Cellphone: 9176655520

e-Mail ID : rsaran@annauniv.edu

Address : 4/17 Poomagal Main road Ambal Nagar

Ekkaduthangal Chennai - 32



Present Position

Associate professor, Centre for Water Resources, College of Engineering Guindy, Anna University, Chennai from November-2014.

Present Additional Responsibility

- Assistant Executive Engineer, Estate Office, Anna University, Chennai from February-2013.
- Assistant Executive Engineer, Civil / Electrical Minor Works Cell, Anna University, Chennai from September-2006.

Previous Positions

- > Assistant Professor, Centre for Water Resources, College of Engineering Guindy, Anna University, Chennai during January-2006 and November-2014.
- Lecturer, Department of Civil Engineering, College of Engineering Guindy, Anna University, Chennai during December-2003 and December-2005.
- ➤ Teaching Research Associate, Department of Civil Engineering, College of Engineering Guindy, Anna University, Chennai during July-2001 and December-2003.

Previous Additional Responsibility

- > Student Counsellor (NRI), Department of Civil Engineering, Anna University, Chennai during December-2010 and June-2014.
- , , Anna University, Chennai.

Other Employment

- Site Engineer, Michal Contractor, Trichy for 1 year.
- > Apprenticeship Trainee, Chennai Port Trust, Chennai for 1 year.
- > Team Leader, Economic Perspectives, Alwarpet, Chennai for 1 year.

Degree

- M.E. in CIVIL ENGINEERING, College of Engineering Guindy, Anna University (1999 -2000).
- B.E. in CIVIL ENGINEERING, Madurai Kamaraj University (1992 1996).

Research Degree

 Ph.D. in Groundwater from Faculty of Civil Engineering, College of Engineering Guindy, Anna University (2001 - 2009).

Title: Optimization of Pumping Well Location for Containment of Contaminated Plume and Remediation using Heuristic Algorithms.

Area of Specialisation

- Applications of Evolutionary Algorithms to Water Resources Engineering
- > Groundwater Modelling and Management

Membership in Professional Organization

- Life Member in Indian Association of Hydrologists (IAH)
- Life Member in Indian Water Resources Society (IWRS)
- Member in the International Water Association (IWA)

Research Guidance

Number of Ph.D Scholars Guiding: 8 Number of M.E./ M.Tech. Projects: 49

Guided

Number of M.E./ M.Tech. Projects: 6

Guiding

Papers Published in Journals

Research Papers Published in International Journals : 8
Research Papers Published in National Journals : 2

1. Balamurugan. R., Lenin Kalyanasundaram. V., Navaneetha Gopalakrishnan. A., and Karunakaran, "Optimization of Pumping and Recharge Quantity for Reclamation of Contaminated Aquifer using Genetic Algorithm", Journal of Ecotoxicology and Environmental Monitoring, published by Palani Paramount Publication. Vol. 19, Issue 4, pp. 301-318 (2009).

