

National Institute of Technology, Tiruchirappalli:

CV of Dr. K. Muthukkumaran

Curriculum Vitae

Dr. K. Muthukkumaran has obtained his BE (Civil & Structural Engg.) from Annamalai University in 1998, Masters from GEC, Anna University, Chennai in 2000 and Ph.D. from IIT Madras in 2005. He worked as a Senior Geotechnical Engineer at OEO, Saudi Aramco, Saudi Arabia prior to NIT Trichy from 2005 to 2006. In 2006, he joint as lecturer in NIT Trichy and presently he is Associate Professor at



NIT Trichy. He has published more than 100 papers in international and national journals and conferences. He has guided 4 (guiding 6) Ph.D., 4 MS and 28 Postgraduate theses. He received DST Young Scientist Award and IGS- Smt. Indra Joshi Biennial award by IGS Delhi. Ministry of Housing and Urban Poverty Alleviation has appointed him as External Expert Reviewer of HUDCO (Tamil Nadu) Projects. He has completed 5 R & D (including ISRO - Chandrayaan- 2 Mission project) and 35 major consultancy projects. He has delivered 50 invited/guest lecturers and organized 7 workshop/short term courses in Geotechnical Engineering. He is the Founder Chairman of Indian Geotechnical Society (IGS-Trichy) Trichy Chapter. He is the Chairman of 6IYGEC, to be held in March 2017 at NIT Trichy. He is a member of ISSMGE –TC-102 and IGS-TC-04. He has been elected as member of IGS-Delhi Executive Committee for 2017-18. His area of research is in geotechnical engineering, which includes pile foundation, soil-structure interaction, marine geotechnics & foundations, field instrumentation, geotechnical physical modeling, ground improvement and forensic geotechnical engineering.

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1. **Name:** Dr. K. Muthukkumaran
2. **Designation:** Associate Professor
3. **Office Address:** Department of Civil Engineering
National Institute of Technology
Tiruchirappalli-620 015
4. **Telephone :** +91 431 2503168
Fax: +91 431 2500133
Mobile: +91 9443651836
5. **Email (Primary):** kmk@nitt.edu
Email (Secondary) :
kmk_iitm@yahoo.com
drkmknitt@gmail.com
6. **Field of Specialization:** Geotechnical Engineering

7. Employment Profile:

Job Title	Employer	From	To
Project Associate Gr-I	IIT-Madras, India	August 2000	December 2000
Research Scholar	IIT Madras	Jan'2000	Dec'2004
Senior Geotechnical Engineer/Research	OEO, Saudi Aramco Saudi Arabia	January 2005	June 2006
Lecturer	National Institute of Technology (NIT), Tiruchirappalli, India	22.06.2006	05.11.2008
Assistant Professor	National Institute of Technology (NIT), Tiruchirappalli, India	06.11.2008	05.11.2011
Associate Professor	National Institute of Technology (NIT), Tiruchirappalli, India	06.11.2011	Till date

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8. Academic Qualifications (From Highest Degree to High School):

Course	Board / University	Year	Division/ Grade	Subjects
Ph.D.	Indian Institute of Technology Madras (IITM), India	2005	---	Geotechnical Engineering (Soil-Structure Interaction)
M.E.	Guindy Engineering College, Anna University Chennai, India	2000	FIRST	Soil Mechanics and Foundation Engineering
B.E.	Annamalai University, India	1998	FIRST	Civil & Structural Engg.

9. Academic/Administrative Responsibilities within the Institute

Position	Faculty/Department/Centre/Institution	From	To
Member	Institute Development Committee (Guest House & Security)	2008	2010
Member	M.Tech Project Review Committee	2010	2013
Member	Estate Maintenance Committee	2011	2012
Class Committee Chairman	M.Tech. (Environmental Engineering)	2012	2013
Staff Advisor	Civil Engineering Association	2014	2015
Lab In-Charge	Geotechnical Engineering Lab	2006	Till date
Member	Institute Industry Interaction Committee	2013	Till date
Member	Smart Campus Development Committee	2013	Till date
Coordinator M.Tech.	Construction Technology and Management (L&T Course)	2014	Till date
Associate Dean & Estate Officer	Estate Office, Swachh Bharat	2015	Till date
Member Secretary	Estate Welfare Committee	2016	Till date
Member Secretary	Quarters Allotment Committee	2016	Till date

10. Academic/Administrative Responsibilities outside the Institute

Position	Institution	From	To
External Expert Reviewer of HUDCO (Tamil Nadu) Projects	Ministry of Housing and Urban Poverty Alleviation (MoHUPA)	2010	Till date
Founder Chairman	Indian Geotechnical Society, Trichy Chapter. http://www.igstrichy.in/	2014	Till date
International Advisory	Soil Structure Interaction Group	2014	Till date

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Member	http://ssige.org/31/Archive.aspx		
Associate Editor	Innovative Infrastructure Solutions http://www.springer.com/earth+sciences+and+geography/engineering+geology/journal/41062?detailsPage=editorialBoard	2014	Till date
Technical Committee Member (TC-04) for Geotechnical Investigation	Indian Geotechnical Society, New Delhi. http://www.igs.org.in/igs-tcs.html	2015	Till date
Technical Committee Member (TC-102) for In-Situ Testing	International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) http://www.issmge.org/committees/technical-committees/fundamentals/in-situ-testing-	2016	Till date
Elected Executive Committee Member	Indian Geotechnical Society, New Delhi. http://www.igs.org.in/igs-election-2016.html	2017	2018

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2004	IGS-SMT Indra Joshi Biennial Price Award	Indian Geotechnical Society, New Delhi.
2007	Young Scientist Award	Department of Science and Technology (DST) Fast Track
2015	Keynote Paper Award	GEOMATE (Osaka, Japan) http://www.geomate.org/index.html
2016	IGS-Kochi Chapter YGE Award	Indian Geotechnical Society, New Delhi.

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month / Year)	To (Month / Year)
2007	Short Term Post Doctoral Research fellow at Queensland University of Technology, Australia.	NITT- TEQIP	11/2007	12/2007
2001	Doctoral Research Scholar at IIT Madras	MHRD	2001	2004
1998	GATE scholar at GEC, Anna University, Chennai	MHRD	1998	2000

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13. Details of Academic Work

(i) Curriculum Development

1. Analysis of Deep Foundation
2. Ground Improvement Techniques
3. Soil Exploration and Field Tests
4. Soil Structure Interaction

(ii) Courses taught at Postgraduate and Undergraduate levels

b. Undergraduates:

1. Geotechnical Engineering –I
2. Geotechnical Engineering – II
3. Advanced Foundation Engineering
4. Geotechnical Earthquake Engineering

c. Postgraduates:

1. Analysis of Deep Foundation
2. Ground Improvement Techniques
3. Soil Exploration and Field Tests
4. Soil Structure Interaction

