

Lectures Delivered

Delivered lectures at a number of courses offered by various agencies for academicians, field engineers, senior administrative staff, and craftsmen. Broad topics of some of the lectures delivered are listed below.

1. Short Term Training Programs/ Training conducted by the Centre for Water Resources Development and Management, Calicut
 - Rural Water Supply and Sanitation
 - Well Interference
 - Groundwater Quality
 - Structures for Inland Water Transport
 - Groundwater Resources Evaluation and Management
 - Groundwater – Flow and Transport
 - Hydrological and Structural Analysis for Dam Safety
 - Instrumentation and Checklist for Dam Safety Inspection
 - Environmental Audit
 - Design of Hydraulic Structures – Dams
 - International Workshop on Groundwater Modelling

2. Short Term Training Programs/ Training conducted by NIT, Calicut
 - Disaster Management in the Context of Dam Distress Events
 - Real Time Flood Forecasting and Risk Analysis
 - Analysis & Design Concepts Related to Dams and Appurtenant Structures
 - Flood Peak Estimation and Flood Forecasting
 - Sustainable Building Technologies and Environment
 - Introduction to Numerical Modelling and the Finite Difference Method
 - Assessment of the Impact of Projected Climate Change on Water Resources in a River Basin
 - Modelling Flow and Transport in Saturated Porous Media
 - Modelling Flow and Transport in Streams
 - Ground Contamination from Waste Disposal Activities
 - Water Quality in Concrete Mix Design
 - Rural Water Supply and Sanitation
 - Design of Coastal Structures
 - Hydrographic Surveys
 - Firefighting and Fire Protection in Tall Buildings
 - Wave Hydrodynamics and Design of Coastal Structures
 - Interaction of Coastal Development with Coastal Processes - its Highlights and Challenges

3. Short Term Training Programs/ Training conducted by NIT, Surathkal
 - Groundwater Quality
 - Groundwater Contamination and Remediation
 - Modelling Contaminant Transport in Groundwater

4. DST Course on Numerical Simulation of Groundwater Flow and Mass Transport for Effective Management of Aquifers at Centre for Earth Science Studies, Thiruvananthapuram
 - Contaminant Transport in the Subsurface – Processes and Modelling

5. Short Term Training Programs conducted by Government Engineering College, Kozhikode
 - Environmental Pollution
 - Clean Energy Options
 - Earthquake Resistant Design of Hydraulic Structures

6. Short Term Training Program Conducted by KITS, Warangal
 - Contaminant Transport in the Subsurface – Processes and Modelling

7. Short Term Course at RIT, Kottayam
 - Modelling of Contaminant Transport in Saturated Porous Media
 - Modelling Flow and Transport in Surface and Subsurface Systems

8. Short Term Course/ Training at the Hard Rock Regional Centre, National Institute of Hydrology, Belgaum
 - Surface Water Quality Modelling and Management