- 2. Lenin Kalyana Sundaram V, Saravanan R, G.Ravikumar and Karunakaran K, "Identification of Suitable Artificial Recharge Areas in Pondicherry Coastal Region Using GIS", Indian Journal of Environment and Research, Vol. 21, pp. 41-46 (2009).
- 3. Lenin Kalyana Sundaram. V, Navaneetha Gopalakrishnan. A and Ravikumar.G, "Modelling of Ground Water Pollution due to Solid Waste Dumping A Case Study", International Journal of Earth Sciences and Engineering, published by CAFET-INNOVA Technical Society. Vol. 3, Issue 2, pp. 176 -187 (2010).
- 4. Balamurugan. R., Karthikeyan. M.S., Rajkumar. R., Anuthaman. N.G. and Navaneetha Gopalakrishnan. A, "Groundwater modeling and demarcation of groundwater protection zones for Tirupur Basin A case study", Journal of Hydro-environment Research, published by Elsevier Publication. pp. 1 16 (2011).
- 5. Saravanan K and Saravanan R, "Determination of Water Requirements of Main Crops in the Tank Irrigation Command Area using CROPWAT 8.0", International Journal of Interdisciplinary and Multidisciplinary Studies (IJIMS), Vol. 1, Issue 5, pp. 266-272 (2014).
- 6. Saravanan. K and Sarvanan. R, "Estimation of Supply Demand Gap in the Ancient Tank Command A Simple Approach", International Journal of Earth Sciences and Engineering, Vol. 8, Issue 4, pp. 256-258 (2015).
- 7. Saravanan. R, Mohan. S and Navaneetha Gopalakrishnan. A.,, "Scale Effect on Dispersion Coefficient of Conservative Solute through Break through Curve (BTC): Experimental Study", International Journal of Earth Sciences and Engineering, Vol. 8, Issue 2, pp. 793-801 (2015).
- 8. Supriya P and Saravanan R, "Optimal Allocation Of Surface Water Resources For Peri-Urban Area Of Chennai To Minimize The Demand-Supply Gap", Journal of Applied Hydrology, published by Association of Hydrologists of India. Issue 1, pp. 86 93 (2016).
- 9. Saravanan.S.P, Ambujam.N.K, Grosbois.C, Saravanan.R, Manikandabharath.K, Rukkumany. R. H, Desmet. M, " Spatial distribution of trace elements into a fluvial urban system in Chennai, India", International Journal of Ecology and Development, published by CESER. Vol. 34, Issue 2, pp. 38 46 (2019).
- Sukkampatti Palanisamy Saravanan, Marc Desmet, Ambujam Neelakanta Pillai Kanniperumal, Saravanan Ramasamy, Nikita Shumskikh and Cécile Grosbois, "Geochemical Footprint of Megacities on River Sediments: A Case Study of the Fourth Most Populous Area in India, Chennai", Minerals, published by MDPI. Vol. 9, Issue 688, pp. 1-20 (2019).

Papers Presented in Programmes

Research Papers Presented in International Programmes : 4
Research Papers Presented in National Programmes : 16

1. ""Sustainable Groundwater Development in Fractured Hard Rocks Aquifers in Chennai" presented in a National level conference on Environmental Engineering, organised by IPHE, Visakhapatnam, India from 22-Aug-2002 to 24-Aug-2002.

- 2. "A Technical Blindness and Its Impact on the Ecology A Case Study" presented in a International level conference on Role of Technical Education in Sustainable Development, organised by Anna University, India from 24-Mar-2005 to 26-Mar-2005.
- 3. "Community Participation for Maintaining Temple Tank A Case Study" presented in a National level workshop on Traditional Rainwater Harvesting, organised by TWAD Board, India from 07-Dec-2005 to 07-Dec-2005.
- 4. "Quantity Assessment and Demarcation of Groundwater Protection Zones for Tirupur " presented in a National level conference on Advanced Computing Techniques in Civil Engineering, organised by St. Peter's Engineering College, Chennai, India from 01-Mar-2006 to 01-Mar-2006.
- 5. "Groundwater Contaminant Transport Modelingfor Lower Part of Noyyal River Basin" presented in a National level conference on Technologies In Civil Engineering, organised by Coimbatore Institute of Technology, Coimbatore, India from 20-Mar-2006 to 21-Mar-2006.
- 6. "GIS and Drastic Modeling for Assessment of Study of Groundwater Vulnerability to Pollution-A case study of Noyyal River Basin" presented in a National level seminar on Application of GIS in Civil Engineering, organised by Department of Civil Engineering, Karunya University, Combatore, Inida from 16-Feb-2008 to 16-Feb-2008.
- 7. Saravanan. R and Karunakaran. K, "Study of Scale Effect of Dispersion coefficient of conservative solute using column study" presented in a National level seminar on Spatial Modeling and Soft Computing in Water Resources Management (SSWRM2008), organised by Annamalai University, India from 14-Mar-2008 to 15-Mar-2008.
- 8. Saravanan, R, "Management of Seawater Intrusion in the Coastal Aquifer of Puducherry Region" presented in a National level seminar on Spatial Modeling and Soft Computing in Water Resources Management (SSWRM2008), organised by Annamalai University, India from 14-Mar-2008 to 15-Mar-2008.
- 9. "Parameter Optimization for Groundwater Remediation of Contaminated Aquifer" presented in a National level conference on Advancement in Manufacturing and Management Systems (AIMMS'08), organised by Sri Sai Ram Engineering College, Chennai, India from 17-Apr-2008 to 17-Apr-2008.
- 10. "Socio-economic Impact of Groundwater Pollution due to Disposal of Textile Effluent A Case Study from India" presented in a International level conference on Towards Sustainable Groundwater in Agriculture Linking Science with Policy, organised by University of California, Davis, USA from 15-Jun-2010 to 17-Jun-2010.
- 11. "Optimal Scheduling of Replacement and Rehabilitation of Water Supply for Community Network" presented in a National level conference on for Drinking:Issues and Options (GWD 2011), organised by Department of Civil Engineering, Banaras Hindu University, Varanasi, India from 11-Feb-2011 to 13-Feb-2011.
- 12. "Role of Lakes and Community in Wellhead Protection" presented in a National level conference on Basins of India, Their Resources and Management, organised by Anna University, India from 17-Feb-2011 to 18-Feb-2011.

