SARANYA. N Mobile # 9962823234 E-Mail ID: <u>saranya.nithiyanandan@gmail.com</u>



OBJECTIVE

To work in the organisation that provides me an opportunity to explore my teaching and research skill.

EDUCATIONAL BACKROUND

- B.E. (Civil Engineering) from Anna University May-2006 with 82%
- M.E. (Soil Mechanics & Foundation Engineering) from Anna University May-2009 with 8.79 CGPA
- Ph. D. (Civil Engineering) from IIT-Madras with 9.3 CGPA

RESEARCH EXPERIENCE

- Have research experience in the field of Biotechnology, Engineering Design, Metallurgical and Material Engineering
- Official user from Civil Department, IIT-M for XRD (X-Ray Diffraction) testing equipment
- Have experience in Zeta Trac Analyzer used in the field of Biotechnology Department
- Have exposure in imaging tools such as Scanning Electron Microscopy (SEM), Transmission Electron Microscopy (TEM) and Tomography and also have experience in doing image processing
- Official user of Mercury Intrusion Porosimetry used for pore structure analysis of material
- Experience in handling advanced characterizing testing equipments which includes, Atomic Adsorption Spectrometer, UV-Spectrometer, Helium Gas Pycnometer, Centrifuge and Impedance Spectroscopy

SOFTWARE SKILLS

- Operating System: Windows/XP
- Application: AUTO CADD, MS PROJECT

• Analysis Software: Z-VIEW, SMART, LAB VIEW, IMAGE PRO, X-Pert PAN ANALYTICAL

LAB ESTABLISHMENT

I have assisted in developing three Geo-environmental labs in Civil Engineering Department, IIT Madras.

The facilities of Geo-environmental lab includes

- 1. Flexible Wall Permeameter
- 2. Atomic Absorption Spectroscopy
- 3. UV Vis Spectroscopy
- 4. Gas Pycnometer
- 5. Time Domain Reflectometer

PUBLICATIONS

NATIONAL CONFERENCE

- Saranya. N and Arnepalli. D. N. "Influence of Zeta Potential on Fundamental Behaviour of Clayey Soils", Fourth Indian Young Geotechnical Engineer's Conference, May-2013
- 2. Saranya. N and Arnepalli. D. N. "Effect of Pore Size Distribution on Unconfined Compressive Shear Strength", Indian Geotechnical Conference, Dec-2016
- 3. Saranya. N and Arnepalli. D. N. "Effect of Particle Size on Surface Characteristics of Soil", Indian Geotechnical Conference, Dec-2018

INTERNATIONAL CONFERENCE

- Saranya. N and Arnepalli. D. N. "Characterizing the dielectric response of compacted fine-grained soils using impedance spectroscopy", 16th International Clay Conference, Granada, Spain, 17th to 21st July 2017
- Saranya. N "Characterizing the Diffused Double Layer Properties of Clay Minerals" ICSMGE 2021 : International Conference on Soil Mechanics and Geotechnical Engineering, Singapore, 29-30 March 2021 (Abstract Accepted)

CHAPTER IN A BOOK

- Saranya. N and Arnepalli. D. N. (2019) "Effect of Pore Size Distribution on Unconfined Compressive Shear Strength", *Geotechnical Characterisation and Geoenvironmental Engineering*, Springer, Volume 1, DOI: 10.1007/978-981-13-0899-4_10
- 2. Saranya. N and Arnepalli. D. N. (2020) "Effect of particle size on surface characteristics of soil", *Geotechnical Characterization and Modelling*, Springer (*Under printing*)

JOURNAL

- Saranya. N and Arnepalli. D. N. (2018) Effect of drying technique on pore structure characteristics of fine-grained geomaterials. *International Journal of Geotechnical Engineering*, 12(6), 578-591
- 2. Saranya. N and Arnepalli. D. N. Characterizing the dielectric response of compacted fine-grained soils using impedance spectroscopy (*under review*)
- 3. Saranya. N and Arnepalli. D. N. Classification of fine-grained soils based on surface properties (*under review*)
- 4. Saranya. N and Arnepalli. D. N. Influence of pore fluid chemistry on pore volume and hydraulic conductivity characteristics (*under review*)

AREA OF INTEREST

Ground Improvement Geoenvironmental Engineering Bio Geotechnology

WORK EXPERIENCE

- Name of company: East Coast Construction Industries Ltd. Designation: Asst. Engineer (Contracts) Period of working: One year (2006-2007)
- Name of Organization: St. Peter's Engineering College, Chennai Designation: Asst. Professor Period of working: 6 months (June-2009 to Dec-2009)
- 3. Name of Organization: Indian Institute of Technology Madras

Designation: Project Associate Period of working: 3 months (March-2017 to May-2017)

 Name of Organization: Coimbatore Institute of Technology, Coimbatore Designation: Project Officer Period of working: 2nd May 2018 – Till date

FIELD EXPERIENCE

Have worked as research assistant for few consultancy works carried out at Chennai, Kerala Railways and at Marwa and Nellore site for the design of Ash Dyke

SUBJECTS HANDLED

I have handled the following subjects for ME students in Coimbatore Institute of Technology for the academic year 2018-2019

- 1. Geoenvironmental Engineering
- 2. Design of Foundation Structures

PROGRAMES ORGANIZED

S. No	Programme Title	No of Days
1.	Deliberations on AICTE Model Curriculum 2018 – Mechanical Engineering	Half – Day
2.	Deliberations on AICTE Model Curriculum 2018 – Civil Engineering	Half – Day
3.	Deliberations on AICTE Model Curriculum 2018 – Electrical and Electronics Engineering	Half – Day
4.	Experimental Teaching & Training on LabVIEW	5
5.	5-Day Hands-on Training on ANSYS Workbench Environment	5
6.	Research Scholar Empowerment Programme – RSEP-II	5
7.	Faculty Induction Programme – I	27
8.	5-Day Faculty Development Programme on Finite Element Method in Civil Engineering	5

9.	High Intense Hands-on Training Programme on CFD Using	7
	SIEMENS Application Software	7
10.	Four Week Faculty Induction Programme - II	28
11.	Five Day Hands on Training on ETABS	5

PERSONAL INFORMATION

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COIMBATORE

N. SARANYA