(iii) Projects guided at Postgraduate level

Name of the Scholar	Title of thesis	Area of Research	Year of Award
Ms.P.Sheethalakhmi	Soil-structure interaction of laterally loaded piles on sloping ground	Soil-Structure Interaction	2007
Mr.C. Senthil Kumar	Soil-structure interaction of laterally loaded pile groups on sloping ground	Soil-Structure Interaction	2008
Mr. B. Aravind Kumar	Soil-structure interaction of laterally loaded batter piles on sloping ground	Soil-Structure Interaction	2008
Mr.V. Prasath	Optimization of gravel for flexible pavement construction	Pavement Design	2008
Mr.K.S. Arun	FE analysis of fixed offshore platform including soil structure interaction study	Offshore structure	2009
Mr. Denzil Fernandez	Effect of lime stabilization on single pile pullout capacity	Ground Improvement	2009
Mr. G.Sandeep	FE analysis of a berthing structure with tie rod	Marine structure	2009
Mr. D.Sathyarayanan	Dynamic analysis of fixed offshore platform including soil-structure interaction study	Offshore structure	2010

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Mr. M. Gokula Kirishnan	Effect of slope of lateral load capacity of pile under passive loading	Foundation	2010
Ms. I.P.Subha	Effect of earthquake induced lateral soil movement on lateral load pile capacity	Geotechnical Earthquake	2010
Mr. Gireesha N T	Study on soil structure interface strength property	Soil-Structure Interaction	2011
Mr. Harish	Study on expansive soils and its improvement	Ground Improvement	2011
Mr. Mathusuthan Reddy	Performances of reinforced earthen embankment under seismic condition	Embankment/ Geotechnical Earthquake	2011
Mr. R.Veeravisagan	Lunar soil Simulant	Teramechanics/soil mechanics	2012
Mr. B. Jagadheeswaran	Investigation of pile behaviour under combined loading including lateral soil movement	Soil-pile Interaction under surcharge load	2012
Mr. Adarshi. P.R	Effect of wheel load on underground tunnels	Underground structures	2012
V. Satish Durgakumar	Bearing capacity improvement using natural geotextiles	Ground Improvement	2013
K. Gowtham Kumar	Use of geotextiles in railway embankment to improve the life of the blast on soft clay soils	Ground Improvement	2013
Jose Joseph	Stabilization of bentonite clay using industrial waste	Ground Improvement	2013
Amy Susan George	Study on removal of heavy metals by Microorganism	Environment Geotechnical Engineering	2014
Uppu Prapulla Kumar	Effect of seawater intrusion on soil and water characteristics – A case study of Velankannai Area	Environment Geotechnical Engineering	2014
Ajitha R	Analysis of heavy metals in Urban soils of Tuticorin	Environment Geotechnical Engineering	2014
Shashank B S	Investigation of Microorganism Treated weak soils under dynamic loading	Ground Improvement	2014
Aravind G	Study on weak soil improvement by	Ground	2014

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	tyre chips	Improvement	
Swarvana Ganguly	Swell and Shrink behaviour of stabilizer treated expansive soil	Ground Improvement	2014
Swapnil M. S.	Effect of Geo-Foam on soft ground bearing capacity and lateral earth pressure	Ground Improvement	2015
Gurunath Gudura	Stabilization of expansive soils by GGBS	Ground Improvement	2015
Hitesh Kumar	Pile behaviour on liquefiable soils	Geotechnical Earthquake	2015
Devahi. P	Effect of heavy metals on swelling soil behaviour	Environment Geotechnical Engineering	2015
Krishna Kumar Kharwar	Effect of paper mill waste on strength development of soft soil and stabilization	Ground Improvement	2016
Koneti Narendra	Effect of ground granulated blast furnace slag on stabilized embankment soils under seismic load	Ground Improvement	2016
Jatoth Jithender	Evaluation of resilient modulus based on laboratory and field test results	Highway Geotechnical	2016
Vignesh Kumar R	Behaviour of e-waste plastic stabilized weak soil under cyclic loading	Ground Improvement	2016
Sudheer Dasari	Evaluation of interface shear strength of landfill liner system and stability analysis of municipal solid waste landfill	Environment Geotechnical	2016
Bantupalli Sai Venkatesh	Effect of sea water on geoenvironmental properties of soils	Environment Geotechnical	2016

14. Details of Major R&D/ Consultancy Projects

(a) Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
Non-Linear Soil-Structure Interaction of Piles on Sloping Ground	Department of Science and Technology (DST)	2007	2010	Completed

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Evaluation of Geotechnical Properties of Lunar Soil Simulant (LSS) for Chandrayaan- 2 Mission - Lunar Terrain Test Facility	ISRO –ISAC, Bangalore	Sep'2011	April' 2012	Completed
Study on External Dump Slope Stabilization/ Drainage System for Mine – II, NLC	NLC, Neyveli	Feb'2012	Dec' 2012	Completed
Slope stability analysis and design for Mine- 1A, NLC	NLC, Neyveli	June'2012	Dec' 2012	Completed

(b) Major Consultancy Projects

Sl. No.	Title	Sponsoring Agency	Status
1.	Geotechnical investigations and suitable foundation recommendation for BHEL Expansion Works at Trichy and Thirumayam, Tamilnadu	BHEL-Trichy	Completed (2009 & 2010)
2.	Safe Barrier Design for Open Mining at Mine-II, Neyveli, India	NLC, Neyveli	Completed (2009)
3.	Geotechnical investigations and foundation design for fish landing centers at varies places in the East Coast of Tamilnadu under Tsunami Project Implementation	Tsunami Project Implementation Division funded by World Bank	Completed (2010)
4	Geotechnical Investigations and foundation recommendation including pile design for Tamilnadu Slum Clearance Board work in Trichy and Madurai division	Tamilnadu Slum Clearance Board	Completed (2010 & 2011)
5	Estimation of dynamic soil properties for cooler design for Ultratech Cement Plant at Ariyalur	Ultratech Cement Limited	Completed (2011)
6	Detailed Geotechnical investigation and foundation recommendation for Yathri Nivas, Srirangam Temple	PWD Trichy	Completed (2012)
7	Detailed Geotechnical investigation and foundation recommendation for IOCL Mounded Storage at Cochin Bottling	IOCL-Cochin	Completed (2012)
8	Detailed Geotechnical investigation and foundation recommendation for the proposed new Naval Land at Rameswaram	Naval Board	Completed (2012)
9	Detailed Geotechnical investigation and	Naval Board	Completed (2012)

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	foundation recommendation for the proposed new Naval Land at Nagappattinam		
10	Detailed Geotechnical investigation and pile foundation analysis for the proposed Railway B.G. line Major Bridge between Nagappattinam and Thiruthuraiipoondi	Southern Railway	Completed (2012)
11	Inspection of pile load test and plate load test for the proposed Railway B.G. line between Nagappattinam and Thiruthuraiipoondi	Southern Railway	Completed (2012 & 13)
12	Detailed Geotechnical investigation and suitable ground improvement recommendation including PVD design for the proposed Railway B.G. line alignment between Nagappattinam and Thiruthuraiipoondi	Southern Railway	Completed (2014)
13	Forensic geotechnical investigation for failed costal diaphragm wall at Nagappattinam fishing harbor	Tamilnadu Fisheries Department	Completed (2014)
14	Analysis and design of pile foundation for the proposed CPCL oil storage tank at Nagappattinam	CPCL	Completed (2014)
15	Geotechnical investigations and foundation recommendation for the proposed New IIM Trichy campus	IIM Trichy	Completed (2014)
16	Geotechnical investigation for the proposed buildings and diaphragm wall at Modasalodai site in Cuddalore district	Tamilnadu Fisheries Department	Completed (2014)
17	Geotechnical investigation and foundation recommendation for the proposed facilities for submarine rockets RGB-12 & RGB-60 at HAPP Trichy	Military Engineering Services/ Garrison Engineering	Completed (2014)
18	Geotechnical investigation and foundation recommendation for the proposed new bus stand at Srirangam, Trichy	M/s. Jones Lang Lasalle Chennai	Completed (2014)
19	Geotechnical investigation and foundation recommendation for the proposed CAMFIL expansion work at Asoor, Trichy	CAMFIL Farr Air Filtration India Pvt. Ltd. Asoor, Trichy	Completed (2014)
20	Conducting of Sub-soil Investigation at 110KV SS Mayiladuthurai for Construction Staff Quarters for KGTPS Staff Maruthur	SE, KGTPS Kuttalam	Completed (2014)
21	Detailed Geotechnical investigation and	Tamilnadu Slum	Completed (2014)