- 13. Saravanan. R, "Flood Inundation Mapping using GIS for Otterinulla to study the Imapct on Livelihoods" presented in a National level conference on Environmental Challenges towards sustainability, organised by Government College of Technology, Coimbatore and Anna University of Technology Coimbatore, India from 24-Mar-2011 to 25-Mar-2011.
- 14. Saravanan, R., Karunakaran, K, "Socio-economic consequences of the groundwater pollution on socially deprived communities: Remediation of groundwater resources" presented in a International level conference on 2011 World Water Week, organised by Stockholm International Water Institute, Sweden from 21-Aug-2011 to 27-Aug-2016.
- 15. "Study on Optimal Location of Permeable Reactive Barrier in Remediation of Contaminated Groundwater using Groundwater Modeling" presented in a National level conference on Emerging New Trends in Civil Engineering, organised by Roever Engineering College, Perambalur, India from 09-Feb-2012 to 10-Feb-2012.
- 16. "Optimization of Tapping Local Water Resources of Peri-Urban Area to Minimize the Future Demand-Supply Gap" presented in a National level conference on Advanced Trends in Civil Engineering, organised by Karpagam University, Coimbatore, India from 02-Mar-2012 to 03-Mar-2012.
- 17. "Waste Water Reuse- an Option for Urban Water Security" presented in a National level conference on Quest for Advancements in Civil Engineering (QACE) 2012, organised by SRM University, Chennai, India from 15-Mar-2012 to 15-Mar-2012.
- 18. "Identification of suitable municipal solid waste dumpsite using GIS and Groundwater modelling" presented in a National level conference on Sustainable Water Resources Planning Management & Impact of Climate Change, organised by BITS Pilani, India from 05-Apr-2013 to 06-Apr-2013.
- 19. Navaneetha Gopalakrishnan. A and Mohan. S, "Effective Management of Coastal Aquaculture and Irrigation Practices for Sustainable Ground Water Resources: An Integrated Approach" presented in a International level conference on 2013 World Water Week, organised by Stockholm International Water Institute, Sweden from 01-Sep-2013 to 06-Sep-2013.
- 20. Saravanan. R, "Wastewater Hydroponics Bubble Technology for Improved Urban Agriculture and Ecological Conservation" presented in a National level conference on Energy and Environment, organised by CODISIA and IITM, India from 16-Sep-2016 to 17-Sep-2016.

Sponsored Projects Completed

- 1. "Assessment of Project Efficiency / Project Performance in a Perumal Tank Command", funded by Water Resources Organization, PWD, Govt. of TN.. Project Cost: 2050000.00.
- 2. "Estimation of Water Requirement for the Proposed Integrated Textile and Industrial Park at Annur, Coimbatore District", funded by M/S.ADD Industrial Park (TamilNadu)Ltd, Coimbatore.. Project Cost: 292000.00.
- 3. "GIS Based Modelling of Coastal Aquifer in Pondicherry Region Towards Solving Sea Water Intrusion", funded by Ministry of Environment and Forests, Govt. of India, New Delhi.. Project Cost: 1152000.00.