9. Training for Engineers of L&T, Mumbai, and L&T Valdel, Bangalore

- Wave Hydrodynamics, Wave Statistics, Design of Coastal and Offshore Structures

| Sl. No. | Title of the Course/ Workshop | Details | Duration | | Remarks |
|---------|---|--------------------------|------------|------------|------------------------|
| | | | From | To | |
| 1. | Workshop on FEFLOW (NGRI, Hyderabad) | | 09.11.2022 | 11.11.2022 | Delivered a lecture |
| 2. | Water Summit – India (WSI 2022)) (Karunya University, Coimbatore) | | 17.09.2022 | | Delivered a lecture |
| 3. | Seminar on Adaptability of Urban Flood Management suitable to Trivandrum City (Institution of Engineers, Kerala State Centre) | | 26.07.2022 | | Delivered a lecture |
| 4. | Climate-change Induced Challenges in Civil Engineering (GEC, Thrissur) | STTP | 14.03.2022 | 18.03.2022 | Delivered a lecture |
| 5. | An Overview of Multidisciplinary Approaches in Civil Engineering (RIT, Hassan) | FDP | 07.09.2020 | 11.09.2020 | Delivered a lecture |
| 6. | Groundwater Assessment – Modelling & Management (SIST, Chennai) | FDP | 17.08.2020 | 22.08.2020 | Delivered a lecture |
| 7. | Climate Change and Hydrologic Extremes (Karunya University, Coimbatore) | FDP | 20.07.2020 | 24.07.2020 | Delivered a lecture |
| 8. | Advances in Flood Modelling – Coastal and Inland Cities (DHI (India)) | | 03.03.2020 | 04.03.2020 | Delivered a lecture |
| 9. | Workshop on Data Collection and Design of Coastal Protection Structures (IDRB, DoWR, GoK) | | 24.02.2020 | 25.02.2020 | Delivered a lecture |
| 10. | III Indian National Groundwater Conference (INGWC-2020) | | 18.02.2020 | 20.02.2020 | Delivered a lecture |
| 11. | International Workshop on Groundwater Modelling | | 17.02.2020 | | Delivered a lecture |
| 12. | Contemporary Technologies for Water and Wastewater Management (Dept. of Civil Engg., TKMCE, Kollam) | STTP | 07.01.2019 | 12.01.2019 | Delivered two lectures |
| 13. | National Workshop on Environmental Modelling (Dept. of Environmental Sciences, University of Kerala) | | 30.01.2018 | 31.01.2018 | Delivered two lectures |
| 14. | Research Avenues in Geoenvironmental Engineering (TKMCE, Kollam) | | 04.12.2017 | 09.12.2017 | Delivered two lectures |
| 15. | Groundwater Modelling (Central Groundwater Board – CGWB) | Tier II (5 day) training | 29.07.2017 | | Delivered two lectures |
| 16. | Mathematical Modelling of Transport in Fluids (RIT, Kottayam) | STTP | 20.12.2016 | 22.12.2016 | Delivered two lectures |
| 17. | Research Colloquium on Environmental and Water Resources Engineering (RIT, Kottayam) | | 22.10.2016 | | Delivered a lecture |
| 18. | Seminar on Water Supply for Towns and Villages – Problems and Solutions (IoE (India) and APHEK) | | 02.01.2016 | | Delivered a lecture |
| 19. | Induction Training Program on Irrigation Water Management (CWRDM, Kozhikode) | 1 month training | 16.11.2015 | 16.12.2015 | Delivered a lecture |
| 20. | Strategies for Groundwater Development and Management | STTP | 06.08.2015 | 08.08.2015 | Delivered a lecture |
| 21. | Design of Hydraulic Structures (GEC, Kannur) | Course | March 2015 | | Delivered few lectures |
| 22. | International Conference on Recent Innovations in Technology 2012 (RIT, Kottayam) | International Conference | 12.01.2012 | 14.01.2012 | Delivered a lecture |
| 23. | Advances in Design of Structures (GEC, Kozhikode) | STTP | 12.12.2011 | 17.12.2011 | Delivered a lecture |