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	foundation design for the proposed Construction of Dwelling Units at Thimmarayachamuthiram, and Melapandamangalam, Trichy.	Clearance Board, Trichy	
22	Design of Sand drains and performance monitoring of railway embankment between Nagapattinam and Thiruthuraipoondi, Ch. 18000 to 23000	M/s. RR Construction (Railway Contractor)	Completed (2014)
23	Design of Prefabricated Vertical Drains and performance monitoring of railway embankment between Nagapattinam and Thiruthuraipoondi, Ch. 13000 to 18000	M/s. Janavi Granites & Builders (Railway Contractor)	Completed (2014)
24	Detailed Geotechnical investigation and foundation recommendation for the proposed construction at Ezhimala, Kerala for Indian Naval Academy (Phase-II work)	M/s. Mukesh Associates, Salem	Completed (2015)
25	Detailed geotechnical investigation and pile foundation analysis and design of the proposed Hi-Tech Gowdon at Nagapattinam project including ground improvement	Tamilnadu Civil Supply Corporation (TNCSC)	Completed (2015)
26	Geotechnical investigation and foundation recommendation for the proposed buildings at various locations in the Kumbakonam Municipality	The Commissioner Kumbakonam Municipality	Completed (2015)
27	Geotechnical Investigation and foundation recommendation for the Proposed Construction of subway	Southern Railway Tiruchchirappalli	Completed (2015)
28	Soil suitability study for embankment formation of NH67	Madhucon Projects Ltd.	Completed (2015)
29	Geotechnical investigation and foundation recommendation-BHEL project	BHEL Trichy	Completed (2015)
30	Soil analysis for railway embankment formation suitability study	Southern Railway Tiruchchirappalli	Completed (2015)
31	Geotechnical investigation and foundation recommendation-Duraisamipuram, Vannarapettai, Sambathottam and Ariyalur	Tamilnadu Slum Clearance Board, Trichy	Completed (2015 & 2016)
32	Geotechnical Investigation and pile analysis for proposed erection of seamless communication tower by Fishing Harbour division	Fishing Harbour project division, Chennai	Completed (2016)
33	Subgrade soil suitability and soil stabilization study for Air Force Station Sular	Garrison Engineer, Military Engineering Service	Completed (2016)

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34	Geotechnical investigation and foundation recommendation- Narimedu in Pudukkottai Town	Tamilnadu Slum Clearance Board, Trichy	ongoing
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15. Number of MS/PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor / Co-Supervisor)	Year of Award
Mrs.N.Almas Begum	Soil-structure interaction of laterally loaded single piles and pile group on sloping ground	Supervisor	2010
Mrs. P.V.Premalatha	Effect of tie rod anchor on laterally loaded berthing structure	Co-Supervisor	2012
Mr. M.Murugan	Performance of FRP strengthened RC piles subjected to static and cyclic lateral loads	Co-Supervisor	2014
Mr. Deendyal	Laterally loaded piles in clayey soils with sloping ground	Co-Supervisor	2016
Mr. Prakash, A.R.	Behaviour of Rock Socketed monopile subjected to lateral load	Supervisor	Synopsis submitted (2016)
Mrs. Kayalvizhi. S. K.	Mitigation of liquefaction potential in weak silty sand using Sisal fiber	Supervisor	On going
Ms. S. Anu	Deciphering the dynamic architecture design from music	Supervisor	On going
Mr. S. Sivaraman	Pile response under vertical and lateral load – field study	Supervisor	On going
Mr. U. Umanath	Innovative foundation technique for expansive soils	Supervisor	On going
Mr. I. Venu Gopal ISAC-ISRO	Lunar Soil Simulant for Chandrayaan – II Project	Supervisor	On going

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Name of the MS Scholar	Title of MS Thesis	Role(Supervisor / Co-Supervisor)	Year of Award
Ms. V. Anusudha	Investigation of industrial and waste treated weak soils under dynamic loading	Supervisor	Thesis Submitted (2016)
Mr. S. Keerthi Raaj	Investigation of railway embankment constructed on PVD stabilized soft marine clay	Supervisor	Thesis Submitted (2016)
Mr. Vinoth Kumar	Study on preloading with sand drain effect of soft soils	Supervisor	Thesis Submitted (2016)
Ms. Sindhuja	Effect of slope on buildings constructed near sloping ground	Supervisor	ongoing

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson , Paper presenter, Any other)	Event Organized by	Venue
December, 2001	International Conference on Ocean Engineering (ICOE-2001)	International	Participant	IIT, Madras	India
December, 2002	International Conference on Ship and Ocean Technology (SHOT – 2002)	International	Paper presenter	IIT, Kharagpur	India
15-19, September 2003	The sixth International Conference on Coastal and Port Engineering in Developing Countries (COPEDEC-2003)	International	Paper presenter	COPEDEC	Srilanka
2004	Fifth International Conference on Case History in Geotechnical Engineering	International	Paper presenter	University of Missouri	Rolla, USA

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2007	8 th Pacific Conference on Earthquake Engineering	International	Paper presenter	NTU	Singapore
20 & 21, December 2008	6 th Asian Young Geotechnical Engineers Conference	International	Paper presenter	IISc Bangalore	Bangalore
2 nd – 5 th February 2009	3 rd International Conference in Ocean Engineering	International	Paper presenter	IIT Madras	India
29-31, May 2013	18 th Southeast Asian Geotechnical & Inaugural AGSSEA Conference	International	Paper presenter	Geotechnical Society of Singapore	Singapore
November 15-16, 2013	Deep Foundation Technologies for Infrastructure Development of India	International	Paper presenter	DFI & IIT Bombay	India
May 25-30, 2014	GeoShanghai-2014 China & Tongji University	International	Paper presenter	GeoShanghai& Tongji University	Shanghai, China
November 09-13, 2015	15 th Asian regional conference on Soil Mechanics and Geotechnical Engineering	International	Paper presenter, Speaker and co-Chairman	Japanese Geotechnical Society (JGS)	Fukuoka, Japan
November 16-18, 2015	GEOMATE-2015 Conference	International	Keynote Speaker and Chairman	Kansai University, Geotechnical Society, GEOMATE International Society - Japan	Osaka, Japan
8 th May 1999	One day Seminar on “Case Studies in Geotechnical Engineering”	National	Participant	Anna University	India
21 st April 2000	One day Seminar on “Bored Cast-in-situ Piles Experiences in Design and Construction”	National	Participant	Anna University	India
21 – 22 December 2000	Two Days Symposium on “Ground	National	Participant	Anna University	India