- 4. "Analysis and Design of Storm Drainage for Marina Loop Road, Pattinapakkam, Chennai", funded by Corporation of Chennai.. Project Cost: 497000.00.
- 5. "Proof Checking of Detailed Estimate of IPP Scheme implemented under NRDWP scheme", funded by TWAD Board, Chennai.. Project Cost: 1800000.00.
- 6. "Performance Evaluation of IPP Scheme implemented under RWS program", funded by TWAD Board, Chennai.. Project Cost: 360000.00.
- 7. "Study on the Effect of Partial De-silting of Small Tanks", funded by INCID, Ministry of Water Resources, Govt. of I.. Project Cost: 2794000.00.
- 8. "Performance study of Rural Water Supply scheme executed under NRDWP in Vellore and Kanchipuram District", funded by TWAD Board, Chennai.. Project Cost: 330000.00.
- 9. "Analysis and Design of Culverts to Replace the Existing Causeways Along the double line railway track of villupuram- dindugal stretch near tiruchirapp", funded by Rail Vikas Nigam Limited, Mylapore, Chennai.. Project Cost: 1003000.00.
- 10. "Estimation of Flood Inundation Depth for the Proposed Colgate Palmolive (India) Limited Site at Sanand", funded by Colgate Palmolive (India) Limited, Powai, Mumbai.. Project Cost: 573000.00.
- 11. "Estimation of Flood Inundation Depth for the Proposed Colgate Palmolive (India) Limited Site at Sricity", funded by Colgate Palmolive (India) Limited, Powai, Mumbai.. Project Cost: 573000.00.
- 12. "Flood Protection Works to Koratalayar River from Napalayam to Sea Mouth in Thiruvallur District of Tamil Nadu", funded by PWD, WRD, Koratalayar Basin Division, TN.. Project Cost: 400000.00.
- 13. "Feasibility study for the conservation of flood discharge and to improve groundwater sustainability at Eden park project of Siruseri site", funded by Eden Park Project L&T South City Projects Ltd, Chennai.. Project Cost: 358000.00.
- 14. "Feasibility of drawing minimum of 200 m3/h water from Vettar River for Nagai Power plant located near Nagapattinam", funded by Nagai Power Private Limited, Mylapore, Chennai–4.. Project Cost: 550000.00.
- 15. "Concurrent evaluation of flood protection works in Araniyar River at U/S and D/S of A.N.Kuppam Anicut and D/S of Lakshmipuram anicut with respect to ", funded by PWD, WRD, Araniyar Basin Division, TN.. Project Cost: 400000.00.
- "SCADA & Telemetry System for Tirunelveli Municipal Corporation Water Supply System", funded by Tirunelveli Municipal Corporation, Tirunelveli.. Project Cost: 20000.00.
- 17. "Design of culvert for a minor channel passing through the free SEZ at Mannur, Sriperumpudur", funded by J. MATADEE Free Trade Zone Private Limited, Periamet, Chennai 3.. Project Cost: 350000.00.

