor - HAG</b> <b>Water &amp; Environment Division</b> <b>Department of Civil Engineering</b> <b>National Institute of Technology</b> <b>WARANGAL - 506 004, INDIA</b>

3.45-5.00	<p style="text-align: center;"><i>Lecture 2</i></p> <p style="text-align: center;"><b>“Environmental Health &amp; Covid-19”</b></p> <p style="text-align: center;"><i>Dr. Devendra Mohan</i>  <b>Professor, HAG</b>  <b>Department of Civil Engineering</b>  <b>Indian Institute of Technology (BHU) Varanasi</b>  <b>Uttar Pradesh-221005</b></p>
<b>Day 2</b>	<b>13.03.2021 (Saturday)</b>
10.15- 11.30	<p style="text-align: center;"><i>Lecture 3</i></p> <p style="text-align: center;"><b>“Solid Waste management”</b></p> <p style="text-align: center;"><b>Dr M CHANDRA SEKHAR</b>  <b>Professor - HAG</b>  <b>Water &amp; Environment Division</b>  <b>Department of Civil Engineering</b>  <b>National Institute of Technology</b>  <b>WARANGAL - 506 004, INDIA</b></p>
11.30- 12.45	<p style="text-align: center;"><i>Lecture 4</i></p> <p style="text-align: center;"><b>“Biomethanation:  A sustainable approach towards management of bio-degradable municipal solid waste”</b></p> <p style="text-align: center;"><b>Dr. Ajay Kalamdhad, Professor</b>  <b>Department of Civil Engineering</b>  <b>Indian Institute of Technology Guwahati</b>  <b>Guwahati, Assam-781039</b></p>
<b>Lunch Break</b>	
2:30- 3:45	<p style="text-align: center;"><i>Lecture 5</i></p> <p style="text-align: center;"><b>“Environmental Pollution and Management”</b></p> <p style="text-align: center;"><b>Dinabandhu Gouda, Additional Director(Scientist E)</b>  <b>Divisional Head, IPC-I Division</b>  <b>Central Pollution Control Board</b>  <b>(Ministry of Environment , Forests &amp; Climate Change, Govt of India)</b>  <b>East Arjun Nagar, Delhi-110032</b></p>
3.45-5.00	<p style="text-align: center;"><i>Lecture 6</i></p> <p style="text-align: center;"><b>“NO cost Removal of heavy metal”</b></p> <p style="text-align: center;"><b>Dr. Upendra Kumar</b>  <b>MIE, FICER, PhD (IIT Kharagpur)</b>  <b>Professor &amp; Ex - HoD</b>  <b>Department of Civil Engineering</b>  <b>National Institute of Technology Silchar</b>  <b>NIT Silchar, Assam- 788010 (India)</b></p>

<b>Day 3</b>	<b><i>14.03.2021 (Sunday)</i></b>
<b>10.15- 11.30</b>	<p><i>Lecture 7</i></p> <p><b>“Removal dye by Low cost method”</b></p> <p><b>Dr. Upendra Kumar</b>  <b>MIE, FICER, PhD (IIT Kharagpur)</b>  <b>Professor &amp; Ex - HoD</b>  <b>Department of Civil Engineering</b>  <b>National Institute of Technology Silchar</b>  <b>NIT Silchar, Assam- 788010, India</b></p>
<b>11.30- 12.45</b>	<p><i>Lecture 8</i></p> <p><b>"Photocatalytic CO<sub>2</sub> conversion into Value added Product"</b></p> <p><b>Dr. Suverna Trivedi</b>  <b>Assistant Professor</b>  <b>National Institute Technology Rourkela</b>  <b>Department of Chemical Engineering, National Institute of Technology</b>  <b>Rourkela, Sundargarh, Odisha, India – 769008</b></p>
<b>2:30- 3:45</b>	<p><i>Lecture 9</i></p> <p><b>“Modified photo-Fenton process for treatment of textile waste water”</b></p> <p><b>Dr. PRATEEKSHA MAHAMALLIK</b>  <b>Assistant Professor</b>  <b>National Institute Technology Rourkela</b>  <b>Department of Civil Engineering, National Institute of Technology Rourkela,</b>  <b>Sundargarh, Odisha, India – 769008</b></p>
<b>3:45-4:45</b>	<p><i>Lecture 10</i></p> <p><b>"Design and development of integrated nano-biomaterials for treatment of industrial wastewater"</b></p> <p><b>Dr. Naresh Kumar Sahoo</b>  <b>Associate Professor</b>  <b>Department of Chemistry</b>  <b>Faculty of Engineering and Technology (ITER)</b>  <b>Siksha 'O' Anusandhan Deemed to be University</b>  <b>Bhubaneswar-751030</b>  <b>Odisha, India</b></p>