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	Improvement Techniques for Practicing Engineers”				
25 – 29 December 2000	A Short Term Course on “Ground Improvement and Deep Foundations”	National	Participant	IITM	India
5 th February 2002	One day Seminar on “Recent Trends on Application of Geosynthetics	National	Participant	IITM	India
25 th April 2002.	One Day Symposium on “Foundations for Refinery Structures and Oil Terminals”	National	Participant	IITM	India
22 nd November 2002	Symposium on “Rehabilitation of Berthing Structures”	National	Participant	IITM	India
December 17-19, 2002	Indian Geotechnical Conference 2002 (IGC-2002)	National	Paper presenter	National Institute of Technology, Allahabad	India
2003	Workshop on Forensic Geotechnical Engineering (IGS-FGE 2003)	National	Paper presenter	Indian Geotechnical Society, Chennai	India
20-22 February, 2003	“National Seminar on Harbour Structures” (NASHAR-2003)	National	Participant	IITM	India
14 – 19 July 2003	A Short Term Course on “Geotechnical Earthquake Engineering” (GEE 2003)	National	Participant	IITM	India
1 st December, 2003.	Symposium on “Foundation Engineering in Soft Marine	National	Participant	IITM	India

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	Clays”				
December 18-20, 2003	Indian Geotechnical Conference (IGC-2003)	National	Paper presenter	IIT Roorkee	India
December 18-22, 2006	Computational Techniques for Seismic Analysis	National	Participant	NPEEE, IITM	India
December 25-29, 2006	Random vibration and Fuzzy Logic in Earthquake Engineering	National	Participant	NPEEE, IITM	India
July 4 – 13, 2007	Faculty development training programme on ANSYS	National	Participant	NITT	India
November 14, 2007	Workshop and Lecturers on bridge maintenance and management system –organized by Griffith University, Australia	International	Participant	Griffith University & Engineers Australia	Australia
November 15-16, 2007	Workshop and Lecturers on deep excavations for basement of buildings and MRTA stations – organized by Griffith University, Australia	International	Participant	Griffith University & Engineers Australia	Australia
20 th November 2008	Awareness Programme on Intellectual Property Rights	National	Participant	NITT	India
December 17-19, 2008	Indian Geotechnical Conference 2008	National	Paper presenter	IISc, Bangalore	India
05.01.2009 to 10.01.2009	Instructional Design and Delivery System	National	Participant	National Institute of Technical Teacher	India

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				Training and Research (NITTTR)	
6 th and 7 th February 2009	Workshop on Deepwater Offshore Structures	National	Participant	Indian Institute of Technology Madras	India
14 th -16 th November 2013	Deep Foundation Technology (DFI) – Workshop of large diameter rock socket piles & Conference of Deep Foundation Technologies for Infrastructures Development in India.	National	Participant	Indian Institute of Technology Bombay	India
14th November 2015	Second Japan-India Workshop in Geotechnical Engineering - Geotechnics for Resilient Infrastructure	International	Paper presenter	Japanese Geotechnical Society (JGS) & Indian Geotechnical Society (IGS)	Fukuoka University Japan

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
One day workshop on Geotechnical investigation and decision making in foundations	National	23 rd October 2007	Organizing Chairman and Secretary	NIT, Triruchirappalli
Two day workshop on Roll of Geotechnical Engineering on Infrastructure Development	National	29 th & 30 th April 2013	Organizing Chairman and Secretary	NIT, Triruchirappalli
Short term course on Reliability Analysis and Design of Sub-structures	National	3 rd & 4 th , October 2013	Organizing Chairman and Secretary	NIT, Triruchirappalli
Two day workshop on challenges in geotechnical	National	14 th & 15 th February	Organizing Chairman	NIT, Triruchirappalli

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investigation and foundation design		2014	and Secretary	
Two day International Workshop on Health Monitoring of Civil Engineering Structures	International	4 th & 5 th November, 2014	Organizing Secretary	NIT, Triruchirappalli
Short term course on subsurface investigations for pavements and buildings	National	10 th – 12 th March 2016	Organizing Chairman and Secretary	NIT, Triruchirappalli
Terzaghi memorial one day seminar on Engineering on Soft Ground	National	1 st October 2016	Chairman	NIT, Triruchirappalli

18. Invited Talks delivered

Topic	Date	Inviting Organization
Port and Harbour Structures	Sep'2004	Vellore Institute of Technology (VIT) – Vellore
Geotechnical Aspects for Civil Engineering Structures	18 th Sep'2006	Govt. Polytechnic Aranthangi
Non-linear soil structure interaction of piles on sloping ground	Nov' 2007	Queensland University of Technology (QUT), Australia
Effect of dredging on open type berthing structure	Nov' 2007	Griffith University, Australia
Know your soil	24 th March 2009	Civil Engineering Federation of Tiruchirappalli (CEFTRON-2009)
Earthquake Resistance Structures	5 th June 2009	Pudukkottai District Collector under Disaster Risk Management Programme (DRMP)
Geotechnical investigation	(13 th May 2010)	Oxford Engineering College, Trichy
Performance of Ground and Buildings during Earthquakes	25 th March 2010	Periyar Maniammani University, Vallam, Thanjavur
Earthquake induced lateral soil movement on lateral pile capacity	5 th October, 2010	VLB Janakiammal College of Engineering and Technology, Coimbatore
Geotechnical earthquake engineering	23 rd Dec' 2010	Periyar Maniammani University, Vallam, Thanjavur
Pile foundations	10 th September, 2011	Institute of Engineers India (IEI), Trichy chapter
Foundation Piling-Sustainable Construction	JJ College of Engineering and	JJ College of Engineering and Technology, Trichy

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	Technology, Trichy (25 th January 2012)	
Recent advancement in ground improvement techniques - - Keynote lecture	27.09.2012	Noorul Islam Univesrity, Inida
Performance of lateral pile under Earthquake induced lateral soil movement - Keynote lecture	20 th February 2013	Sun College of Engineering and technology, Erachakulam, Kanyakumari
Foundation Engineering – an overview	12 th October 2013	RVS School of Engineering and Technology, Dindigul
Measurement of Aquifer Parameters	25 th & 26 th October, 2013	NIT Trichy
Assessment of Pile Failures due to Excessive Settlement during Pile Load Test	6 th and 7 th December, 2013	NIT Trichy
Ground Improvement Techniques For Highways	5 th February 2014	Karur College of Engineering Karur
Soil Stabilization for Highway Project	20 th February 2014	Thiagarajar College of Engineering, Madurai
Assessment of pile failures and strengthening of RC pile using FRP	3 rd March 2014	CARE School of Engineering, Trichy
Soil Sampling for Engineering Analysis	12 th March 2014	NIT Calicut
Fibre Reinforced Polymer (FRP) Strengthened Reinforced Concrete Piles Under Lateral Loads	4 th April 2014	JNTU, IIT Hyderabad and IGS Hyderabad
Finite Element theory and application in geotechnical Engineering (Material modeling of soil behaviour)	21 st April 2014	Division of Soil Mechanics and Foundation Engineering, Department of Civil Engineering, College of Engineering Guindy, Anna University, Chennai
Soil and Foundation Engineering	8 th August 2014	Kalasalingam University
Pile Foundation	26 th August 2014	Karunya University, Coimbatore