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| | | | From | To | |
| 24. | Workshop on Water Management Strategies for Arid and Semi-arid Zones (Karunya University) | Workshop | 22.03.2011 | 23.03.2011 | Delivered a lecture |
| 25. | Water and Environment (CWRDM, Kozhikode) | Short Term | 27.01.2011 | 02.02.2011 | Delivered a lecture |
| 26. | Irrigation Project Modernisation – New Concepts and Dam Safety (CWRDM, Kozhikode) | Short Term | 06.10.2010 | 08.10.2010 | Delivered 2 lectures |
| 27. | Offshore Engineering (L&T, Mumbai) | Short Term Training for Engineers from L&T | 13.12.2010 21.06.2010 | 17.12.2010 02.07.2010 | Delivered 6 lectures in each course |
| 28. | Advances in Numerical Methods in Engineering (GEC, Kannur) | STTP | 02.08.2010 | 07.08.2010 | Delivered a lecture |
| 29. | Recent Advances in Numerical Methods in Engineering (NITC) | Summer | 24.05.2010 | 05.06.2010 | Delivered a lecture |
| 30. | Total Station Surveying and Other Advanced Surveying Techniques (NITC) | Summer | 18.05.2009 | 29.05.2009 | Delivered a lecture |
| 31. | Water Quality Assessment and Management (NIH, Belagaum) | Short Term | 02.02.2009 | 06.02.2009 | Delivered a lecture |
| 32. | Advanced Technological Interventions for Environmental Sustainability (RIT, Kottayam) | STTP | 14.03.2007 | 27.03.2007 | Delivered 2 lectures |
| 33. | Water Resources Management (NITK, Surathkal) | Short term | 18.12.2006 | 23.12.2006 | Delivered a lecture |
| 34. | Seminar on Solid Waste Management (MCITRA, Kozhikode) | Seminar | 25.03.2006 | | Delivered a lecture |
| 35. | Green Power- Eco friendly Energy Engineering (GEC, Kozhikode) | STTP | 06.03.2006 | 18.03.2006 | Delivered 2 lectures |
| 36. | Inland Water Transport (CWRDM, Kozhikode) | STTP | 14.02.2006 | 16.02.2006 | Delivered a lecture |
| 37. | Groundwater Resources Evaluation and Management (CWRDM, Kozhikode) | Short Term | 21.11.2005 21.11.2006 20.11.2007 24.11.2008 | 25.11.2005 25.11.2006 24.11.2007 28.11.2008 | Delivered a lecture |
| 38. | Environmental Impact Assessment of Water Resources Projects (NITK, Surathkal) | Short Term | 14.11.2005 02.01.2006 | 18.11.2005 06.01.2006 | Delivered a lecture |
| 39. | DST Course on Numerical Simulation of Groundwater Flow and Mass Transport for the Effective Management of Aquifers (CESS, Thiruvananthapuram) | DST Advanced Training School | 01.08.2005 | 20.08.2005 | Delivered 2 lectures |
| 40. | Assessing Risk of Groundwater Contamination from On-site Sanitation in Rural Kerala (CWRDM, Kozhikode) | Short Term | 06.06.2005 | 18.06.2005 | Delivered a lecture |
| 41. | NIRMAAN 2005 (GEC, Thrissur) | Tech Fest of CE Students | 02.03.2005 | 04.03.2005 | Delivered a lecture |
| 42. | Seminar on Relevance of Inland Waterways in Kerala (CWRDM, Kozhikode) | Seminar | 28.02.2005 | | Delivered a lecture |
| 43. | Pollution and its Control – Strategies and Techniques (GEC, Kozhikode) | STTP | 07.02.2005 | 19.02.2005 | Delivered 2 lectures |
| 44. | Workshop on Well Interference (CWRDM, Kozhikode) | Workshop | 11.02.2005 | | Delivered a lecture |
| 45. | Rural Water Supply and Sanitation (CWRDM, Kozhikode) | Short Term | 12.10.2004 19.07.2005 | 16.10.2004 22.07.2005 | Delivered a lecture |
| 46. | Recent Trends in the Analysis and Design of Offshore Structures | Summer | 05.05.1997 | 16.05.1997 | Delivered a lecture |
| 47. | Concrete Mix Design | Short Term | | | Delivered a lecture |

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| | | | From | To | |
| 48. | Services in Tall Buildings | Short Term | | | Delivered a lecture |
| 49. | ITN-WATSAN Course on Rural Water Supply and Waste Management | Short Term | 06.03.1995 | 11.03.1995 | Delivered a lecture |
| 50. | Foundations for Coastal and Offshore Structures | Summer | 17.05.1993 | 28.05.1993 | Delivered a lecture |
| 51. | Ground Contamination from Waste Disposal Activities and Solutions | Summer | 05.05.1992 | 16.05.1992 | Delivered 2 lectures |