- 18. "High flood level mapping for Provision of OTM Accommodation and Amenities for ICGAS and ICGAIS and Hangers at CGAS, Meenambakkam", funded by Garrison Engineer (Navy) Military Engineer Services Fort St.George, Chennai.. Project Cost: 186000.00.
- 19. "Study of the Carrying Capacity of the PWD Proposed Canal from Korattur to Madhavaram Lake with regard to the Channel Hydraulics", funded by The President Birla Avenue Resident's Welfare Association, Kadhirvedu, Chennai.. Project Cost: 38000.00.
- 20. "Altitude and Coordinates for the Proposed Chimney Location of Power Plant Site near Gummidipoondi using Global Positioning System (GPS)", funded by Kamachi Sponge and Power Corporation Ltd ABC Trade Centre, Anna Salai, Chennai.. Project Cost: 38000.00.
- 21. "Bhavani Barrage II SHEP Physical model study for head race and tail race channel design", funded by TNEB, Chennai 2.. Project Cost: 496000.00.
- 22. "Bhavani Barrage I SHEP Mathematical model study for head race and tail race channel design", funded by TNEB, Chennai 2.. Project Cost: 24000.00.
- 23. "Analysis of Hydraulic Calculation for the Water Supply Pipe Line System at CMWSSB Pumping Station, Anna Poonga Site at Royapuram, Chennai", funded by M/s. Subhash Projects and Marketing Ltd, Kilpauk, Chennai -10.. Project Cost: 20000.00.
- 24. "Cause for Failure of Cascade of Check Dams Constructed Across Varattaru for Artificial Recharge of Groundwater in Gangavalli Block of Salem District", funded by TWAD Board, Chennai.. Project Cost: 27000.00.
- 25. "Augmentation of Water for Theppakulam At Virudhunagar", funded by Virudhunagar Hindu Nadar Mahamai, Virudhunagar.. Project Cost: 135000.00.
- 26. "Groundwater Scenario of Siva Subramaniya Nadar College of Engg. ", funded by Siva Subramaniya Nadar College of Engg. (SSNCE).. Project Cost: 94000.00.
- 27. "Technical Feasibility of Treated Sewage Effluent Disposal at Mahindra Industrial Park. ", funded by M/S Mahindra & Mahindra and TIDCO.. Project Cost: 200000.00.
- 28. "Pilot Research Project on Hydrologic Analysis and Hydraulic Designs for Rejuvenation of Ooranies in Kancheepuram and Ramanathapuram Districts. ", funded by Department of Rural Development, Govt. of Tamil Nadu.. Project Cost: 320000.00.

Programme Chaired

1. Co Chairman, National level conference titled "Energy and Environment" conducted by CODISIA and IITM from 16-Sep-2016 to 17-Sep-2016.

Programme Organized

- 1. Co-coordinator, National level workshop on "Inter / Re Linking of Urban Lakes through Peoples Participation" from 05-Dec-2005 to 05-Dec-2005.
- 2. Coordinator, National level workshop on "Water and Equity" from 29-Jul-2008 to 29-Jul-2016.

- 3. Coordinator, National level workshop on "Social Science Research Methodology for Water and Equity" from 25-Aug-2009 to 25-Aug-2009.
- 4. Coordinator, National level workshop on "Water Resources System Modeling" from 09-Mar-2017 to 10-Mar-2017.

Programme Attended

- 1. Participated in a National level workshop on "Groundwater Management" organized by Centre for Water Resources, Anna University, India from 18-Aug-2002 to 19-Aug-2002.
- 2. Participated in a International level workshop on "Subsurface Assessment of Contaminated Sites" organized by NGRI, Hyderabad, India from 23-Oct-2002 to 24-Oct-2002.
- 3. Participated in a National level workshop on "Legal procedures in Enforcement Including Consent Drafting" organized by Centre for Environmental studies, Anna University, India from 24-Feb-2003 to 28-Feb-2003.
- 4. Attended a National level seminar on "Web Resources for Research and Development Acceleration" organized by University Central Library, Anna University, India from 19-Nov-2003 to 19-Nov-2003.
- 5. Participated in a International level workshop on "Sustainable Land fill Management" organized by Centre for Environmental Studies, Anna University, India from 03-Dec-2003 to 05-Dec-2003.
- 6. Participated in a National level workshop on "Re-Engineering Teaching Skills" organized by Centre for faculty development, Anna University, India from 25-Feb-2004 to 26-Feb-2004.
- 7. Attended a National level Short Course on "Application of Environmental Science and Technology for Sustainable Water Resource Management" organized by IIT, Guwahati, India from 31-May-2004 to 06-Jun-2004.
- 8. Participated in a National level conference on "Role of Technical Education in Sustainable Development" organized by Environmental Studies and Centre for Water Resources, Anna University, India from 24-Mar-2005 to 26-Mar-2005.
- 9. Attended a National level seminar on "Desalination An Option for Future" organized by Institution of Engineers (India), Tamilnadu State Centre, India from 23-Jul-2005 to 24-Jul-2005.
- 10. Attended a National level Short Course on "Mathematical Modelling in Hydrogeology: Numerical simulation of Groundwater Flow and Solute Transport" organized by Department of Geology, Anna University, India from 07-Nov-2005 to 30-Nov-2005.
- 11. Participated in a International level workshop on "Gender and Water" organized by SaciWATERs, Hyderabad, India from 03-Oct-2006 to 12-Oct-2006.
- 12. Attended a National level Short Course on "Advanced Techniques in Water Resources Management" organized by IITB, India from 13-Nov-2006 to 17-Nov-2006.