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Innovation in Civil Engineering	19 th September 2014	University College of Engineering, Nagercoil. (A Constituent college of Anna University Chennai)
Performance monitoring of a berthing structure under service condition & Forensic investigation of a berthing structure under seismic condition – a field study	4 th & 5 th October 2014	Builders Association of India, Tirunelveli Centre.
Advance in Geotechnical Engineering – Performance monitoring of geotechnical constructions - Keynote lecture	10 th October 2014	SASTRA University, Thanjavur.
Challenges in Geotechnical Investigations – Keynote lecture	17 th December 2014	JNTU, Kakinada (IGC-2014)
Later Load Capacity Enhancement of RC Piles using FRP under Static and Cyclic Loads - Keynote lecture	7 th January 2015	Coimbatore Institute of Technology, Coimbatore.
Soil Strength at Construction Site	3 rd February 2015	National College Trichy
Performance of Ground and Buildings during Earthquakes. and Recent advancement in ground improvement techniques	14 th February 2015	Kongunadu College of Engineering & Technology, Thottiam.
Long and short term mitigations of earthquake	17 th February 2015	Sri Shakthi Institute of Engineering and Technology Coimbatore.
Disaster mitigation - foundation perspective	26 th February 2015	Bharathidasan Institute of Technology Anna University, Trichy
Concreting in Pile Foundation	24 th October 2015	Peace Social Welfare Mission, Nagercoil
Behaviour of laterally loaded rock socketed pile in multi-layered soil-rock profile	14 th November 2015	Fukuoka University, Japan
FRP Strengthened Reinforced Concrete Piles under Static Lateral Loads – A Field Study – Keynote lecture	16 to 18 November 2015	GEOMATE, Osaka, Japan

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Soil Mechanics- Soil Classification and shear strength	2 nd December 2015	Ramco Institute of Technology, Rajapalayam
Evaluation of interface shear strength of composite liner system and stability analysis for a landfill lining system	27 th February 2016	SASTRA University, Thanjavur
Performance of FRP Strengthened/ Retrofitted RC Piles Subjected to Lateral Loads	April 6-7, 2016	Karunya University, Coimbatore
Pile Foundation Theory and Practices	13-18 June 2016	Bannari Amman Institute of Technology
Earthquake soil structure interaction analysis	2 nd September 2016	Kalasalingam University
Exposure and Job Opportunities in Civil & Geotechnical Engineering	17 th September 2016	Knowledge Institute of Technology, Salem
Research Avenues in geotechnical Engineering	24 th September 2016	Erode Sengunthar Engineering College

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Member	American Society of Civil Engineers (ASCE) (M. ID 419270)	2004
Member	Institute of Civil Engineers, London (ICE) (M. ID 61930814)	2005
Life Member/Donor Member	Indian Geotechnical Society (IGS) (LM-2207, DM-54)	2004 - 2013
Life Member	Indian Society for Technical Education (ISTE) (LM-51650)	2006
Member	Indian Road Congress (IRC) (M-34165)	2007
Life Member	Institute of Engineers, India (IEI) (M-139990-4)	2009
Life Member	International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE) (IND14DM-0054)	2014
Life Member	Deep Foundation Institute (DFI)	2014

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20. Academic Foreign Visits

Country	Duration of Visit		Programme
	From	To	
Sri Lanka	14.09.2003	25.09.2003	To present research papers in the Sixth International Conference on Coastal and Port Engineering in Developing (COPEDOC-VI)
USA	12.04.2004	25.04.2004	To present a research paper in the Fifth International Conference on Case Histories in Geotechnical Engineering at University of Missouri Rolla, UAS
Saudi Arabia	January 2005	June 2006	Worked as a Senior Geotechnical Engineer in Saudi ARAMCO Projects at OEO
Bahrain	10.12.2005	11.01.2006	To investigate the Bahrain reclamation project & seabed slope stability analysis
Australia	02.11.2007	02.12.2007	Short term post doctoral research fellow in soil-structure interaction at Queensland University of Technology (QUT)
Singapore	03.12.2007	09.12.2007	To present a research papers in the 8 th Pacific Conference on Earthquake Engineering at Nanyang Technological University (NTU) & 18 th Southeast Asian Geotechnical & Inaugural AGSSEA Conference
Singapore	27.05.2013	03.06.2013	To present a research papers in the 18 th Southeast Asian Geotechnical & Inaugural AGSSEA Conference at Singapore
Malaysia	30.05.2013	31.05.2013	University visit (Universiti Teknologi Malaysia, UTM)
China	25.05.2014	30.05.214	To present a research paper in the Geoshanghai -2014 International Conference and visit to Tongji University – Shanghai
Japan	08.11.2015	20.11.2015	15 th ARC Conference on Soil Mechanics and Geotechnical Engineering – Fukuoka Japan-India Joint workshop on “Geotechniques for resilient infrastructures”_ Fukuoka Keynote speaker and Session Chairman – GEOMATE Conference - Osaka

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21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page Numbers	Year
Muthukkumaran K, Sundaravadivelu, R.	Numerical modeling of dredging effect on berthing structure	International Journal of ACTA Geotechnica	Vol.2,No.4	249-259	2007
MuthukkumaranK, Sundaravadivelu R and Gandhi S.R	Effect of dredging and axial load on a berthing structure	International Journal of Geoengineering Case Histories	Vol.1 Issue-2	73-88	2007
MuthukkumaranK, Sundaravadivelu R.	Effect of dredging on open type berthing structure- A numerical study	Indian Geotechnical Journal	Vol.37 No.4	283-300	2007
MuthukkumaranK, Sundaravadivelu R and Gandhi S.R	Effect of slope on p-y curves due to surcharge load	Soils and Foundations	Vol. 48 No.3	361-369	2008
Senthamilkumar S, Natarajan C and Muthukkumaran K	Field study on engineering properties of soil deposit in (Nagapattinam) coastal area for liquefaction analysis	Journal of Institution of Engineers, India	Vol.88	30-36	2008
Almas Begum N, Sheethalakshmi P, and Muthukkumaran K	Lateral load capacity of single pile located at slope crest	Indian Geotechnical Journal	Vol. 38, No. 3	279-295	2008
Almas Begum N, and Muthukkumaran K	Experimental investigation on single model pile in sloping ground under lateral load	International Journal of Geotechnical Engineering	Vol.3 No.1	133-146	2009
Senthamilkumar S, Natarajan C and Muthukkumaran K	Multilinear Regression Analysis for Seismic Response and Engineering Properties of	International Journal of Geotechnical and Geological Engineering	Vol. 27 No.3	439-453	2010