| Sl. No. | Particulars |
|---------|---|
| 1. | <p align="center">Chairman/ Co-chairman of National/ International Conferences</p> <p>Chaired sessions in the following conferences</p> <ul style="list-style-type: none"> (i) Moderator for the session on Disaster Preparedness : Standards and Actions at the National Conference on Policies and Strategies for Flood Management: Kerala Scenario, organised by the Dept. of Water Resources, Govt. of Kerala during 23-24 January 2020 (ii) Chaired a session at the International Conference HYDRO 2019 (Hydraulics, Water Resources and Coastal Engineering) organised by the Indian Society for Hydraulics (ISH) at Hyderabad during 18-20 December 2019. (iii) Chaired a session at the International Conference on Infrastructure Development: Issues, Innovations, and the Way Forward (21-23 June 2018) at MBCET, Thiruvananthapuram (iv) Presented the recommendations of the International Dam Safety Conference 2018 at the Valedictory Session (v) Rapporteur for a Technical Session of the International Dam Safety Conference 2018 (vi) Chaired a session at the International Conference on Emerging Trends in Engineering Science & Technology (ICETEST - 2018) at GEC, Thrissur on 18th January 2018 (vii) Chaired the session on Engineering and Technology, 28th Kerala Science Congress 2016 (viii) Chaired a session at the International Conference on Emerging Trends in Engineering Science & Technology (ICETEST - 2015) at GEC, Thrissur on 9th December 2015 (ix) Chaired a session at the International Conference on Recent Innovations in Technology 2012 at RIT, Kottayam, on 13th January 2012 (x) Chaired a session at the 3rd International Geography Congress at CWRDM, Kozhikode on 7th May 2011 (xi) Chaired a session at the National Conference on Technological Trends (NCTT 2009) at College of Engineering, Thiruvananthapuram, on 7th November 2009 and August 2012 (xii) Chaired a session at the National Seminar on Emerging Trends in Environment and Development (KUNSED2009), Kerala University, Thiruvananthapuram, on 09.10.2009 |
| 2. | <p align="center">Keynote speaker of National/ International Conferences and Invited Lectures</p> <ul style="list-style-type: none"> (i) Delivered a keynote lecture at the 2 day seminar on "Advances in Flood Modelling – Coastal and Inland Cities" organized by the DHI (India) Water and Environment Pvt. Ltd. at the NCCR, NIOT Campus, Chennai, during 03-04 March 2020 (ii) Delivered an invited talk on "Basic Hydrodynamic Processes in the Coastal Zone" at the 2 day Workshop on Data Collection and Design of Coastal Protection Structures organised by the IDRB, Dept. of Water Resources, Govt. of Kerala, during 24-25 February 2020 (iii) Delivered a keynote lecture at the III Indian National Groundwater Conference (INGWC-2020) held at CWRDM, Kozhikode during 18-20 February 2020 (iv) Delivered a keynote lecture on "Artificial Recharge of Groundwater" at the National Seminar on "Solutions to Water Scarcity in Chennai City", organised by the Dept. of Civil Engineering, St. Peter's Institute of Higher Education and Research at Chennai during 4- 5 February 2020 (v) Delivered an invited talk on "Mathematical Modelling and its Applications in Water Resources Engineering" at the International Conference on Emerging Technologies for Sustainability at the Amal Jyothi Engineering College, Kanjirappally on 19th July 2019. (vi) Delivered an invited talk on "Water Resources Management in Kerala – A Review Based on the Kerala Floods 2018" at the MEA Engineering College, Pandikkad, Perinthalmanna on 28.03.2019 (vii) Delivered an invited talk on "Kerala Floods – Experiences and Lessons Learnt" at the one day seminar on "New Frontiers of Hydraulics and Water Resources Engineering" at NITK, Surathkal on 28.12.2018 (viii) Delivered an invited talk on "Climate Change and the Energy Sector in Kerala" at the one day seminar organized by FEEC at Kozhikode on 20.12.2018 (ix) Delivered an invited talk on "Water Management in the Context of Recent Floods in Kerala" at the Calicut Chapter of the Institution of Engineers (India) on 30.10.2018. |