<b>Day 4</b>	<b>15.03.2021 (Monday)</b>
<b>11.30-12.45</b>	<p align="center"><i>Lecture 11</i></p> <p align="center"><b>“Decentralized Wastewater Treatment”</b></p> <p align="center"><b>Dr. Rajesh Roshan Dash</b> Associate Professor (Civil Engineering) School of Infrastructure Indian Institute of Technology Bhubaneswar Argul, Jatni -752050, Odisha, India</p>
<b>Lunch Break</b>	
<b>2:30- 3:45</b>	<p align="center"><i>Lecture 12</i></p> <p align="center"><b>“Appropriate Technologies for removal of trace toxins”</b></p> <p align="center"><b>Dr. Devendra Mohan</b> Professor Department of Civil Engineering, HAG Department of Civil Engineering Indian Institute of Technology (BHU) Varanasi Uttar Pradesh-221005</p>
<b>3.45-4.45</b>	<p align="center"><i>Lecture 13</i></p> <p align="center"><b>" Electronic waste management in India"</b></p> <p align="center"><b>Dr. Jiwan Singh</b> Assistant Professor, Department of Environmental Science, Coordinator-B.Tech. Civil Engineering, Coordinator-B.Tech. Electronics and Communication Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow, Uttar Pradesh-226025, India</p>
<b>Day 5</b>	<b>16.03.2021 (Tuesday)</b>
<b>10.15-11.30</b>	<p align="center"><i>Lecture 14</i></p> <p align="center"><b>“Bank filtration: A sustainable traditional water treatment technology”</b></p> <p align="center"><b>Dr. Rakesh Roshan Dash</b> (OEC, IIT Delhi, IIT Roorkee) Associate Professor Veer Surendra Sai University of Technology (A Technical University of Government of Odisha) Burla-768018, Dist.- Sambalpur (Odisha), India (Ex-Scientist, Bureau of Indian Standards Ministry of Consumer Affairs, Govt. of India</p>

<p><b>11.30- 12.45</b></p>	<p style="text-align: center;"><i>Lecture 15</i></p> <p style="text-align: center;"><b>"Climate change: a threat to the society"</b></p> <p style="text-align: center;"><b>Dr. Arun Lal Srivastav</b></p> <p style="text-align: center;">[M.Sc; UGC-NET; Ph.D. (IIT-BHU, Varanasi); Post Doctorate (Taiwan)]</p> <p style="text-align: center;"><b>Assistant Professor</b></p> <p style="text-align: center;"><b>Department of Applied Sciences,</b></p> <p style="text-align: center;"><b>Chitkara University, Himachal Pradesh – 174103</b></p>
<p style="text-align: center;"><i>Lunch Break</i></p>	
<p><b>2:30- 3:45</b></p>	<p style="text-align: center;"><i>Lecture 16</i></p> <p style="text-align: center;">“Application of constructed wetland for the treatment &amp; reuse of Waste water”</p> <p style="text-align: center;"><b>Dr. Umesh Mishra, Professor, Civil Engineering,</b></p> <p style="text-align: center;"><b>NIT Agartala</b></p> <p style="text-align: center;"><b>Chairman, Centre for Rural &amp; tribal Development</b></p> <p style="text-align: center;"><b>Chairman, Industry Institute Interaction Cell</b></p> <p style="text-align: center;"><b>Chairman , State Level Expert Appraisal Committee Tripura</b></p>
<p><b>3.45-4.00</b></p>	<p style="text-align: center;"><b>Valedictory Session</b></p>

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## Annexure-I I

### Local Organizing Committee

<b>Patron:</b>	<b>Prof. B. B. Biswal</b> <b>Director, NIT Meghalaya</b>
<b>Coordinator</b>	Dr. Ganesh Chandra Dhal, Assistant Professor, Department of Civil Engineering
<b>Co- Coordinator</b>	Dr. Hriday Mani Kalita, Assistant Professor, Department of Civil Engineering Dr. Susmita Sharma , Assistant Professor, Department of Civil Engineering
<b>Organizing Secretary:</b>	<b>Dr. M. Longshithung Patton, Assistant Professor &amp; Head, Civil Engineering</b>
<b>Organizing Committee</b>	Dr. Comingstarful Marthong, Associate Professor, Department of Civil Engineering Dr. Smrutirekha Sahoo, Assistant Professor, Department of Civil Engineering Dr. Dibyendu Adak, Assistant Professor, Department of Civil Engineering Dr. Debabrata Podder, Assistant Professor, Department of Civil Engineering Dr. Pradeep Kumar Gautam , Assistant Professor, Department of Civil Engineering Dr. Needhi Kotoky , Assistant Professor, Department of Civil Engineering All Ph.D Scholars of Department of Civil Engineering
<b>Advisory Committee</b>	Prof. Ayon Bhattacharjee, Professor, PH and TEQIP coordinator Prof. H.C. Das, Professor, ME and Dean (Faculty Welfare) Prof. G. Panda, Professor, EE and Dean (Academic affairs) Dr. G. K. Dutta, Associate Professor, CY and Dean (R&C) Dr. C. Marthong, Associate Professor, CE and Dean (P&D) Dr. Atanu Banerjee, Associate Professor, EE and Dean (Student Welfare)

\*\*\*\*Join with Google Meet: [meet.google.com/owj-qeud-dkp](https://meet.google.com/owj-qeud-dkp)