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	Liquefiable Coromandel Coastal Soil Deposits				
Muthukkumaran K	Effect of liquid waste on the index and engineering behaviour of cohesive soils	Indian Geotechnical Journal	Vol. 40 No. 3	195-200	2010
Muthukkumaran K and Subha I.P	Effect of earthquake induced lateral soil movement on pile behaviour	International Journal of Geotechnical Earthquake Engineering	Vol. 2 No.2	71-90	2011
Almas Begum N, and Muthukkumaran K	Finite element analysis of laterally loaded piles on sloping ground	Indian Geotechnical Journal	Vol. 41 No.3	155-161.	2011
P. V. Premalatha, K.Muthukkumaran and P. Jayabalan	Effect of dredging and tie-rod anchor on the behavior of berthing structure	International Journal of Engineering Science and Technology	Vol 3 No 6	5099-5115	2011
Harishkumar K and MuthukkumaranK	Study on swelling soil behaviour and its improvements	International Journal of Earth Sciences and Engineering	Vol. 04 No. 06	19-25	2011
Gireesha N. T and Muthukkumaran K	Study on soil structure interface strength property	International Journal of Earth Sciences and Engineering	Vol.04 No. 06	89-93	2011
Murugan M, Natarajan C and Muthukkumaran K	Behavior of Laterally Loaded Piles in Cohesionless Soils	International Journal of Earth Sciences and Engineering	Vol.04 No. 06	104-106	2011
P. V. Premalatha, K.Muthukkumaran and P. Jayabalan	Distribution of lateral load among the Piles of a Berthing Structure	International Journal of Earth Sciences and Engineering	Vol.04 No. 06	1129-1138	2011
Muthukkumaran K and Gokul Krishnan	Three dimensional analysis of piles on sloping ground subjected to passive load	International Journal of Engineering and Technology Innovation	Vol 2 No 3	31-47	2012

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	induced by surcharge				
Murugan M, Muthukkumaran K and Natarajan C	Compressive behavior of concrete cubes confined with glass and carbon fibre reinforced polymers	International Journal of Engineering and Science	Vol.03	2618-2626	2013
Murugan M, Natarajan C and Muthukkumaran K	Compressive behavior of concrete cylinders confined with glass and carbon fibre reinforced polymers	International Journal of Structural and Civil Engineering Research	Vol.02	69-76	2013
Murugan M, Natarajan C and Muthukkumaran K	Experimental investigation on GFRP strengthened RC piles under lateral loads	International Journal of Forensic Engineering	Vol. 2 No. 1	15 –28	2014
Muthukkumaran K	Effect of slope and loading direction on laterally loaded piles in cohesionless soil	International Journal of Geomechanics, ASCE	Vol. 14 No. 1	1-7	2014
Muthukkumaran K and Jose Joseph	Utilization of Industrial waste in the stabilization of Montmorillonite rich expansive soils	Soil Behaviour and Geomechanics, Geotechnical, SP, ASCE	No.236	224-233	2014
Muthukkumaran K and Aravind Kumar B	Effect of raker piles in lateral load capacity of laterally load pile group	Soil Behaviour and Geomechanics, Geotechnical, SP, ASCE	No.236	776-785	2014
Kanmani S, Gandhimathi R and MuthukkumaranK	Bioclogging in porous media: influence in reduction of hydraulic conductivity and organic	Journal of Environmental Health Science and Engineering	12:126	1-11	2014

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	contaminants during synthetic leachate permeation				
Muthukkumaran K and Arun K.S	Effect of seabed slope on pile behaviour of fixed offshore platform under lateral forces	Journal of Ocean Engineering and Marine Energy	Vol. 1 No.3	pp 223-236	2015
Almas Begum N, and Muthukkumaran K	Experimental investigation of single model pile subjected lateral load in sloping ground	International Journal of Geotechnical and Geological Engineering	Vol. 33 No.4	935-946	2015
Deendayal R, Muthukkumaran K and Sitharam T.G.	Response of laterally loaded pile in soft clay on sloping ground	International Journal of Geotechnical Engineering	Vol. 10 No.1	pp 10-22	2015
Premalatha P.V, Muthukkumaran K and Jayabalan P	Experimental Study on behaviour of piles in berthing structure	Proceedings of the ICE - Maritime Engineering	Vol. 168 No.4	182-193	2015
A. R. Prakash and K.Muthukkumaran	Effect of Horizontal Load on Socketed Pile	International Journal of Earth Science and Engineering	Vol. 8 No.3	1407-1410	2015
Muthukkumaran K. and Shashank B.S.	Durability of microbially induced calcite precipitation (MICP) treated cohesionless soils	JGS-SP	Vol. 2 No. 56	1946-1949	2016
MuthukkumaranK, Keerthi Raaj S and Vinoth Kumar M	Assessment of pile failures due to excessive settlement during pile load test	JGS-SP	Vol. 2 No. 73	2520-2524	2016
Deendayal R, Muthukkumaran K and Sitharam T.G.	Dynamic Response of Single Pile Located in Soft Clay underlay by Sand	International Journal of GEOMATE	Vol. 11, No. 26	2563-2567	2016
Jegatheeswaran B and Muthukkumaran K	Behavior of pile due to combined loading with	International Journal of Geo-Engineering	Vol. 7 No.1	1-10	2016

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	lateral soil movement,				
Muthukkumaran K and Prakash A.R.	Behaviour of laterally loaded socketed pile in multi-layered soil-rock profile,.	JGS-SP	Vol. 3 No.2	51-55	2016
Deendayal R, Muthukkumaran K and Sitharam T.G.	Development of non-dimension p-y curves for laterally loaded piles in sloping ground	Indian Geotechnical Journal	DOI 10.1007/s40098-016-0213-7		2016
Murugan M, Muthukkumaran K and Natarajan C	FRP-Strengthened RC Piles. I: Piles under Static Lateral Loads	Journal of Performance of Constructed Facilities	In press		
Murugan M, Muthukkumaran K and Natarajan C	FRP-Strengthened RC Piles. II: Piles under Cyclic Lateral Loads	Journal of Performance of Constructed Facilities	In press		

(B) Conferences/Workshops/Symposia Proceedings

International Conferences

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page No.	Conference Theme (International Level)	Venue	Year
Sundaravadivelu R, Gandhi S.R, Muthukkumaran K and Trivedi A.P.	Effect of mudslide on pile due to dredging in open type berthing structure	The Inaugural International Conference on Port and Maritime R&D and Technology	445-451	Offshore Technology	Singapore	2001
Muthukkumaran K , SundaravadiveluR and Gandhi S.R.	Stability of coastline during dredging in open type pile supported structures	The 10th International Conference on Maritime Association of the Mediterranean	142, 13-17	Maritime Technology	Athens, Greece	2002
Muthukkumaran K , SundaravadiveluR and Gandhi S.R.	Effect of surcharge loading on	International Conference on Ship and Ocean	Paper No: 11	Marine Materials and Ocean	IIT Kharagpur, India	2002

