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EDUCATION

Ph.D in Civil Engineering (Geoenvironmental)

University of Illinois at Chicago, Chicago, USA

Thesis: *"Effects of Leachate Recirculation on Geotechnical Properties of Municipal Solid Waste Landfills"*

Relevant Coursework: *Landfills and Impoundments, Environmental Remediation Engineering, Environmental Geotechnology, Vadose Zone Hydrology, Pollution Prevention Engineering, Geophysics*

M.E. in Soil Mechanics and Foundation Engineering (Geotechnical Engineering)

College of Engineering Guindy, Anna University, India

Thesis: *"Serviceability of Low Volume Roads"* – Dealt with the concept of pavement serviceability index for low volume roads, developed an empirical equation for pavement maintenance.

Relevant Coursework: *Site Investigation and Soil Exploration, Foundation Engineering, Pavement Engineering, Environmental Geotechnology, Soil Dynamics, Finite Element Method, Soil Properties and Behaviour, Theoretical Soil Mechanics Strength and deformation behavior of soils and GIS (theory and practical).*

B.E. in Civil Engineering

College of Engineering Guindy, Anna University, India

Project: *"Behavior of Cold Formed Steel Beam Column Welded Connections"*

Relevant Coursework: *Structural Design (Steel & Concrete), Advanced Design of structures, Irrigation Engineering and Design, Fluid Mechanics and Hydraulic machinery, Transportation Engineering, Environmental Engineering and Design (Water and Wastewater), Surveying, Construction Project Management*

Area of Research

Geoenvironmental Engineering, Laboratory Testing of Materials, Landfill Design, Environmental Impact Assessment, Geospatial Technologies, Contaminated Site Assessment and Remediation, Engineering Education, Teaching with Technology, Accreditation, Blended & Flipped Classroom, Student Assessment, Strategic Planning and Institutional Development, MOOC development, QC/QA

PROFESSIONAL EXPERIENCE

1. July 2017 to till date – Head i/c, Centre for International Affairs

ITEC Coordinator, National Institute of Technical Teachers Training & Research, Chennai

Job profile involves coordinating with Ministry of External Affairs towards the conduct of ITEC courses, flagship programme of Government of India.

Transformations: Streamlined the process of administrative procedure in the candidate enrolment and registration. Provided facelift to the CIA events by change management. To facilitate participants and coordinators, two handouts have been brought out, “Guidelines for ITEC Participants” and “Guidelines for ITEC coordinators”. By emphasizing the strength of the institute and through liaison with MEA, brought more courses and participants. Established good rapport with our mission in different countries.

2. October 2016 to till date – SWAYAM – Teacher Education: Project Member

National Institute of Technical Teachers Training & Research, Chennai

Job profile involves development of MOOC in the area of teacher education.

Transformations: Prepared a handbook on “Guidelines for MOOC Course Coordinators” incorporating the tips for developing MOOC videos. The quality of introductory videos was well appreciated by several officials. I have been nominated as a sub-committee member for developing capacity building workshop for MOOC coordinators.

3. April 2012 to till date - Associate Professor & Head i/c, Centre for Environmental Management, National Institute of Technical Teachers Training & Research, Chennai

Job profile involves providing training to the technical teachers in the area of environmental engineering and management.

Transformations: Among the four NITTTR, our institute is the first to offer and conduct course in the area of “Green Building Concepts and Sustainable Development”. We developed first of its kind Virtual Laboratory in “Environmental Engineering Laboratory” with integrated pedagogical approach. Involved and carried out consultancy services related to hazardous landfill and characterization of hazardous waste. Established the state of art advanced solid waste/environmental laboratory facilities with Atomic absorption spectrophotometer, Gas Chromatography, TOC analyzer, Flue Gas Analyser, UV – Spectrophotometer, Weather Station.

4. July 2009 to March 2012 – Visiting Faculty

In Centre for Environmental Management, National Institute of Technical Teachers Training & Research, Chennai

Job profile involves providing consultancy services related to hazardous landfill and characterization of hazardous waste. We developed first of its kind Virtual Laboratory in “Environmental Engineering Laboratory” with integrated pedagogical approach. Established the state of art advanced solid waste/environmental laboratory facilities with Atomic absorption spectrophotometer, Gas Chromatography, TOC analyzer, Flue Gas Analyser, UV – Spectrophotometer, Weather Station.

5. September 2009 to November 2009 – Senior Project Officer

In Geotechnical Engineering Division, Indian Institute of Technology, Madras

Job profile involves checking the design of Hazardous waste landfills and providing monitoring guidelines for construction of landfills. I was also involved in the fabrication of flexiwall permeability testing at IITM.

6. January 2009 to July 2009 – Design Engineer

In Great Lakes Soil and Environmental Consultants, Illinois

Job profile involves characterization of materials used for landfill construction in accordance with ASTM and AASHTO procedures. Preparation of test reports. Involved in the design of Dekalb County Landfill and characterization of liner material.

7. August 2005 to December 2008 – Teaching & Research Assistant in Department of Civil Engineering at University of Illinois at Chicago.

Research Assistant:

- Performed laboratory investigation on the degrading field and synthetic Municipal Solid Waste (MSW) to assess the change in geotechnical properties.
- Performed characterization of MSW materials through MODECOM and ASTM procedures.
- Associated in the field investigation on bioreactor landfills to assess the efficacy of leachate recirculation through geophysical testing such as electrical resistivity, seismic refraction, GPR, EM 32 and ERT.
- Performed geotechnical testing on field soil samples as per ASTM procedures.
- Associated in the consultancy and research projects of the UIC's Geotechnical and Geoenvironmental Laboratory.

Teaching Assistant:

- Instructed undergraduate students and tutored them in their courses – *Soil Mechanics, Foundation Design and Analysis, Statics*.
- Assisted in research work of other graduate students in the laboratory.

8. January 2005 to August 2005 - Lecturer in Civil Engineering, Department of Civil Engineering, College of Engineering, Guindy, Anna University, Chennai, India

Teaching:

- Courses Handled: *Soil Mechanics, Foundation Engineering, Soil Engineering Laboratory, Ground Improvement, Computer Application in Civil Engineering and Computer Practice -1*.
- Advisor to undergraduate project works – Guided 6 batches of students.
- Developed online project booking to conduct the project review for undergraduate students.

Research and Consultancy Projects:

- Involved in consultancy projects undertaken by Division of Soil Mechanics and Foundation Engineering.

9. April 2002 to January 2005 – Teaching Research Associate in Department of Civil Engineering, College of Engineering, Guindy, Anna University, Chennai, India.

Job Profile deals with teaching undergraduate students (B.E Civil) – Subjects Taught: Soil Mechanics, Foundation Engineering, Soil Engineering Laboratory, Ground Improvement, and Computer Application in Civil Engineering and Computer Practice -1 and associated in consultancy and research projects of the division.

Administrative work (2002 – 2005)

- Academic Information Management System (AIMS) Coordinator for Civil Engineering Department.
- Associated in Division Laboratory Stores and Records Maintenance.
- Department Progress Report Preparation for All India Council of Technical Education (AICTE) – 2004.
- Anna University Representative (AUR) for Tamil Nadu Professional Course Entrance Examination – 2003 and 2004.

10. June 2001 to March 2002 – Project Associate in Center for Disaster Mitigation and Management, Anna University, Chennai, India.

- Developed procedure to perform seismic microzonation based on geotechnical considerations.
- Associated in the preparation of National Strategy Handbook “Seismic Microzonation – Geotechnical Considerations”.

- Prepared Ready reckoner for “Performance of Seismic Microzonation”.
- Team Member in preparation of Landslide Vulnerability Atlas of India.
- Technical support in the preparation of “Compendium of Major Landslides of India”.
- Associated in the preparation of Disaster Search and Rescue Database.
- Associated in the Courses/Training/Workshops conducted by the center.