- (x) Delivered an invited lecture "Flood Management for the State of Kerala – Outline of a Proposal Based on the Experiences from the Floods of 2018" at the one day Workshop on "Sustainable Solutions to Flood Management towards "Climate Resilient Kerala" organized by the Hindustan Institute of Technology and Science, Chennai on 25.10.2018
- (xi) Made an invited presentation on "Development of a Real Time Flood Forecasting System for Reservoirs in the Periyar River Basin" before the Joint Team of the NPMU of the NHP, MoWR, RD & GR and CWC on a visit to Kerala to explore the feasibility of development of flood forecasting/ early warning system and rules for reservoir operation on 27.09.2018 at Aluva.
- (xii) Delivered a key note lecture titled "Water Resources Management in Kerala: Challenges and the Way Forward" at the International Conference on Infrastructure Development: Issues, Innovations, and the Way Forward (21-23 June 2018) at MBCET, Thiruvananthapuram
- (xiii) Delivered an invited lecture titled "Water Resources Management in Kerala: Challenges and the Way Forward" at the State level seminar "Nature for Water" organized by the Dept. of Water Resources, GoK, at Thiruvananthapuram on 22.03.2018 in connection with the World Water Day 2018
- (xiv) Delivered an invited talk on Modelling of Pollutant Transport in Water Bodies at the National Workshop on Environmental Modeling organized by the Department of Environmental Sciences, University of Kerala on 31st January 2018
- (xv) Delivered an invited talk on "Assessing the impact of projected climate change on water resources of a river basin at the Workshop organized by the Gujarat Technological University during Research Week 2017 on 14th March 2017
- (xvi) Delivered an invited talk at the Research Colloquium on Environmental and Water Resources Engineering (RIT, Kottayam) on 22nd October 2016
- (xvii) Delivered a keynote lecture on "Issues in Municipal Solid Waste Management" in the National Conference on Challenges and Emerging Trends in Civil Engg. and Technology on 19th October 2016 organised by the College of Engineering, Vadakara
- (xviii) Delivered an invited talk on the "Impact of Projected Climate Change on Water Resources" at Govt Engineering College, Thrissur, under TEQIP Phase II
- (xix) Delivered an invited talk on the theme "Water and Sustainable Development" on 22nd March 2015 in the meeting organised in connection with the World Water Day by the Kozhikode Local Centre of the Institution of Engineers (India) and the Kozhikode District Committee of the Association of Public Health Engineers, Kerala
- (xx) Design of Minor Irrigation and Canal Structures – Invited Lecture at Dept. of Civil Engineering, Govt. Engineering College, Kannur, April 2015
- (xxi) Delivered an invited talk on Wastewater Treatment and Contaminant Transport at the International Conference on Waste Management for Sustainable Development jointly organised by the Department of Civil Engineering, NSS College of Engineering, Palakkad, Palakkad Local Centre of the Institution of Engineers (India), and the Laurie Baker International School of Habitat Studies during 21-23 March 2014.
- (xxii) Delivered an invited talk on "Assessment of the Impact of Climate Change on Water Resources in a River Basin" at the National Workshop on "Water Resources Management in the Climate Change Scenario" organised by the Dept. of Civil Engineering, Andhra University, Visakhapatnam on 29th June 2013.
- (xxiii) Delivered an invited talk on "CFD Applications in Ocean Engineering" at the Symposium on "CFD Applications in Water Engineering" organised by the Karnataka State Council for Science and Technology and Dept. of Civil Engineering, IISc, Bangalore on 1st June 2013.
- (xxiv) Delivered an invited talk on "Climate Change Modelling" at the International Meet on "Impact of Climate Change on Water Resources Development and Management" on 17th August 2012 at Karunya University, Coimbatore.
- (xxv) Delivered a keynote address on "Mathematical Modelling of Civil Engineering Systems" at the International Conference on Recent Innovations in Technology 2012 at RIT, Kottayam, on 13th January 2012.
- (xxvi) Delivered an invited talk on "Groundwater Management Strategies" on 22nd March 2011 in the DST sponsored workshop on "Water Management Strategies for Arid and Semi-arid Zones" held at Karunya University, Coimbatore.
- (xxvii) Presented an invited talk on e-Wastes at the National Workshop on Management of Urban Solid Wastes, organised by the Institution of Engineers (India), in August 2006.
- (xxviii) Presented an invited talk on "Inland Navigation Related Structures" at the one day workshop on Inland Navigation In Kerala held at Kochi in 2005.
- (xxix) Presented an invited talk on "Groundwater Modelling for River Basin Management" at the International Seminar on Integrated River Basin Management with Special Reference to the Humid Tropics at CWRDM, Calicut, on 22nd August, 2003.