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	single pile in sloping ground	Technology		Engineering		
Muthukkumaran K, SundaravadiveluR and Gandhi S.R.	Effect of slope on berthing structure under seismic condition- A field study	The Sixth International Conference on Coastal and Port Engineering in Developing Countries	Paper No.29	Coastal and Port Engineering	Colombo, Sri Lanka	2003
Muthukkumaran K, SundaravadiveluR and Gandhi S.R.	Lateral movement of weak soil slope and its effect on pile supported coastal structures	The Sixth International Conference on Coastal and Port Engineering in Developing Countries	Paper No.31	Coastal and Port Engineering	Colombo, Sri Lanka	2003
Muthukkumaran K, SundaravadiveluR and Gandhi S.R.	Effect of sloping ground on single pile load deflection behaviour under surcharge load	The 13th World Conference on Earthquake Engineering	Paper No.21 47	Earthquake Engineering	Vancouver Convention and Exhibition Center, Canada	2004
Muthukkumaran K, SundaravadiveluR and Gandhi S.R.	Monitoring of lateral deflection in a berthing structure during dredging- A case study	The Fifth International Conference on Case Histories in Geotechnical Engineering	Paper No. 5.35	Geotechnical Engineering	New York, USA.	2004
Muthukkumaran K and SundaravadiveluR	Effect of slope on p-y curves; under passive loading	The 10th International Conference on Piling and Foundations	Paper No. 040.	Geotechnical Engineering	Amsterdam, UK	2006
Muthukkumaran K	Numerical modeling for dredging effect of berthing	First Sri Lankan Geotechnical Society International Conference on	Paper No. 3420	Soil and Rock Engineering	Colombo, Sri Lanka	2007

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	structure on marine soils	Soil and Rock Engineering				
Muthukkumaran K and Seethalakshmi P	Effect of slope on p-y curves due to lateral soil movements	First Sri Lankan Geotechnical Society International Conference on Soil and Rock Engineering	Paper No. 3420	Soil and Rock Engineering	Colombo, Sri Lanka	2007
Muthukkumaran K	Effect of Slope on Berthing Structure under Lateral Soil Movement– A Numerical Study	8th Pacific Conference on Earthquake Engineering	Paper No. 283	Earthquake Engineering	Singapore	2007
Almas Begum N and Muthukkumaran K	Effect of Lateral Load on Piles Embedded in Sandy Slope	International Workshop on Earthquake hazards and Mitigation	pp 359-369	Earthquake Engineering	IIT Guwahati, India	2007
Senthamilkumar S Natarajan C and Muthukkumaran K	Empirical Correlation of Liquefaction Induced Settlement of Coromandel Coastal Sand Deposits	International Workshop on Earthquake hazards and Mitigation	pp 370-377	Earthquake Engineering	IIT Guwahati, India	2007
Senthamilkumar S Natarajan C and Muthukkumaran K	Assessment of Seismic Site Characteristics of Nagapattinam Coromandel Coast Sand Deposits	International Workshop on Earthquake hazards and Mitigation	pp 378-386.	Earthquake Engineering	IIT Guwahati, India	2007
Muthukkumaran K and Almas Begum N	Effect of Ground Slope on Pile Foundation under Passive Loading	2nd BGA International Conference on Foundation Engineering	Paper No. 445	Soil Mechanics & Foundation Engineering	Scotland	2008
Almas Begum N and Muthukkumaran K	Numerical Modeling for	The 12th International	pp 3368-	Geotechnical Engineering	Goa, India,	2008

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	Laterally Loaded Piles on Sloping Ground	Conference on International Association for Computer Methods and Advances in Geomechanics	3375			
Muthukkumaran K	Modified Approach for Estimation of p-y Curves in Sloping Ground under Surcharge Load	6th Asian Young Geotechnical Engineers Conference	pp 145-156	Geotechnical Engineering	IISc Bangalore	2008
N Almas Begum, C Senthil Kumar and K. Muthukkumaran	Behaviour of Pile Groups Subjected to Lateral Load	International Conference in Ocean Engineering	pp 656-665	Ocean Engineering	IIT Madras, India	2009
K.S. Arun and K.Muthukkumaran	Finite Element Analyses of Fixed Offshore Platform Including Soil-Structure Interaction Study	International Conference in Ocean Engineering	pp 194-204.	Ocean Engineering	IIT Madras, India	2009
P.V. Premalatha, G.Sandeep, P.Jayabalan and K.Muthukkumaran	Numerical Modelling and Analysis of A Berthing Structure with Tie Rod	International Conference in Ocean Engineering	pp 647-655.	Ocean Engineering	IIT Madras, India	2009
SenthamilkumarS, Natarajan, C, Ilamparuthi K and Muthukkumaran K	Liquefaction Potential Index Based Lateral Spread Empirical Modal	Fifth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics		Geotechnical & Earthquake Engineering and Soil Dynamics	SAN diego, CA	2010
Muthukkumaran K and Gokul Krishnan	Finite difference analysis of	7th European Conference on Numerical	Paper No. 327	Geotechnical Engineering	Trondheim, Norway	2010

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	pile on sloping ground under passive loading	Methods in Geotechnical Engineering				
Muthukkumaran K and Sathyanarayanan	Effect of Seabed Slope on Offshore Pile Lateral Behaviour under Static Wave Force	29th International Conference on Ocean Offshore and Arctic Engineering	Paper No.O MAE2 010-21164	Ocean Offshore and Arctic Engineering	Shanghai, China.	2010
Muthukkumaran K	Investigation of Geotechnical Failures and Documentation	Proceedings of the First INDO-US Forensic Engineering Workshop, ASCE	Publication (ISBN 978-0-7844-1149-0) , pp 52-59	Forensic Engineering	NIT, Trichirappalli, India.	2010
P. V. Premalatha, K. Muthukkumaran and P. Jayabalan	Behaviour of piles supported berthing structure under lateral loads	14th Pan-American Conference on Soil Mechanics and Geotechnical Engineering	Paper No.10 75.	Soil Mechanics and Geotechnical Engineering	Toronto, Ontario, Canada.	2011
M.Murugan, C.Natarajan and K.Muthukkumaran	Response of single pile in cohesionless soil subjected to both vertical and horizontal loads	International Conference on intelligent science and technology		Science and Technology	Sun College of Engineering and Technology, Nagercoil, Tamil Nadu, India	2011
Muthukkumaran K and B.Madhusudan Reddy	Finite Element Analysis of Earthen Embankment Constructed on Soft Ground under Static and Seismic Loading	Proceeding of the 15th World Conference of Earthquake Engineering		Earthquake Engineering	Lisboa, Portugal	2012
K.Muthukkumaran	Strengthening	18th Southeast	pp.	Geotechnical	Singapore	2013

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and M.Murugan, C.Natarajan	of RC piles subjected to lateral loads using GFRP composites	Asian Geotechnical & Inaugural AGSSEA Conference	923-928.	Engineering		
A. R. Prakash and K Muthukkumaran	Behaviour of Monopile under Axial Load in Marine Clay Soil	Proceedings of the International Conference on Innovations and Advances in Civil Engineering Towards Green and Sustainable Systems		Civil Engineering	CIT, Coimbatore	2014
Muthukkumaran K and B.Madhusudan Reddy	Analysis of Earthen Embankment Constructed on Soft Ground under Static and Seismic Loading	Proceeding of Sixth International Geotechnical Symposium on Disaster Mitigation in Special Geoenvironmental Condition	pp 177-180	Geotechnical & Geoenvironmental Engineering	IIT Madras.	2015
Devahi P and Muthukkumaran K	Effect of Heavy Metals on the Swelling Properties of Expansive Soil	Proceedings of the First International Conference on Sustainable Practices in Civil Engineering	pp.23-29	Civil Engineering	KPR Institute of Engineering & Technology, Coimbatore	2015
K.Muthukkumaran and M.Murugan, C.Natarajan	FRP Strengthened Reinforced Concrete Piles under Static Lateral Loads – A Field Study Construction Materials and Environment	Proceedings of the 5 th International Conference on Geotechnique (GEOMATE-2015)	ISBN: 978-4-99059 58-4-5 C3051 pp, 25-32.	Geotechnical & Foundation Engineering	Osaka, Japan	2015
Deendayal Rathod, K Muthukkumaran and T.G. Sitharam	Dynamic Response of Single Pile	Proceedings of the 5th International	ISBN: 978-4-99059	Geotechnical & Foundation	Osaka, Japan	2015