AWARDS & HONORS

- UNESCO Invitation to the Asia-Pacific Regional Seminar on MOOCs for Higher Education - Fellowship for travel and stay - 2018
- Good Governance Day – First Prize in Oration - 2014
- Institution of Engineers, India - Young Engineer Award - 2012.
- American Society of Civil Engineering (ASCE) – Illinois Section – Geotechnical Award – 2006
- Swiss Federal Institute of Technology (EPFL), in partnership with the United Nations Institute for Training and Research (UNITAR) Fellowship for the study on “Sustainable Development and Role of Technology”.
- SWISS confederation, SDC (UN-ISDR, UNESCO) – Scholarship
- University of Illinois – Doctoral Fellowship

CONTRIBUTIONS (TEACHING) TO CONTINUING EDUCATION PROGRAMMES

(a) International Training Programmes

As a coordinator and resource person trained more than 400 participants through the international ITEC courses the revenue generated to the institute amounts to Rs.450 lakhs, sponsored by Ministry of External Affairs, GoI

S. No.	Dates of training program conducted	Participant profile (teachers, govt. employees, other)	Number of participants
01	Transforming Instruction through Blended Classroom Approach		
01	Batch – I From 02-12-2019 to 13-12-2019	Academic and Government Officials	31 Participants (From 21 different countries viz., Bhutan, Columbia, Cote d'ivoire, Ethiopia, Honduras, Indonesia, Kenya, Malaysia, Maldives, Mexico, Moldova, Mongolia, Namibia, Nigeria, Paraguay, Somalia, Suriname, Tanzania, Uganda, Uzbekistan, Zambia)
2 to 9	Sustainable Development and Environmental Management (A total of Eight Batches)		
02	Batch – VIII From 27-09-2017 to 21-11-2017	Academic and Government Officials	19 Participants (From 12 different countries viz.,Afghanistan, Cote d'ivoire, Cuba, Egypt, El-Salvador, Fiji, Iraq, Kyrgyzstan, Sudan, Vietnam, Zambia, Zimbabwe)
03	Batch – VII From 27-07-2016 to 20-09-2016	Academic and Government Officials	13 Participants (From 9 different countries viz.,Afghanistan, Bhutan, Egypt, Ethiopia, Fiji, Senegal, South Sudan, Tunisia, Nigeria)
04	Batch - VI from 22-07-2015 to 15-09-2015	Academic and Government Officials	18 Participants (From 9 different countries viz., Bangladesh, Afghanistan, Egypt, Bhutan, Sudan, Ghana, Nigeria, Seychelles, Mauritius)
05	Batch –V from 02-12-2014 to 27-01-2015	Academic and Government Officials	17 Participants (From 11 different countries viz., Egypt, Tanzania, Madagascar, Jordan, Sudan, Algeria, Bhutan, Myanmar, Peru, South Africa, Laos)
06	Batch–IV from 02-10-2013 to 26-11-2013	Academic and Government Officials	19 Participants (From 14 different countries viz., Ethiopia, Vietnam, Egypt, Peru, Burundi, Syria, Ghana, Lesotho,

S. No.	Dates of training program conducted	Participant profile (teachers, govt. employees, other)	Number of participants
			<i>Tanzania, Zambia, Malawi, Mauritius, Indonesia, Sri Lanka)</i>
07	Batch–III from 04-10-2012 to 29-11-2012	Academic and Government Officials	16 Participants (From 12 different countries viz., Vietnam, Poland, Nepal, Cambodia, Sudan, Uzbekistan, Dem. Rep. of Congo, Lesotho, Zimbabwe, Nigeria, Cameroon, Namibia)
08	Batch–II from 18-01-2012 to 15-03-2012	Academic and Government Officials	25 Participants (From 13 different countries viz., Cambodia, Demo. Rep. Of Congo, Guatemala, Jordan, Sri Lanka, Sudan, Syria, Vietnam, Botswana, Kenya, Lesotho, Tanzania, Zambia)
09	Batch –I from 20-10-2010 to 14-12-2010	Academic and Government Officials	19 Participants (From 14 different countries viz.,Angola, Afghanistan, Thailand, Mongolia, Sri Lanka, Poland, Ivory Coast, Iran, Sudan, Laos, Namibia, Mauritius, Tanzania, Cameroon)
10-11	Developing Technical Education to Meet the National Growth		
10	Batch 1: from 05-10-2011 To 16-11-2011	Academic and Government Officials	17 Participants (From 12 different countries viz.,Botswana, Lebanon, Sudan, Yemen, Sri Lanka, Afghanistan, Myanmar, Belarus, Madagascar, Namibia, Mauritius, Ivory coast)
11	Coordinated Colombo Plan Staff College Training Programme “Web Based Technical Education”		
12 : 16	Water Quality Analysis: Laboratory Practices (A total of Five Batches)		
12	Batch - 5 from 04.02.2015 to 31.03.2015	Academic and Government Officials	19 Participants (From 14 different countries viz.,Colombia, Egypt, Ethiopia, Fiji, Lithuania, Madagascar, Moscow-STP, Thailand, Uzbekistan, Vietnam, Mauritius, Nigeria, Tanzania, Zambia)
13	Batch - 4 from 04.02.2014 to 31.03.2014	Academic and Government Officials	21 Participants (From 14 different countries viz.,Egypt, Papua New Guinea, Afghanistan, Vietnam, South Sudan, Myanmar, Mongolia, Niger, Bangladesh, Tanzania, Nigeria, Zambia, Uganda, Bhutan)
14	Batch - 3 from 04-02-2013 to 29-03-2013	Academic and Government Officials	15 Participants (From 12 different countries viz.,Iraq, Vietnam, Ethiopia, Mongolia, Indonesia, Laos, Uzbekistan, Mongolia, Sri Lanka, Tanzania, Sierra Leone, Uganda)
15	Batch - 2 from 03-08-2011 to 27-09-2011	Academic and Government Officials	9 Participants (From 6 different countries viz.,Nigeria, Afghanistan, Sudan, Uzbekistan, Zimbabwe, Cambodia)
16	Batch - 1 from 04.08.2010 to 28.09.2010	Academic and Government Officials	11 Participants (From 8 different countries viz.,Iraq, Sudan, Cambodia, Palestine, Mongolia, Myanmar, South Africa, Zambia, Mauritius)
17:19	IT, Web Design, English Communication and Pedagogy (A total of Three Batches)		
17	Batch – 3/5 from 20.02.2019 to 17.04.2019	Academic faculty members	40 Participants from Bangladesh
18	Batch – 2/5 from 07.11.2018 to 29.12.2018	Academic faculty members	40 Participants from Bangladesh
19	Batch – 1/5 from 03.05.2017 to 24.06.2017	Academic faculty members	39 Participants from Bangladesh

(b) Special Training Programme

As a coordinator and resource person for the specially designed courses for the government engineers the revenue generated to the institute amounts to Rs.60.5 lakhs.