- 13. Attended a National level seminar on "Historical Perspectives on Tanks and their relevance in Modern Era" organized by DHAN Foundation, Madurai, India from 26-Dec-2006 to 26-Dec-2006.
- 14. Participated in a National level conference on "Eco-Environmental Impact on Water Resources Potential towards Re-Linking and Integrating Its Hydrological Cycle" organized by Centre for Water Resources, Anna University, India from 03-Jan-2007 to 05-Jan-2007.
- 15. Participated in a International level conference on "Water Access and Conflicts: Implications for Governance" organized by SaciWATERs, Hyderabad, India from 21-Mar-2007 to 22-Mar-2007.
- 16. Participated in a International level workshop on "Water and Equity" organized by SaciWATERs, Hyderabad and SOPPECOM, Pune, India from 03-Oct-2007 to 09-Oct-2007.
- 17. Participated in a National level workshop on "Application of Science. Geography and Value Education for Flood Management in Chennai" organized by Centre for Water Resources, Anna University, India from 24-Oct-2007 to 25-Oct-2007.
- 18. Participated in a National level workshop on "Case Study Development" organized by TISS-SaciWATERS, India from 25-Feb-2008 to 29-Feb-2008.
- 19. Participated in a International level workshop on "Participatory Field Research Methodology" organized by Nepal Engineering College, Nepal from 06-May-2008 to 13-May-2008.
- 20. Attended a National level seminar on "Rejuvenation of water Bodies and Water Courses in Chennai Metropolitan Area" organized by Centre for Water Resources, Anna University, India from 23-Mar-2009 to 23-Mar-2009.
- 21. Participated in a National level workshop on "Climate Change and its Impacts" organized by NITTTR, Chennai, India from 16-Sep-2009 to 16-Sep-2009.
- 22. Participated in a International level workshop on "Water and Rights" organized by Nepal Engineering College, Nepal from 05-Jan-2010 to 12-Jan-2010.
- 23. Participated in a International level conference on "Towards Sustainable Groundwater in Agriculture Linking Science with Policy" organized by California Davis & Water Education Foundation, USA from 15-Jun-2010 to 17-Jun-2010.
- 24. Attended a International level Short Course on "Managing Water Pollution" organized by Postgraduate Institute of Agriculture (PGIA), University of Peradeniya, Sri Lanka from 02-May-2011 to 06-May-2011.
- 25. Participated in a International level workshop on "Stockholm World Water Week 2011" organized by Stockholm International Water Institute, Sweden from 21-Aug-2011 to 27-Aug-2011.
- 26. Participated in a International level workshop on "2013 World Water Week" organized by Stockholm International Water Institute, Sweden from 01-Sep-2013 to 06-Sep-2013.
- 27. Attended a National level Short Course on "Soil and Water Assessment Tool (SWAT) using open source tools: QGIS & QSWAT" organized by IITM, Chennai, India from 04-Jan-2016 to 09-Jan-2016.

28. Attended a National level Short Course on "Environmental System Modeling" organized by IITM, Chennai, India from 03-Oct-2016 to 08-Oct-2016.

Special Reprasentations

1. India in Editorial Board Member from 01-Jun-2015

Honours

1. "INAE Fellowship" given by Indian National Academy of Engineering (INAE) from India (2009).