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	Located in Soft Clay underlay by Sand	Conference on Geotechnique, Construction Materials and Environment (GEOMATE-2015)	58-4-5 C3051 , pp. 471-474.	Engineering		
A. R. Prakash and K Muthukkumaran	Effect of free standing height on rock socketed pile under lateral load	Proceedings of the Deep Foundation Institute on Deep Foundations Technologies for Infrastructure Development in India	Paper No. 26.	Foundation Engineering	IISc Bangalore	2015
S. Keerthi Raaj and K. Muthukkumaran	Numerical and Theoretical Analysis of Consolidation of Soft Clay Installed With PVD at Nagapattinam - A Case Study	Proceedings of the Deep Foundation Institute on Deep Foundations Technologies for Infrastructure Development in India	Paper No. 29	Foundation Engineering	IISc Bangalore	2015

National Conferences

Stalin V.K., Muthukkumaran K and Karthikeyan A	Effect of liquid waste on the index and Engineering Behaviour of Soils	Indian Geotechnical Conference - 2000 Millenium Conference	pp 229-230	Geotechnical Engineering	Mumbai	2000
Muthukkumaran K, Sundaravadivelu R and Gandhi S.R	Behaviour of single pile in sloping ground under surcharge loading	Indian Geotechnical Conference - 2002	pp 441-444	Geotechnical Engineering	Allahabad	2002
Muthukkumaran K, Sundaravadivelu R	Behaviour of berthing	Workshop on Forensic	pp 135-13	Geotechnical Engineering	Chennai	2003

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and Gandhi S.R.	structure under changing slope in seismic condition- A case study	Geotechnical Engineering, IGS-FGE				
Muthukkumaran K, SundaravadiveluR and Gandhi S.R.	Effect of sloping ground on single pile load deflection curve	Indian Geotechnical Conference - 2003	pp 137-140	Geotechnical Engineering	IIT Roorkee	2003
Muthukkumaran K, SundaravadiveluR and Gandhi S.R.	Behaviour of instrumented pile under vertical loading – a field investigation(received best paper ward)	Indian Geotechnical Conference - 2004	pp 347-350	Geotechnical Engineering	NIT Warangal	2004
Senthil Kumar C and Muthukkumaran K	Effect of relative density on pile group lateral load capacity	Indian Geotechnical Conference - 2008	pp 133-136	Geotechnical Engineering	IISc Bangalore.	2008
Aravind Kumar B and Muthukkumaran K	Behaviour of raker piles under lateral load	Indian Geotechnical Conference - 2008	pp 137-140	Geotechnical Engineering	IISc Bangalore	2008
G.Sandeep, P.V.Premalatha, P.Jayabalan and K.Muthukkumaran	Strengthening of Berthing Structure	Proceedings of National Conference on failure studies and remedial measures to concrete structures	p-190-199	Civil Engineering	KSR College of Engg, Tiruchengode with AICTE New Delhi, India	2008
Prasath V and Muthukkumaran K	Optimal use of gravel in low cost flexible	Indian Geotechnical Conference - 2008	pp 206-209	Geotechnical Engineering	IISc Bangalore	2008

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	pavement					
SenthamilkumarS, Natarajan, C. Muthukkumaran K and Ilamparuthi K	Study on influence of local soil conditions on ground motion amplification	Indian Geotechnical Conference - 2009	pp 57- 61	Geotechnical Engineering	Guntur, India	2009
Arun, K.S. and Muthukkumaran K	Effect of soil- pile interaction on fixed offshore platform behaviour	Indian Geotechnical Conference - 2009	pp 139- 143	Geotechnical Engineering	Guntur, India	2009
Denzil Fernandez and Muthukkumaran K	Effect of lime stabilisation on single pile pullout capacity	Indian Geotechnical Conference - 2009	pp 476- 479	Geotechnical Engineering	Guntur, India	2009
Varenya Kumar D.M, Madhuri Murali, Sindhuja Ganesh and Muthukkumaran K	Behaviour of composite piles under lateral load pp 747-750	Indian Geotechnical Conference - 2009	pp 747- 750	Geotechnical Engineering	Guntur, India	2009
Gokula Krishnan M. SathyanarayananD, Subha I.P and Muthukkumaran K	Behaviour of an open type berthing structure under earthquake condition –a numerical approach	Indian Geotechnical Conference - 2009	pp 553- 557	Geotechnical Engineering	Guntur, India	2009
Premalatha P.V, Muthukkumaran K and Jayabalan P	Analysing the optimum length of tie rod anchor for a berthing structure	Indian Geotechnical Conference - 2009	pp 127- 130	Geotechnical Engineering	Guntur, India	2009
Muthukkumaran K and Sathynarayanan D	Effect of Seabed Slope on Offshore Pile Lateral Behaviour under Wave	Indian Geotechnical Conference - 2010	pp 683- 686	Geotechnical Engineering	IIT Bombay	2010

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	Force					
Muthukkumaran K and Subha I.P	Effect of Earthquake Induced Lateral Soil Movement on Piles in Sloping Ground	Indian Geotechnical Conference - 2010	pp 209-212	Geotechnical Engineering	IIT Bombay	2010
M. Murugan, C. Natarajan and K.Muthukkumaran	Response of Laterally Loaded Long Free-Head Pile in Cohesionless Soil	National Conference on Modern Trends in Civil Engineering (NCMTC – '11)		Civil Engineering	Dr.Sivanthi Aditanar College of Engineering , Tiruchendur , Tamil Nadu, India	2011
M.Murugan, C.Natarajan and K.Muthukkumaran	Response of Laterally Loaded Single Pile in Sandy Soil	National Conference on Recent Trends in Civil & Mechanical Engineering		Civil Engineering	Anna University of Technology, Tiruchirappalli, Tamil Nadu, India	2011
M.Murugan, C.Natarajan and K.Muthukkumaran	Seismic Retrofit of Structural Pile Foundation	National Conference on Earthquake and structural Engineering (NCESE -2011)		Structural Engineering	V.L.B. Janakiamma l College of Engineering and Technology, Coimbatore, Tamil Nadu, India.	2011
Adarsh P.R. and Muthukkumaran K	Effect of wheel load on underground tunnels	RDCE'12		Civil Engineering	SRM University, Chennai	2012
Adarsh P.R. and Muthukkumaran K	Experimental study of wheel load over tunnels	NCRAG'12	pp 40-41	Geotechnical Engineering	GCT, Coimbatore	2012
Jegatheeswaran B and Muthukkumaran K	Effect of length and diameter on the lateral capacity of pile in	RDCE'12		Civil Engineering	SRM University, Chennai	2012

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	cohesive and cohesionless soils					
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