S. No.	Dates of training program conducted	Number of participants
1	MIS – Environmental Impact Assessment <i>Sponsored by: Public Works Department, Govt. of Tamil Nadu</i> From 23.11.2009 to 27.11.2009	18
2	Basics of Flood Modeling <i>Sponsored by: L&T, Chennai, Tamil Nadu</i> From 29.09.2010 to 03.10.2010	21
3	Computer Application in Irrigation Water Management <i>Sponsored by: Public Works Department, Govt. of Tamil Nadu</i> From 07.02.2011 to 11.02.2011	19
4	Design of Irrigation Structure <i>Sponsored by: Public Works Department, Govt. of Tamil Nadu</i> From 25.04.2011 to 29.04.2011	25
5	Environmental Impact Assessment <i>Sponsored by: Public Works Department, Govt. of Tamil Nadu</i> From 27.06.2011 to 01.07.2011	21
6	Computer Application in Irrigation Water Management <i>Sponsored by: Public Works Department, Govt. of Tamil Nadu</i> From 11.07.2011 to 15.07.2011	21
7	Design of Irrigation Structure <i>Sponsored by: Public Works Department, Govt. of Tamil Nadu</i> From 25.07.2011 to 29.07.2011	25
8	Induction Training programme for newly recruited engineers of Highways Department – Batch I <i>Sponsored by: Highways Department, Govt. of Tamil Nadu</i> From 27.03.2012 to 31.03.2012	25
9	Induction Training programme for newly recruited engineers of Highways Department - Batch II <i>Sponsored by: Highways Department, Govt. of Tamil Nadu</i> From 16.04.2012 to 20.04.2012	23
10	Induction Training programme for newly recruited engineers of Highways Department – Batch III <i>Sponsored by: Highways Department, Govt. of Tamil Nadu</i> From 14.05.2012 to 18.05.2012	25
11	Induction Training programme for newly recruited engineers of Highways Department – Batch IV <i>Sponsored by: Highways Department, Govt. of Tamil Nadu</i> From 04.06.2012 to 08.06.2012	25
12	Induction Training programme for newly recruited engineers of Highways Department – Batch V <i>Sponsored by: Highways Department, Govt. of Tamil Nadu</i> From 19.06.2012 to 23.06.2012	26
13	Induction Training programme for newly recruited engineers of Highways Department – Batch VI <i>Sponsored by: Highways Department, Govt. of Tamil Nadu</i> From 23.07.2012 to 27.07.2012	26
14	Induction Training programme for newly recruited engineers of Highways Department – Batch VII <i>Sponsored by: Highways Department, Govt. of Tamil Nadu</i> From 30.07.2012 to 03.08.2012	23
15	Induction Training programme for Pollution Control Assistant Engineers <i>Sponsored by: Tamil Nadu Pollution Control Board, Chennai</i> From 16.07.2013 to 27.07.2013	38
16	Induction Training programme for newly recruited Engineers.	72

S. No.	Dates of training program conducted	Number of participants
	<i>Sponsored by: Tamil Nadu Slum Clearance Board, Govt. of Tamil Nadu From 18.05.2017 to 02.06.2017</i>	
17	Induction Training programme for newly recruited Assistant Engineers. <i>Sponsored by: Tamil Nadu Housing Board Govt. of Tamil Nadu From 04.06.2018 to 22.06.2018</i>	25
18	Induction Training programme for newly recruited Junior Drafting Officers <i>Sponsored by: Tamil Nadu Housing Board Govt. of Tamil Nadu From 04.06.2018 to 16.06.2018</i>	18
19	Induction Training programme for newly recruited Surveyors. <i>Sponsored by: Tamil Nadu Housing Board Govt. of Tamil Nadu From 04.06.2018 to 16.06.2018</i>	18
20	Induction Training programme for newly recruited Technical Assistants <i>Sponsored by: Tamil Nadu Housing Board Govt. of Tamil Nadu From 09.07.2018 to 20.07.2018</i>	75
21	Training of Trainers Programme for Highway Engineering Officials <i>Sponsored by: Tamil Nadu Highways Department Govt. of Tamil Nadu From 26.08.2019 to 30.08.2019</i>	10
22	Training of Trainers Programme for Highway Engineering Officials <i>Sponsored by: Tamil Nadu Highways Department Govt. of Tamil Nadu From 23.09.2019 to 27.09.2019</i>	11
23	SWAYAM Capacity Building Workshop for Course Coordinators <i>Sponsored by: Ministry of Human Resource Development, Gol From: 27 – 29 May 2019</i>	26
24	SWAYAM Capacity Building Workshop for Course Coordinators <i>Sponsored by: Ministry of Human Resource Development, Gol From: 11 – 13 September 2019</i>	22
25	SWAYAM Capacity Building Workshop for Course Coordinators <i>Sponsored by: Ministry of Human Resource Development, Gol From: 04 – 06, November 2019</i>	25

(c) Engineering College Programmes

As a coordinator and resource person, conducted specially designed engineering college programme in the Instructional Design and Delivery System, NBA Accreditation, Outcome Based Education, Student Assessment and Evaluation in more than 75 technical institutes and generated revenue to the institute to the tune of Rs.49 lakhs.

Sl.No	Venue	From	To	No. of Partici.
1	Arasu Engineering College	08.08.11	13.08.11	44
2	SCAD Group of Institutions, Tirunelveli	14.11.11	19.11.11	50
3	James College of Engineering and Technology, Nagercoil	05.12.11	10.12.11	56
4	Selvam College of Technology	02.05.12	04.05.12	58
5	Jansons Institute of Technology, Coimbatore.	25.06.12	29.06.12	46
6	Rajiv Gandhi Institute of Technology, Kottayam.	26.07.12	28.07.12	16
7	Kongu Engineering College, Erode, Tamil Nadu	06.08.12	08.08.12	49

Sl.No	Venue	From	To	No. of Partici.
8	Kongu Engineering College, Erode, Tamil Nadu	09.08.12	11.08.12	52
9	GMR Institute of Technology, Rajam, A.P.	06.09.12	08.09.12	50
10	Sri Venkatesa Perumal College of Engg & Tech., Puttur.	31.12.12	05.01.13	55
11	Visakha Institute of Engineering & Technology, Visakhapatnam	03.06.13	07.06.13	57
12	Dhanalakshmi Srinivasan Engineering College, Perambalur	02.07.13	06.07.13	60
13	Dhanalakshmi Srinivasan Engineering College, Perambalur	02.07.13	06.07.13	60
14	Dr. N.G.P. Institute of Technology, Coimbatore.	11.11.13	15.11.13	50
15	Adhiparasakthi Engineering College. Melmaruvathur	09.12.13	13.12.13	41
16	Bharathidasan Institute of Technology, Tiruchirappalli.	09.12.13	20.12.13	33
17	National Institute of Technology, Puducherry	16.12.13	20.12.13	23
18	IES College of Engineering, Thrissur.	28.01.13	01.02.13	53
19	PSNA College of Engg. & Tech., Dindigul.	25.02.13	01.03.13	51
20	Arunai College of Engineering, Tiruvanamalai	27.06.13	29.06.13	55
21	Muthayammal Engineering College, Rasipuram	29.07.13	02.08.13	50
22	RVS College of Engineering and Technology, Coimbatore	05.05.14	09.05.14	55
23	Visakha Institute of Engineering & Technology, isakhapatnam	12.05.14	16.05.14	46
24	KCG College of Technology, Chennai	23.06.14	27.06.14	40
25	G Pulla Reddy Engineering College, Kurnool	02.07.14	04.07.14	54
26	Ganadipathy Tulsi's Jain Engineering College, Vellore, TN	22.12.14	27.12.14	34
27	Mangalam College of Engineering, Ettumanoor, Kottayam	01.06.15	5.06.15	55
28	KCG College of Technology, Chennai, Tamil Nadu	22.06.15	26.06.15	37
29	Jerusalem College of Engineering, Chennai,	29.02.16	02.03.16	50
30	VPMM Engineering college for women, Srivilliputtur	25.06.16	27.06.16	55
31	The National Institute of Engineering Mysuru	11.07.16	16.07.16	57
32	BMS College of Engineering Bengaluru	25.07.16	29.07.16	43
33	College of Engineering Guindy Anna University Chennai	21.09.16	23.09.16	56
34	Madras Institute of Technology Anna University Chennai	13.10.16	15.10.16	48
35	College of Engineering Trivandrum, Kerala	17.10.16	22.10.16	26
36	Alagappa College of Technology Anna University	24.10.16	26.10.16	48
37	Jerusalem College of Engineering Chennai	28.11.16	03.12.16	51
38	PSNA College of Engineering & Technology, Dindigul	19.12.16	24.12.16	51
39	Tamil Nadu Agricultural University Coimbatore	28.12.16	31.12.16	55
40	The National Institute of Engineering Mysuru	03.01.17	08.01.17	53
41	APJ kerala Technological University Kerala	13.02.17	15.02.17	38
42	National Engineering College, Kovilpatti, Tamil Nadu	22.05.17	27.05.17	50
43	National Engineering College, Kovilpatti, Tamil Nadu	22.05.17	27.05.17	46
44	National Engineering College, Kovilpatti, Tamil Nadu	27.05.17	29.05.17	51
45	National Engineering College, Kovilpatti, Tamil Nadu	27.05.17	29.05.17	52
46	National Engineering College, Kovilpatti, Tamil Nadu	28.05.17	30.05.17	43
47	National Engineering College, Kovilpatti, Tamil Nadu	28.05.17	30.05.17	42

