One Week Online Short Term Course
On

"Advanced Techniques on Hydrological Modeling and Hydraulic Structures"

December 26–30, 2020

ORGANIZING COMMITTEE

Patron

Professor (Dr.) Goutam Sutradhar
Director, National Institute of Technology, Manipur

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National Institute of Technology, Manipur

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Dr. Thiyam Tamphasana Devi
Assistant Professor, Department of Civil Engineering
National Institute of Technology, Manipur

Convener

Dr. Bakimchandra Oinam
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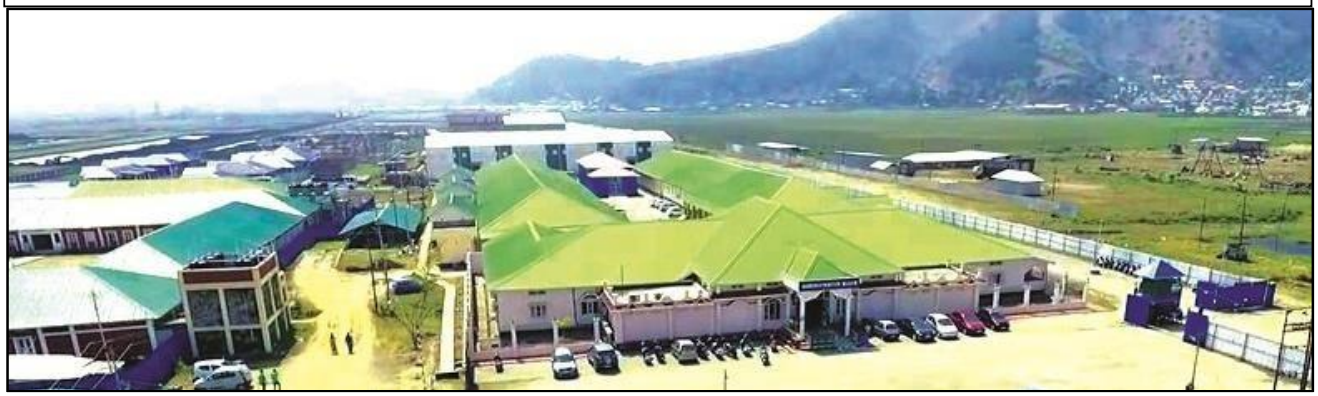

Organized By:

DEPARTMENT OF CIVIL ENGINEERING
NATIONAL INSTITUTEF TECHNOLOGY MANIPUR WEST IMPHAL
MANIPUR, INDIA-795004

ABOUT NIT, MANIPUR

National Institute of Technology Manipur, a centrally funded institution is set up to impart quality technical education at various levels of higher learning. It is one of the ten new NITs established and developed as "Institute of National Importance" by an act of Parliament in 2007. NIT Manipur started its first session with the three branches of Engineering-Electrical & Electronics Engineering, Electronics & Communication Engineering and Computer Science Engineering. The functioning of the institute was started at its temporary campus at Takyelpat, Imphal under the mentorship of NIT, Agartrala. As one of the National Institutes of Technology (NIT), the Institute has the responsibility of providing high quality education in Engineering, Technology and Sciences to produce competent technical and scientific manpower for the country. The Institute offers B Tech, M Tech, M Sc, MBA and PhD programmers in several disciplines of Engineering, Technology and Sciences.

ABOUT THE COURSE

This course will provide a detailed understanding of advanced hydraulic topics such as urban storm engineering and hydraulics structures as well as advanced hydrology topics such as estimating floods, flood routing and groundwater. In this course the following contents will be discussed.

- Hydrological rainfall-runoff relationship modeling using GIS techniques
- Application of satellite images in hydrological modeling
- Sediment transport in open channel flows
- Appreciate the importance of groundwater
- Estimate groundwater recharges and model pollutants in groundwater
- Model the scouring around bridge pier

A course certificate will be issued upon successful completion this course.

OBJECTIVES OF THE COURSE

i. The main objective of this STC is to provide a unique platform to facilitate the scientists, researchers, academicians, industrialist and UG, PG/PhD students to share the knowledge for hydrological modeling using GIS techniques.

ii. Ability to provide a thorough understanding of the fluvial sediment transports in open channel flow

iii. An understanding of scouring around bridge pier and its modeling

iv. An overview on groundwater modeling using advanced techniques

Who can attend this STC through Online?

Students: (UG, PG, PhD)

Faculty of Engineering: (Any Branch)

Other Professionals: Engineers & Scientists from Industry and R&D organizations

Registration: Kindly register through this link:

https://docs.google.com/forms/d/e/1FAIpQLSeHRR_baZKp-ZJWaJk3tghYvQUEAGAv6rvXrMBsQ3sNXpK9RA/viewform?usp=sf_link

Registration fee for attending this STC.