Experience Abroad

- 1. Visited Nepal Engineering College, Nepal from 05-May-2008 to 14-May-2008. Purpose of visit :Training.
- 2. Visited Nepal Engineering College, Nepal from 05-Jan-2010 to 12-Jan-2010. Purpose of visit :Training.
- 3. Visited University of California, Davis, USA from 15-Jul-2010 to 21-Jun-2016. Purpose of visit :Conference.
- 4. Visited UNEP-DHI Centre for Water and Environment, PGIA, Sri Lanka from 02-May-2011 to 06-May-2011. Purpose of visit: International Training.
- 5. Visited Stockholm International Water Institute, Sweden from 21-Aug-2011 to 27-Aug-2011. Purpose of visit: Conference.
- 6. Visited Stockholm International Water Institute, Sweden from 01-Sep-2013 to 06-Sep-2013. Purpose of visit: Conference.
- 7. Italy from 02-Sep-2014 to 06-Sep-2014. Purpose of visit: Personal Visit.
- 8. Visited University François-Rabelais of Tours, France, France from 25-Sep-2015 to 09-Oct-2015. Purpose of visit :Research Exchange.
- 9. Visited The University of Edinburgh, Scotland from 09-Jul-2017 to 16-Jul-2017. Purpose of visit :International Faculty Exchange Programme .
- 10. Scotland from 22-Jul-2018 to 29-Jul-2018. Purpose of visit: Personal Visit.
- 11. Germany from 22-Jul-2019 to 28-Jul-2019. Purpose of visit: Personal Visit.

Invited Lectures

1. Delivered a Lecture on "Computer Application in Water Distribution Network" in Design of Water Distribution Network organized by Metro Water Training Centre, Chennai (22-Nov-2004).

- 2. Delivered a Lecture on "Rejuvenation of Ooranies in Kancheepuram and Ramanathapuram districts" in Capacity Development for Panchayt Presidents organized by Rural Development Department, Govt. of TN, Tiruchirappalli (27-May-2005).
- 3. Delivered a Lecture on "Groundwater Modelling Procedures" in Water Resources organized by Anna Institute of Management, Chennai (14-Sep-2006).
- 4. Delivered a Lecture on "Baseline Survey & Applications" in Sustainable Development of Water Resources organized by National Institute of Technical Teachers Training, Chennai (24-Nov-2009).
- 5. Delivered a Lecture on "Base Line Survey for Environmental Impact Assessment" in Environmental Impact Assessment Guide Lines and Procedure organized by IITM, Chennai (19-Jul-2010).
- 6. Delivered a Lecture on "Water Sampling Methods for River and Coastal Regions" in Environmental Laboratory Practice organized by National Institute of Technical Teachers Training, Chennai (28-Aug-2010).
- 7. Delivered a Lecture on "Water Quality Data Analysis and DSS" in Environmental Laboratory Practice organized by National Institute of Technical Teachers Training, Chennai (30-Aug-2010).
- 8. Delivered a Lecture on "Sustainable Water Management" in Sustainable Development and Environment Management organized by National Institute of Technical Teachers Training, Chennai (11-Nov-2010).
- 9. Delivered a Lecture on "Application of Groundwater Model and Hands on Experience for Aqua Chemical Modeling in Water Resources Pollution" in on Role of Aqua Chemical Modeling in Water Resources Pollution organized by Annamalai University, Chidambaram (23-Nov-2010).
- 10. Delivered a Lecture on "Irrigation scheduling" in Training Programme on Irrigation Scheduling organized by CWR, Anna University, Chennai (20-Dec-2010).
- 11. Delivered a Lecture on "Advances in Water Resources Engineering: Critical Issues and Strategic Options for Sustainable Development" in Advances in Environmental and Water resources Engineering organized by Adhiparasakthi Engineering College, Melmaruvathur (22-Dec-2010).
- 12. Delivered a Lecture on "Crop Water Requirement computation with a specific reference to Paddy crop" in Training Programme on Crop Water Resuirement organized by CWR, Anna University, Chennai (05-Jan-2011).
- 13. Delivered a Lecture on "EIA for River Valley Project" in EIA for Water Resources Development organized by National Institute of Technical Teachers Training, Chennai (19-Jan-2011).
- 14. Delivered a Lecture on "Estimation of Runoff for Small and Large Catchments" in Water Resources Development organized by National Institute of Technical Teachers Training, Chennai (28-Apr-2011).
- 15. Delivered a Lecture on "Equipments for Pumping the Water and Sewage" in Urban Housing Infrastructure organized by Anna University, Chennai (29-Apr-2011).