Sl.No	Venue	From	To	No. of Partici.
48	RMK College of Technology, Chennai	19.06.17	24.07.17	
49	Symbiosis Institute of Technology, Pune.	26.06.17	01.07.17	41
50	Anna University, Chennai, Tamil Nadu	08.07.17	19.07.17	41
51	Rajalakshmi Engineering College, Chennai, TN	09.08.17	11.08.17	54
52	Sandip university, Nasik, Maharashtra	22.08.17	24.08.17	51
53	VNR Vignana Jothi Institute of Engineering & Technology, TL	11.12.17	15.12.17	34
54	Kuppam Engineering College, Kuppam, AP	11.12.17	16.12.17	53
55	Ballari Institute of Technology & Management, Karnataka	18.12.17	23.12.17	53
56	Anna University, Chennai, Tamil Nadu	18.12.17	29.12.17	20
57	NIE Institute of Technology, Mysuru, Karnataka	01.01.18	06.01.18	59
58	National Institute of Engineering, Mysuru, Karnataka	01.01.18	06.01.18	52
59	St. Peters University, Chennai	02.04.18	04.04.18	
60	PSNA College of Engineering & Technology, Dindigul	16.04.18	21.04.18	
61	Karunya Institute of Technology and Science, Coimbatore	30.05.18	01.06.18	50
62	Karunya Institute of Technology and Science, Coimbatore	30.05.18	01.06.18	
63	Hindustan Institute of Technology and Science, Chennai	09.07.18	14.07.18	
64	Vidyavardhaka College of Engineering: Mysuru	13.08.18	18.08.18	43
65	College of Engineering – Mech & Civil Anna University	29.10.18	31.10.18	
66	National Institute of Technology, Puducherry	04.12.18	09.12.18	45
67	Aarupadai Veedu Institute of Technology (AVIT), Paiyanoor	18.01.19	19.01.19	40
68	Vinaya Mission Institute - Salem	05.02.19	08.02.19	40
69	National Institute of Technology, Manipur	12.03.19	17.03.19	49
70	Poornima University, Jaipur	01.07.19	06.07.19	40
71	AMET University, Chennai	08.07.19	14.07.19	40

(d) Faculty Development Programmes – Technical Courses

As a coordinator and resource person, organized courses on the cutting edge specially designed engineering college programme in the Instructional Design and Delivery System, NBA Accreditation, Outcome Based Education, Student Assessment and Evaluation in more than 75 technical institutes and generated revenue to the institute to the tune of Rs.45 lakhs.

1. Modern Construction Materials & Techniques
2. Disaster Management & Earthquake Resistant Structures
3. Modern Trends in Urban Planning and Water Management
4. Importance of Soil Testing in Civil Engineering (Theory & Laboratory)
5. Environmental Engineering Laboratory Practice
6. Disaster Management
7. Water Management
8. Green Building Concepts and Sustainable Development
9. Geotechnical Practice (Foundation Engineering)
10. Repairs and Renovations of Structures
11. Environmental Engineering

12. Geotechnical Engineering
13. Solid Waste Management
14. Repairs and Renovations of Structures
15. Environmental Science and Disaster Management
16. Environmental Impact Assessment
17. Building Information Modeling and Sustainable Development using REVIT Architecture and Allied Autodesk Products
18. Environmental Engineering Laboratory Practice - EXCITE Programme (EXcellence in Civil Engineering TEaching)
19. Limit State Design of Steel Structures as per I.S. 800 -2007
20. Research Methodology
21. Research Methodology in Engineering Education
22. Workshop on Environmental & Pollution Control - Manual Preparation
23. Water Quality Data Analysis and Interpretation
24. Environmental Chemistry
25. Environmental Laboratory Testing Practice
26. Instrumentation in Chemical Analysis of Water and Waste Water
27. Outcome Based Assessment in Civil Engineering
28. Climate Change Adaptation and Mitigation and Management
29. Environmental Pollution Control and Management
30. Outcome Based Education
31. Flipped Classroom

(e) Completed Projects: (Expert Advice and Development Projects)

1. Project title : Integrity assessment of sludge storage pit
 Sponsor : Tamil Nadu Petro products Limited, Manali, Chennai
 Investigators : S. Mohan and G. Janardhanan
 Duration : August 2009 to March 2010
 Amount : Rs. 1,00,000
 Brief Description:
 The main aim of the project is to assess the status of the sludge storage pit. Integrity of the storage pit is assessed and the status of groundwater with respect to the contamination due to breach of liner material is assessed through the systematic laboratory testing of the ground water sample in and around the storage pit. The proper storage is recommended based on the observations to comply with the TNPCB hazardous waste storage guidelines.

2. Project title : Storm Water design for the air force runway
 Sponsor : Garrison Engineer, Air Force, India.
 Investigators : S. Mohan, S.R. Gandhi and G. Janardhanan
 Duration : 2009 – 2010
 Amount : Rs. 75,000
 Brief Description:
 The main aim of the project is to assess the drainage condition in and around the runway. Using the modern tools for analysis the contour of the area is prepared and design has been suggested to have prefect runoff in the runway.

3. Project title : Handout preparation on climate change its impact and adaptability
 Sponsor : TNPCB, Chennai

Investigators : S. Mohan and G. Janardhanan

Duration : October 2009

Amount : Rs. 50,000

Brief Description:

The main aim of the funding is to sensitize the faculty members about the impact of climate change in their livelihood and how to educate the student community about the climate change through visually appealing posters and messages.

4. Project title : Checking the design and monitoring the project of First Cell of the Phase II
Landfill at common hazardous waste treatment, storage and disposal Facility

Sponsor : Ramky Group, Chennai

Investigators : S. Mohan and G. Janardhanan

Duration : June 2010 to December 2010

Amount : Rs. 2, 50,000

Brief Description:

The main aim of the project is to check the design of hazardous waste landfill at Gummidipoondi. The project includes periodic monitoring of the various phases in the liner construction and testing the suitability of materials (clay, Gravel, sand, HDPE liner, Geotextiles) used for the construction. In addition to this monitoring groundwater wells are tested for the quality of the water. The project resulted in the documentation of the standard operating procedure for the hazardous waste landfill construction and maintenance.

5. Project title : Analysis of Brine Sludge

Sponsor : Tamil Nadu Petro products Limited, Manali, Chennai

Investigators : S. Mohan and G. Janardhanan

Duration : March 2010 to March 2011

Amount : Rs. 1, 50,000

Brief Description:

The main aim of the project is to check the characteristics of the brine sludge. It also aims to test whether the sludge is hazardous or not as per the CPCB guidelines. Based on the results, the disposal strategy for this brine sludge is recommended.