UG Students: Rs 500/- including GST

PG/PhD Students: Rs. 750/- including GST

Faculty: Rs. 1000/- including GST

Engineers /Other professionals: Rs.2000/- including GST

Details of the Bank Account:

Name: Director NIT Manipur IRG

Acc. No. 60330100000143

Bank and Branch: Bank of Baroda, NIT Manipur Campus

IFSC code: BARB0NITMAN

Numbers of participants are limited to 50. Shortlisted candidates will be informed through email.

For any query, you can contact to the course coordinator

Dr. Thiyam Tamphasana Devi, Assistant Professor (CE)

Email: nitmanipur.stc@gmail.com; Mb: +91-9862728287

IMPORTANT DATES

Last Date of Registration

December 23, 2020

Resource Persons

Dr. Bakimchandra Oinam is an Associate Professor in Department of Civil Engineering, National Institute of Technology, Manipur. He received his PhD from Institute for Modelling Hydraulic and Environmental Systems, University of Stuttgart, Germany. His research area are geo-statistical methods/spatial interpolation techniques to generate a continuous precipitation surface for a complex topography; understanding the role of GIS to capture and model the concept of Resource Management Domain (RMD) for sustainable Agriculture and developing a research methodology for understanding and mapping the land degradation at multi- scale. He has also published several research articles in national and international reputed journals and attended various conferences across India and abroad.

Dr. Gopal Krishan is currently Scientist-C, at National Institute of Hydrology, Roorkee and Ex-Researcher-Indo Gangetic Basin, Groundwater Resilience Project, British Geological Survey, United Kingdom and IIRS (ISRO). Dr. Gopal has over 19 years of research experience in many facets of hydrological evaluations, surface water and groundwater hydrology project management, and field investigations. Dr. Gopal received his PhD in Soil Science and Water Management from Dr. Y.S. Parmar UHF, Solan, HP in 2001. He has supervised 1 PhD; 6 post graduates (MTech/MSc); 1 CV Raman Fellow, 1 DAAD Fellow and presently, he is guiding 2 PhD students and 1 MTech student. Dr. Gopal has completed 4 international and national funded projects and continuing work on 5 projects. He published more than 150 research papers in international/national journals and conferences, 1 book, 12 book chapters, news letter and 10 technical reports. Dr. Gopal is a fellow member of Society of Earth Scientists; Life member of Indian Association of Hydrologists; member of International Association of Hydrological Sciences, International Association of Hydro-geologists, Indian Society of Remote Sensing and American Water Resources Association.

Dr. Bikash Ranjan Parida is associated as an UGC-Assistant Professor at Central University of Jharkhand (CUJ) since September 2016. He received his PhD from Max Planck Institute for Meteorology, University of Hamburg, Germany. He also did his Post-Doctoral study in University of California, USA. He has been involved in Earth and Environmental studies specifically solving the environmental problems using space-based technologies and climate modeling. He is interested on cross cutting activities related to atmosphere-land surface exchange processes (surface water, energy, carbon fluxes etc.), carbon cycling modeling, application areas in agriculture, forest and natural resources monitoring and assessment, and climate change.

Dr. Mahesh Patel is currently an Assistant Professor in the Department of Civil Engineering at National Institute of Technology, Jalandhar. He received his PhD from Indian Institute of Technology Guwahati (IIT Guwahati). He did his post-doctoral study from University of Virginia, USA. His main research area are turbulent fluvial flows, bedform dynamics, flow resistance, bed morphology, the evolution of sheet flow, seepage in alluvial channels, environmental hydraulics, and hyporheic flow over fixed bedforms. He was also associated to carry out hydrological modelling of stormwater and had published several research articles in conferences and reputed journals.

Dr. Thiyam Tamphasana Devi is currently working as Assistant Professor in Department of Civil Engineering, National Institute of Technology, Manipur, India. She obtained her PhD from Indian Institute of Technology Guwahati (IIT Guwahati). She had also published 43 research articles in journals, conferences and 01 book chapter of repute in these research areas. Her research interest includes hydrological modelling using GIS techniques; and Computational Fluid Dynamics application in fluid flow. She majorly works in turbulence modeling in multiphase and interaction of fluid flow with hydraulic structures.

Dr. Swati Bhave is currently working as an Assistant Professor in Department of Civil Engineering, National Institute of Technology, Nagpur. Dr. Swati received her PhD from Indian Institute of Technology, Roorkee (IIT Roorkee). Her research includes numerical and experimental study on hydraulic structures, open channel flow. She has presented several conferences in India and abroad and also published research articles in reputed journals.