- 16. Delivered a Lecture on "Heuristic Concepts in Optimization â€" Water Sharing Disputes and Game Theory application for Water Dispute Analysis" in Water Resources Optimisation organized by PWD Training Institute, Chennai (02-May-2011).
- 17. Delivered a Lecture on "Groundwater Modeling Assessment and Management Procedure for Urban & Coastal Aquifer System" in Hydrogeochemical Modeling Assessment and Management of Urban & Coastal Groundwater organized by Jawaharlal Nehru University, New Delhi (21-Oct-2011).
- 18. Delivered a Lecture on "Computer Application in Water Resources Engineering" in Computer Application in Civil Engineering organized by Tagore Engineering College, Chennai (23-Aug-2012).
- 19. Delivered a Lecture on "Groundwater Modeling and Demarcation of Groundwater Protection Zones" in Remediation technologies and modelling of assessment of groundwater contaminatio organized by NGRI, Hyderabad (23-Jan-2013).
- 20. Delivered a Lecture on "Hydrology and Stream flow modelling" in Recent Trends in Water resources, Hydraulics and Coastal modelling organized by National Institute of Technology, Tiruchirappalli (07-Nov-2013).
- 21. Delivered a Lecture on "Hydraulic Machinery" in Faculty Development Programme organized by Vellammal Engineering College, Chennai (18-Dec-2013).
- 22. Delivered a Lecture on "Software Application in Water Resources Engineering" in Recent Trends in Civil Engineering organized by University College of engineering, Ariyalur (12-Mar-2014).
- 23. Delivered a Lecture on "EIA for Water Resources Project" in Development of Water Resources Project organized by Public Works Staff Training Institute, Chennai (21-Jan-2015).
- 24. Delivered a Lecture on "Sustainable Water Resources Development" in Advancement in Civil Engineering organized by Saveetha School of Engineering, Saveetha Universit, Chennai (17-Mar-2015).
- 25. Delivered a Lecture on "Groundwater Pollution Modelling and Management" in Environmental Modelling organized by SRM University, Chennai (25-Apr-2015).
- 26. Delivered a Lecture on "Water Resources Management for Sustainable Development" in Integrated Water Resources Management and Strategies for Water Development organized by Sree Vidyanikethan Engineering College, Tirupati (04-Jul-2015).
- 27. Delivered a Lecture on "Consequences of Urban Sprawl on Water Resources and Sustainable Watershed Management" in World Water Day organized by Vels University College, Chennai (22-Mar-2016).
- 28. Delivered a Lecture on "Application of Evolutionary Algorithm to Groundwater flow and Transport modeling" in Integrated Water Resources Management and Strategies for Water Development organized by VIT-Vellore, Vellore (09-Jun-2016).

- 29. Delivered a Lecture on "Water Resources Management" in Sustainable Developemnt organized by Karpagavinayaga College of Engineering and Technol, Kanchipuram (23-Sep-2016).
- 30. Delivered a Lecture on "Groundwater Flow and Transport Modeling Procedure" in Groundwater Flow and Transport Modeling organized by National Institute of Hydrology, Kakinada (27-Sep-2016).
- 31. Delivered a Lecture on "Groundwater Modeling" in Groundwater Monitoring Compliance organized by SRM University, Department of Civil Engineering, , Chennai (28-Jan-2017).
- 32. Delivered a Lecture on "River Management and Urban Planning â€" Emerging Trends" in Urban Water ARCUS Workshop organized by Anna University and GéHCO research Unit, Universi, School of Architecture & Planning, Anna University (18-Feb-2017).
- 33. Delivered a Lecture on "Computational Intelligence for Groundwater Simulation and Optimisation" in Water Resource and Environmental Systems organized by Annamalai University, Department of Civil Engineer, Chidambaram (27-Mar-2017).