6. Project title : Study on Land use and Land cover Changes in Mine II - Neyveli

Sponsor : Neyveli Lignite Corporation Limited, Neyveli

Investigators : S. Mohan, G. Janardhanan, and K.S.A. Dinesh Kumar

Duration : June 2010 to December 2010

Amount : Rs. 3, 50,000

Brief Description:

The main purpose of this project is to monitor land use land cover pattern and hydro geomorphology using the satellite imagery data which was procured from the NRSA for the prescribed area in 1:10000 scale. Interpretation and preparation of report had been done using satellite imagery in addition with ground truth verification. Special attention had been given for landuse, landcover pattern for Mine I, Mine IA and Mine II comparing with previous year data.

7. Project title : TNSCB Total Station Survey Perumbakkam Scheme under JNNURM

Sponsor : Tamil Nadu Slum Clearance Board, Chennai

Investigators : S. Mohan, G. Janardhanan, K.S.A. Dinesh Kumar and T. Jagatharakshan

Duration : June 2010 to December 2010

Amount : Rs. 7, 52, 698

Brief Description:

The main aim of the project is to estimate the quantity of fill material required to prepare the plot for construction. Using the total station equipment, complete area has been studied and contours maps are prepared and volume required is estimated for each phase of the project.

8. Project title : Establishing Training Environment for Training Technical Teachers and Students

Sponsor : National Mission on Education through ICT, MHRD, GoI

Investigators : V.P.Sivhakumaar, G. Kulanthaivel, S. Mohan and G. Janardhanan

Duration : 2010 to 2014

Amount : Rs. 28,00,000

Brief Description:

Our institute was pride to be part of National flagship project, NMEICT. In this project four courses have been developed for training technical teachers (a) Computer Graphics (b) Data Communication (c) Instructional Planning and Delivery and (d) Environmental Engineering Laboratory (Virtual Laboratory). The project followed four quadrant approach and developed the content, video, animation and assessment materials.

9. Project title : GIS Mapping of selected cities in Chennai and Slum Information Management System

Sponsor : Tamil Nadu Slum Clearance Board, Chennai

Investigators : S. Mohan, G. Janardhanan, K.S.A. Dinesh Kumar and K.S. Giridharan

Duration : June 2010 to December 2010

Amount : Rs. 1, 99, 147

Brief Description:

The main aim of the project is to develop GIS based slum information system for two models slums in the city of Chennai viz., Ramadoss nagar and Bojaraja Nagar. The complete social economic survey was carried out and plot boundary is drawn using modern tools. Using satellite imagery, integration of socio economic details with the map is carried out for developmental purpose. The survey also includes identifying and selecting options for improving their livelihoods using skill development.

10. Project title : Ground Water Modeling Study for the multi-layer Coastal Aquifer System of Neyveli Hydro-Geological Basin

Sponsor : Neyveli Lignite Corporation Limited

Investigators : S. Mohan, K.S.A. Dinesh Kumar and G. Janardhanan

Duration : February 2011 to March 2012

Amount : Rs. 24,80,000

Brief Description:

This study has been conducted to assess the impact of mine pumping as well as other pumping on the Neyveli basin, to quantify the impact of mine pumping plan on the overall water balance of the aquifer system, to study the feasibility of Mine III operation and its potential mine water pumping, and to assess the possibility of sea water intrusion the different scenario. The Groundwater modeling had been prepared using Visual Modflow software.

11. Project title : Environmental Impact on Ground Water due to Industries

Sponsor : SPAC Tapioca Products (I) Ltd., Salem

Investigators : S. Mohan, G. Janardhanan and K.S.A. Dinesh Kumar

Duration : April 2011 – November 2011

Amount : Rs. 3, 30, 900

Brief Description:

The main aim of the project is to assess the groundwater condition in and around the industry. The pump in test was carried out to understand the yield of the wells. The ground water / soil contamination due to the industry is also studied in detail. The remedial measures was recommended in order to meet the guidelines stated by the monitoring authorities.

12. Project title : Preparation of Social Economic Survey, BioMetric Identity Capture, Slum
MIS, Topographical Survey, GIS Based Slum Mapping in Tirunelveli Region

Sponsor : Tamil Nadu Slum Clearance Board, Chennai

Investigators : S. Mohan, and G. Janardhanan

Duration : July 2011 to July 2012

Amount : Rs.23,00,000

Brief Description:

The main aim of the project is to develop GIS based slum information system for the slums of Tirunelveli Corporation. The complete social economic survey was carried out and plot boundary is drawn using modern tools. Using satellite imagery, integration of socio economic details with the map is carried out for developmental purpose. The survey also includes identifying and selecting options for improving their livelihoods using skill development.

13. Project title : TNSCB Total Station Survey Perumbakkam Scheme under JNNURM Phase – II

Sponsor : Tamil Nadu Slum Clearance Board, Chennai

Investigators : S. Mohan, G. Janardhanan and K.S.A. Dinesh Kumar

Duration : September 2012 to December 2012

Amount : Rs.1, 00, 000

Brief Description:

The main aim of the project is to estimate the quantity of fill material required to prepare the plot for construction. Using the total station equipment, complete area has been studied and contours maps are prepared and volume required is estimated for each phase of the project.

14. Project title : TNSCB – Pillayarpaty Ph.II – Computation of Volume filling Earth

Sponsor : Tamil Nadu Slum Clearance Board, Trichy Division, Thiruchirapalli - 1

Investigators : S. Mohan, G. Janardhanan and K.S.A. Dinesh Kumar

Duration : September 2012 to November 2012

Amount : Rs.1, 00, 000

Brief Description:

The main aim of the project is to estimate the quantity of fill material required to prepare the plot for construction. Using the total station equipment, complete area has been studied and contours maps are prepared and volume required is estimated for each phase of the project.

15. Project title : TNSCB – Computation of Volume filling Earth – III Section

Sponsor : Tamil Nadu Slum Clearance Board, Trichy Division, Thiruchirapalli - 1

Investigators : S. Mohan, G. Janardhanan and K.S.A. Dinesh Kumar

Duration : July 2012 to October 2012

Amount : Rs. 70, 000

Brief Description:

The main aim of the project is to estimate the quantity of fill material required to prepare the plot for construction. Using the total station equipment, complete area has been studied and contours maps are prepared and volume required is estimated for each phase of the project.

16. Project title : Road User Satisfaction Survey – III
Sponsor : Tamil Nadu Road Sector Project, Chennai
Investigators : S. Mohan, G. Janardhanan and K.S.A. Dinesh Kumar
Duration : May 2012 to August 2012
Amount : Rs.33, 10, 000
Brief Description:
The main aim of the project is to prepare the detailed report on the user satisfaction. The road in the state of Tamilnadu was taken up for the study as per the guidelines of TNRSP. The different kind of roads in each district with appropriate sampling proportion was taken up for the study. After the detailed survey and its analysis the report with recommendation was submitted.
17. Project title : Design Check of STP 250 KLD Capacity at NTPL
Sponsor : Abhiram Infra Projects Pvt. Ltd., Chennai
Investigators : S. Mohan and G. Janardhanan
Duration : May 2012 – December 2012
Amount : Rs. 84, 225
Brief Description:
The main aim of the project is to check the design of the proposed sewage treatment plant of the NTPL. Based on detailed analysis with the secondary data, the design was vetted and the standard construction protocol and the precaution to be followed was submitted to the client.
18. Project title : Estimation of Volume required to fill in JJ Nagar, Trichy
Sponsor : Tamil Nadu Slum Clearance Board, Trichy
Investigators : S. Mohan, G. Janardhanan and K.S.A. Dinesh Kumar
Duration : March 2012 – August 2012
Amount : Rs. 99, 270
Brief Description:
The main aim of the project is to estimate the quantity of fill material required to prepare the plot for construction. Using the total station equipment, complete area has been studied and contour maps are prepared and volume required is estimated for each phase of the project.
19. Project title : TNPCB – Examination for the recruitment of Environmental Scientists
Sponsor : Tamil Nadu Pollution Control Board, Chennai
Investigators : S. Mohan, V.P.Sivhakumaar and G. Janardhanan
Duration : 01-03-2012 to 30-06-2012
Amount : Rs. 1, 50, 008
Brief Description:
In this project, the content and assessment expertise is utilized for framing the assessment questions for selecting environmental scientist to the TNPCB.
20. Project title : TNPCB – Examination for the recruitment of Assistant Engineers
Sponsor : Tamil Nadu Pollution Control Board, Chennai
Investigators : S. Mohan, V.P.Sivhakumaar and G. Janardhanan
Duration : 01-03-2012 to 30-06-2012
Amount : Rs. 2, 75, 750
Brief Description:
In this project, the content and assessment expertise is utilized for framing the assessment questions for selecting assistant engineers to the TNPCB.

21. Project title : Checking the Design and Monitoring the landfill – Phase II Cell 2
Sponsor : Tamilnadu Waste Management Ltd., Chennai
Investigators : S. Mohan and G. Janardhanan
Duration : March 2012 – September 2012
Amount : 4, 00, 000
Brief Description:
The main aim of the project is to check the design of hazardous waste landfill at Gummidipoondi. The project includes periodic monitoring of the various phases in the liner construction and testing the suitability of materials (clay, Gravel, sand, HDPE liner, Geotextiles) used for the construction. In addition to this monitoring groundwater wells are tested for the quality of the water. The project resulted in the documentation of the standard operating procedure for the hazardous waste landfill construction and maintenance.
22. Project title : TNSCB - Soil Testing for construction of 240 tenements in
Muthammalpuram, Orathanadu
Sponsor : Tamil Nadu Slum Clearance Board, Trichy
Investigators : S. Mohan, G. Janardhanan and K.S.A. Dinesh Kumar
Duration : March 2012 – April 2012
Amount : Rs. 3, 30, 900
Brief Description:
In this project, detailed site investigation is carried out towards the construction of 240 tenements in the Orathanadu for TNSCB. The SPT was carried out at the various strategic locations and recommendation towards the design of foundation was made.
23. Project title : Checking the Design and Monitoring the landfill – Phase II
Sponsor : Tamilnadu Waste Management Ltd., Chennai
Investigators : S. Mohan and G. Janardhanan
Duration : August 2010 to February September 2011
Amount : 2, 50, 000
Brief Description:
The main aim of the project is to check the design of hazardous waste landfill at Gummidipoondi. The project includes periodic monitoring of the various phases in the liner construction and testing the suitability of materials (clay, Gravel, sand, HDPE liner, Geotextiles) used for the construction. In addition to this monitoring groundwater wells are tested for the quality of the water. The project resulted in the documentation of the standard operating procedure for the hazardous waste landfill construction and maintenance.
24. Project title : TNPCB – Examination for the recruitment of Assistant Engineers
Sponsor : Tamil Nadu Pollution Control Board, Chennai
Investigators: S. Mohan, G. Janardhanan, K.S.A. Dinesh Kumar and V. Shanmuganeethi
Duration :
Amount : Rs. 1, 68, 540
Brief Description:
In this project, the content and assessment expertise is utilized for framing the assessment questions for selecting assistant engineers to the TNPCB.
25. Project title : Study on Land use Land Cover and Hydro Geomorphology through
satellite imageries for NLC mining lease area
Sponsor : Neyveli Lignite Corporation Limited

Investigators: S. Mohan, K.S.A. Dinesh Kumar and G. Janardhanan

Duration :

Amount : Rs. 5,61,800

Brief Description:

The main purpose of this project is to monitor land use land cover pattern and hydro geomorphology using the satellite imagery data which was procured from the NRSA for the prescribed area in 1:10000 scale. Interpretation and preparation of report had been done using satellite imagery in addition with ground truth verification. Special attention had been given for landuse, landcover pattern for Mine I, Mine IA and Mine II comparing with previous year data.

26. Project title : Computation of Volume using Total Station & GPS for Athipattu Site

Sponsor : Tamil Nadu Slum Clearance Board

Investigators : S. Mohan, K.S.A. Dinesh Kumar and G. Janardhanan

Duration :

Amount : Rs. 1, 46,000

Brief Description:

To compute the cut and fill volume using Total Station and GPS.

27. Project title : Computation of Volume of earth at Annai Anjugam Nagar, Perungalathur

Sponsor : Tamil Nadu Slum Clearance Board

Investigators : S. N. Panda, K.S.A. Dinesh Kumar and G. Janardhanan

Duration :

Amount : Rs. 1,18,000

Brief Description: To compute the cut and fill volume using Total Station and GPS.

28. Project title : Computation of Volume of earth at Manali New Town

Sponsor : Tamil Nadu Slum Clearance Board

Investigators : S. N. Panda, K.S.A. Dinesh Kumar and G. Janardhanan

Duration :

Amount : Rs. 1,64,450

Brief Description: To compute the cut and fill volume using Total Station and GPS.

29. Project title : Flood Mitigation Plan for Kargil Nagar

Sponsor : Tamil Nadu Slum Clearance Board

Investigators : S. N. Panda, K.S.A. Dinesh Kumar and G. Janardhanan

Duration : Feb to July 2019

Amount : Rs. 5,90,00

Brief Description:

To investigate the flood situation in the Kargil Nagar. To design flood mitigation plan for Kargil Nagar using primary and secondary data.

Completed Projects: (Laboratory Testing)

30. Project title : Deleterious Content of Soil – RITES

Sponsor : RITES, New Delhi

Investigators : S. Mohan and G. Janardhanan

Duration : May 2012 to December 2012

Amount : Rs. 42, 355

Brief Description:

Towards testing of aggregates for the construction of road.

31. Project title : Water testing for construction purpose as per IS codes
Sponsor : PSK Engineering Construction Company, Chennai
Investigators : S. Mohan and G. Janardhanan
Duration : 31-12-2010 to 10-01-2011
Amount : Rs. 5,000
Brief Description:
Towards testing of water sampling for construction purpose.
32. Project title : Conducting Jar test on raw water sample
Sponsor : Larsen & Toubro Limited, Chennai
Investigators: S. Mohan and G. Janardhanan
Duration : 22-03-2011 to 22-04-2011
Amount : Rs. 8, 000
Brief Description:
Testing of raw water sample to find optimum coagulant dosage
33. Project title : Water testing for drinking and construction as per IS code
Sponsor : RPP Selvam Infrastructure Pvt. Ltd., Chennai
Investigators: S. Mohan and G. Janardhanan
Duration : 12-04-2011 to 12-05-2011
Amount : Rs. 6,000
Brief Description:
Towards testing of water sampling for construction purpose.
34. Project title : Deleterious Content of Soil – RITES
Sponsor : RITES, New Delhi
Investigators: S. Mohan and G. Janardhanan
Duration :
Amount : Rs. 47,912
Brief Description:
Towards testing of aggregates for the construction of road.
35. Project title : Characterization of clay material – Rajiv Gandhi Nivavakkam – Lotus Pond
Sponsor : CPWD, Chennai
Investigators: S. Mohan and G. Janardhanan
Duration :
Amount : Rs. 2, 75, 750
Brief Description:
Characterization of clay material – Permeability and grain size.
36. Project title : Water testing in Lower Palar Basin
Sponsor : Public Works Department, Tamil Nadu
Investigators: G. Janardhanan and K. S. A. Dinesh Kumar
Duration : 2018
Amount : Rs. 66,000
Brief Description:
Towards testing of water sampling for construction purpose.

Research Projects

37. Project title : Demonstrating Environmentally Sound Technologies For Management Of Open Dumpsites Of Municipal Solid Wastes And Transition Towards Controlled

Sponsor : Tamil Nadu Pollution Control Board, Tamil Nadu

Investigators: G. Janardhanan and K.S.A. Dinesh Kumar

Duration :

Amount : Rs. 4,42,100.00

Brief Description:

38. Project title : Asian Coastal Ecosystem An Integrated Data base and information Management system (DIMS) for Assessing impact of climate change and its appraisal

Sponsor : Asian Pacific Network

Investigators: S. Mohan, G. Janardhanan and K.S.A. Dinesh Kumar

Duration :

Amount : Rs. 4,11,788.43

Brief Description:

The main aim of this research project is to collect the coastal data from various research organizations towards the development of database for assessing the climate change. The different models are executed to understand the intensity of the impact.

DST Funded Training Programme

39. Project title : “Geospatial Technologies”

Sponsor : Department of Science and Technology (DST), Govt. Of India.

Investigators: G. Janardhanan and K.S.A. Dinesh Kumar

Duration : June 2019 – March 2020

Amount : Rs. 10,00,000.00

LIST OF PUBLICATIONS (Print & Video)

a) Journals Published (Referred)

1. K.S.A. Dinesh Kumar, **G. Janardhanan**, R. Ravichandran (2019). “Criteria Analysis using GIS to Priorities the Slums”. International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Vol-9 (1),7493-7496.
2. Hailemariam Feleke, Girmay Medhin, Helmut Kloos, **Janardhanan Gangathulasi**, and Daniel Asrat (2018). “Household-stored drinking water quality among households of under-five children with and without acute diarrhea in towns of Wegera District, in North Gondar, Northwest Ethiopia”, Environmental Monitoring and Assessment,190(11): 669. (1-12).
3. Soro Yaya, **Janardhanan GangaThulasi**, Ouattara N’Golo and N’da Konan (2018). “State of major tunas stock in Atlantic East center zone, off Ivory Coast”, Journal of Biodiversity and Environmental Sciences, Vol 12(6). 112-123.
4. **Janardhanan G**, Dinesh Kumar KSA and Karthigeswari S (2015), “Spatial Analysis to Ascertain the Induced Development in the East Coast Road, Tamil Nadu”, Journal of Advanced Research in Geo Sciences & Remote Sensing" "VOL 2, NO 2
5. Reddy, K.R., Hettiarachchi, H., Giri, R.K., and **Gangathulasi, J.** (2015). “Effects of degradation on geotechnical properties of municipal solid waste from Orchard Hills Landfill, USA.” *International Journal of Geosynthetics and Ground Engineering*, 1(3), 1-14

6. Reddy, K.R., Hettiarachchi, H., **Gangathulasi, J.**, and Bogner, J.E., "Geotechnical Properties of Municipal Solid Waste at Different Phases of Degradation," **Waste Management**, Vol.31, No.11, 2011, pp.2275-2286.
7. Reddy, K.R., Hettiarachchi, H., **Gangathulasi, J.**, Bogner, J.E., and Lagier, T., "Geotechnical Properties of Synthetic Municipal Solid Waste," **International Journal of Geotechnical Engineering**, Vol.3, No.3, 2009, pp.429-438.
8. Reddy, K.R., **Gangathulasi, J.**, Hettiarachchi, H., Parakalla, N.S., and Bogner, J.E., "Geotechnical Properties of Fresh Municipal Solid Waste at Orchard Hills Landfill, USA," **Waste Management Journal**, Vol.29, No.2, 2009, pp.952-959.
9. Reddy, K.R., **Gangathulasi, J.**, Hettiarachchi, H., Parakalla, N., Bogner, J.E., and Lagier, T., "Geotechnical Properties of Landfilled Municipal Solid Waste Under Short-Term Leachate Recirculation Operations," **Waste Management & Research**, Vol.27, No.6, 2009, pp.578-587.
10. Reddy, K.R., **Gangathulasi, J.**, Hettiarachchi, H., Parakalla, N., Bogner, J.E., and Lagier, T., "Hydraulic Conductivity of Municipal Solid Waste in Landfills," **Journal of Environmental Engineering**, ASCE, Vol.135-No.8, 2009, pp.677-683.
11. Reddy, K.R., **Gangathulasi, J.**, Hettiarachchi, and Bogner, J., "Geotechnical Properties of Municipal Solid Waste Subjected to Leachate Recirculation," **Geotechnics of Waste Management and Remediation**, ASCE Geotechnical Special Publication No.177, ASCE Press, Reston, Virginia, 2008, pp.144-151
12. Grellier, S., Reddy, K., **Gangathulasi J.**, Adib, R., and Peters, C., (2007). "Correlation between electrical resistivity and moisture content of Municipal Solid Waste in bioreactor landfill." ASCE Geotechnical Special Publication No:163, ASCE Press, Reston, Virginia, 2007.

b) Papers in Conferences

13. Janardhanan Gangathulasi and Sudhindra Nath Panda, "Faculty Development through Blended approach," 2019 IEEE Frontiers in Education Conference (FIE), Cincinnati, Ohio, USA, 2019, pp. 1-5.
14. Anne Mary., & Janardhanan, G. (2019). Experimental investigation on the strength behaviour of artificial coarse aggregate in concrete. In: Proc. Global Environmental Changes and Sustainable Development. [online] Chennai: ASDf, p.137. Available at: <https://edlib.net/2019/icgecsd/978-93-88122-07-8.pdf>
15. Shahul Hamed., & Janardhanan, G. (2019). "Eco-Friendly Bio-Electrochemical treatment methods for removing toxic organics pollutants from Pharmaceutical Waste Water", In: Proc. Global Environmental Changes and Sustainable Development. [online] Chennai: ASDf, p.107. Available at: <https://edlib.net/2019/icgecsd/978-93-88122-07-8.pdf>
16. J. Gangathulasi, "Flipped classroom instruction using virtual simulation laboratory," 2017 IEEE Frontiers in Education Conference (FIE), Indianapolis, IN, USA, 2017, pp. 1-5. doi:10.1109/FIE.2017.8190475
17. Janardhanan G, (2016), "Enhancing the attainment of Environmental Engineering Laboratory course outcomes through Virtual Laboratories", Proc. Of the Third World Summit on Accreditation, 18-20, March.
18. Janardhanan G, (2016), "Redefining the evaluation of internship programme for enhancing the quality of course outcome", Proc. Of the Third World Summit on Accreditation, 18-20, March.
19. Mohan S and Janardhanan G (2009). "Climate Change: Is it a disaster", Proc. Of Intl. conference on disaster management and mitigation, (ICDMM), India, pp.197-210 (Invited Lecture).
20. Janardhanan G and Mohan. S (2009). "Bioreactor Landfill: Is it a sustainable mode of solid waste management", Prof. of Advances in Environmental Engineering 2009, NIT Rourkela. pp.10-18. (Invited Lecture)

21. Reddy, K.R., Gangathulasi, J., Parakalla, N., Bogner, J., Carpenter, P., and Lagier, T., "Field Monitoring and Performance Assessment of Orchard Hills Bioreactor Landfill," *Proceedings of 2009 NSF Engineering Research and Innovation Conference*, Honolulu, Hawaii, June 2009, 13p.
22. Carpenter, P.J., Grellier, S., Reddy, K., Adib, R., Peters, C., and Gangathulasi J (2008). "Investigating the interior of a landfill cell with leachate injection using electromagnetic conductivity and ground penetrating radar surveys." *Proc. of SAGEEP 2008*, Philadelphia. USA.
23. Grellier, S., Reddy, K., Gangathulasi J, Adib, R., and Peters, C. (2007). "U.S. MSW and its biodegradation in a bioreactor landfill." *Proceedings of Sardinia 2007, Eleventh International Waste Management and Landfill Symposium*, S.Margherita di Pula, Italy.
24. Grellier, S., Reddy, K., Gangathulasi J, Adib, R., and Peters, C.,(2006). "Electrical resistivity tomography imaging of leachate recirculation in Orchard Hills Landfill." *Proceedings of the SWANA conference*, Charlotte.
25. Janardhanan, G., Reddy, K.R., and Ilamparuthi, K., "Stress-strain and Strength Characteristics of Municipal Solid Waste," *Proceedings of the National Conference on Geotechnics in Environmental Protection*, National Institute of Technology, Allahabad, India, April 2005.
26. Janardhanan,G., K.Ilamparuthi and M.Vinoth (2005), "Compaction Characteristics of Bentonite Enhanced Flyash", *Proceedings of the National Conference on Geotechnics in Environmental Protection*, National Institute of Technology, Allahabad, India, April 2005.
27. K.Ilamparuthi and G.Janardhanan(2005), "Behaviour of Randomly oriented fibres reinforced soil", *Proceedings of Advanced in Geotechnical Engineering*.
28. G.Janardhanan K.Ilamparuthi and A.Sarguanan (2004), "Serviceability of Flexible Pavements" *Proceeding of Recent Advancement in Civil Engineering*, Calicut.
29. G.Janardhanan and K.Ilamparuthi (2003), "Role of Indian Geotechnical Society in geotechnical engineering knowledge network for educating budding engineers". *Proceeding of Indian Geotechnical Conference*.
30. G.Janardhanan (2002), "Earthquake Prediction – Fact or Myth" *Proc. Of "National Convention on Disaster Management in Environmental Engineering"*
31. Dr.R.K.Bhandari and G.Janardhanan (2002), "Seismic Microzonation – Some Vital Concerns from a Geotechnical Engineer's Desk", *Proceeding of DST'S Indo- China Workshop on Natural Disasters*.
32. G.Janardhanan (2002), "A Powerful but neglected aspect of Disaster Mitigation", *Proceeding of DST'S Indo- China Workshop on Natural Disasters*.
33. P.K.Sikdar, Kishor Kumar, Nitesh Kumar and G.Janardhanan, (2002), "A Critical Review of Landslide Hazard Zonation practices and the directions for future", *Proceeding of DST'S Indo- China Workshop on Natural Disasters*.

c) Book / Chapters published:

- i. Janardhanan G (2018) "Workbook – Instructional Design and Delivery System"
- ii. Janardhanan G and K. P. Isaac,. (2017). "Chapter 14: Designing of Question papers and solution keys" in the book "Higher Education Faculty Career Orientation and Advancement" Published by CERG. ISBN: 978-81-933475-9-1. Pg:111-130.
- iii. Janardhanan G (2016), Course Material "Instructional Design and Delivery System" – Edited.
- iv. E-Book "Climate Change: India's Initiative and Actions" – Released on September 16th 2009 – International Day for the preservation of Ozone Layer – National Institute of Technical Teachers Training & Research, Ministry of Human Resource Development, Govt. of India.

- v. "Study on degradation of commercial rigid polyurethane foam used for filling of Process Gas Equipment (PGE) and Pipes and Corrosion behavior of pipes at K-25/K-27" - ARGONNE NATIONAL LABORATORY – ANL - 06/32. – Technical Report. Available Online: [http://www.osti.gov/bridge/product.biblio.jsp?query_id=0&page=0&osti_id=895663 \](http://www.osti.gov/bridge/product.biblio.jsp?query_id=0&page=0&osti_id=895663)
- vi. Seismic Microzonation – Technical manual, Published by Center for Disaster Mitigation and Management, sponsored by Department of Science and Technology, Ministry of Science and Technology, Government of India.
- vii. Unit Weight of MSW at Orchard Hills Landfill based on field testing - Technical Report submitted to CREED, France.
- viii. Leachate distribution and geotechnical stability of bioreactor landfills – Progress Report submitted to CREED, France.
- ix. Practice Problems – Computer practice I Workbook.

d) Video

- i. **Civil Infrastructure for SMART City Development** – SWAYAM ARPIT Course – 40 Hours Duration
- ii. **Sustainable Construction Materials and Techniques** – SWAYAM ARPIT Course – 40 Hours Duration.
- iii. **"Transformation Instruction through Blended Classroom"** – SWAYAM MOOC Course of 40 hours duration.
- iv. **Student Assessment and Evaluation** – SWAYAM MOOC course of 40 hours duration
- v. **Redefining Laboratory Instruction using Virtual Laboratory** – SWAYAM MOOC Course of 20 hours Duration.
- vi. **"Environmental Engineering Laboratory Practice"** – With Simulation Laboratory.

MEMBERSHIP OF PROFESSIONAL BODIES/ORGANIZATIONS

- 1) Member in American Society of Engineering Education (ASEE)
- 2) Member in American Society of Civil Engineers (ASCE)
- 3) Member in American Society for Testing and Materials (ASTM)
- 4) Member in International Water Association (IWA)
- 5) Member in Indian Society of Technical Education
- 6) Member in Indian Geotechnical Society
- 7) Member in National Solid Waste Association of India
- 8) Member in Indian Concrete Institute
- 9) Member in Institution of Engineers (India)

SOFTWARE'S DEVELOPED /WORKED

1. Using Spreadsheet following applications have been developed to compute results of the testing conducted as per ASTM and BIS:
 - a. Water and Wastewater analysis
 - b. Geotechnical and Geoenvironmental Analysis.
2. Computer skill set
 - a. Platform: Unix ,Dos, Windows
 - b. Working Environment: Solaris, MS Office, STAR Office
 - c. Packages: HELP, SLIDE, FLAC 5.0, BORELOG, DRIVE, EMBANK, Sigmaplot, AutoCAD, PCSTABLE, Surfer, EDUSHAKE, WINKLER, SLOPE, LLP99, ALP99, SLOPE8R, UNIPHASE, ARC VIEW, ARC INFO, PLAXIS (undergone training)

PROFESSIONAL SERVICE

1. Reviewer, ASCE Journal of Geotechnical and Geoenvironmental Engineering
2. Reviewer, Indian Geotechnical Journal
3. Editorial Board, Anna University Alumni E-Newsletter.
4. Web Developer and Operator for the GLGGC conference - 2006.
5. Member in SWAYAM Teacher Education Committee
6. Member in National Committee “Pedagogy and Scheduling”, DTH- NMEICT.
7. Faculty in charge of NITTTR Chennai MoU's.
8. Consultancy work in the area of Outcome Based Education; Framing Vision, Mission, PEO, PO and CO.
9. Board of Studies Member in various Universities and Institutions.
10. Doctoral Committee Member in various Universities.
11. Reviewer in Professional Journals.
12. Executive committee Member Indian Geotechnical Society Chennai Chapter.
13. NABET – QCI – Functional Area Expert in Solid Waste Management.

CERTIFICATIONS

- Federal Emergency Management Agency, United States of America – ISC Certification
 - a) Introduction to Hazard Mitigation
 - b) Introduction to Hazardous Materials
 - c) Retrofitting flood prone residential structures
- Laboratory safety and chemical waste management training
- Ethics training for University employees

References available upon request