

Softwares known

**PLAXIS (2D & 3D)** 

**AutoCAD** 

**REVIT** 

STAAD.Pro

RADAN – GPR Survey

## T.PRABUM.E, (Ph.D).,

E – Mail: tp.civilnitt@gmail.com

## CAREER OBJECTIVE

Looking for a challenging career that will provide me a good platform to utilize my teaching & research skills to gain exceptional career move ahead through long efforts and performance regularity.

#### ACADEMIC PROFILE

• Doctor of Philosophy : Geotechnical Engineering (Full Time) – Thesis Submitted

Year of passing &Institution: 2019-22 & National Institute of Technology (NIT), Trichy

**Aggregate Percentage** : First Class with CGPA: 9.75

**Research Title** : In-Situ Resource Utilization for Evaluating the Design

Criteria of Lunar Structures including Moonquake Effect

**2**: +91 – 9566882229

Funded by : ISRO – RESPOND Project, Chandrayaan Missions

• Master of Engineering : Soil Mechanics and Foundation Engineering (Geo-Tech)

Year of passing & Institution: 2013-15 & Anna University, CEG-Campus, Chennai

**Aggregate Percentage** : First Class with CGPA: 7.51

Project Title : Influence of Nano Sized Cemented Particles on the

Effectiveness of Soil Improvement

Course / Secondary	Year of passing	Institution & Board	Percentage of mark/CGPA
B.E	2013	Kongu Engineering College, Perundurai, Erode & Autonomous	8.35
HSC	2009	P.A Vidya Bhavan Higher Secondary School, Karur & State Board	88.50%
SSLC	2007	P.A Vidya Bhavan Higher Secondary School, Karur & State Board	93.00%

### **WORKING EXPERIENCE**

Position	Period	Institution / Company	Duration
Senior Research Fellow (SRF)	2019 - Till Date	National Institute of Technology (NIT), Tiruchirappalli	3 Years 3 Months
Assistant Professor	2015-18	Builders Engineering College, Kangayam	3 Years 6 Months

# Alternate E-mail

tp.civil1992@gmail.com

## Alternate Mob.No

**2**: +91 – 9487364511

### AREA OF INTEREST

- Lunar (Moon) Soil Simulation and In-Situ based Lunar Materials
- Sub Surface Investigation and Field Testing
- Ground Improvement Techniques
- Foundation Engineering
- Soil Mechanics

## **MEMBERSHIP**

- Life member of The **Indian Society for Technical Education (ISTE)** (Membership ID: LM110248)
- Life Member of Indian Geotechnical Society (IGS) Coimbatore and Trichy Chapter (Membership ID: LM208599)

## **ACADEMIC ACTIVITIES & AWARDS**

## Journal Reviewer:

- Acting as a reviewer for the "Arabian Journal of Geosciences," SPRINGER, SCIE.
- Acting as a reviewer for the "Journal of Civil Engineering" and "International journal of Engineering, Basic Sciences, Management and Social Studies (IJEBMS)," IEAE International Journals.

### **Editor:**

• Acting as a Editor for the "Iterative International Publishers IIP, USA & India" Book Series for Futuristic Trends in Construction Materials & Civil Engineering.

## Awards:

- Won Young Researcher Award'22 for the research work on Evaluating the Geotechnical Properties of the lunar soil simulants (Chandrayaan Missions), awarded by the Institute of Scholars, Banglore, India.
- Won Research Excellence Award'21 for the outstanding research work and publications awarded by the Institute of Scholars, Banglore, India.

## **Programs Organized:**

Period & Year	Program	Program Title	Name of the Fundung Agencies
5 <sup>th</sup> to 14 <sup>th</sup> December, 2016	FDTP	Soil Mechanics	Anno
4 <sup>th</sup> to 10 <sup>th</sup> December, 2017	FDTP	Soil Mechanics	Anna University, CEG- Campus, Chennai
11 <sup>th</sup> to 17 <sup>th</sup> June, 2018	FDTP	Foundation Engineering	
30 <sup>th</sup> Nov to 11 <sup>th</sup> December, 2018	FDTP	Earthquake Geotechnical Engineering	

## **Guest Lectures Delivered:**

Period		Program Title	Nome of the Institutions	
From	То	110gram Title	Name of the Institutions	
04.07.2021	-	Webinar on Over View of	Excel College of Engineeirng,	
		Geotechnical Engineering	Tiruchengode	
12.06.2020	-	Webinar on Soil Mechanics	M.Kumarasamy College of	
			Engineering, Karur	
11.06.2018	17.06.2018	Foundation Engineering	Builders Engineering College,	
		(FDTP)	Nathakadaiyur, Kangayam	
10.12.2017	10.12.2017	Soil Mechanics (FDTP)	Builders Engineering College,	
			Nathakadaiyur, Kangayam	
05.12.2016	14.12.2016	Soil Mechanics (FDTP)	EBET Group of Institutions,	
			EBET Knowledge Park,	
			Nathakadaiyur, Kangayam	

## **Programs Attended:**

• QIP-STTC/GIAN course : 3 Nos (QIP-STTC – 2 Nos @ IISc, Bangalore & GIAN @ NITT)

Seminars & Workshops : 10 NosConferences : 6 Nos

## **Students Project Guided:**

• UG & PG Projects : 8 Nos

## **Personal Data**

Name : T.Prabu

DOB : 01/02/1992

Gender : Male

Nationality: Indian

Blood group: A1+ve

Father's Name: V. Thannasi

Mother's Name:T.Karpakam

# **Personality Traits**

- Team facilitator
- Responsibility
- Willingness to learn

#### **PUBLICATIONS**

# **Science Citation Indexed (SCI) Papers:**

- Prabu, T, Muthukkumaran, K, and Venugopal, I. (2022). Assessment of Dynamic Properties
  of a New Lunar Highland Soil Simulant (LSS-ISAC-1) Developed for Chandrayaan Missions.
  Soil Dynamics and Earthquake Engineering, 155. (ELSEVIER)
  https://doi.org/10.1016/j.soildyn.2022.107178
- Prabu, T, Muthukkumaran, K, Venugopal, I and Anbazhagan, S. (2021). Assessment of Shear Strength and Compressibility Behaviour of Newly Developed Lunar Soil Simulant (LSS-ISAC-1) for Lander and Rover Chandrayaan Mission. Planetary and Space Science, 209. (ELSEVIER) <a href="https://doi.org/10.1016/j.pss.2021.105354">https://doi.org/10.1016/j.pss.2021.105354</a>
- Prabu, T, Muthukkumaran, K and Venugopal, I. (2021). Assessment of Geotechnical Properties of Lunar Soil Simulants for Lunar Missions. Indian Journal of Engineering and Materials Science, 28, 317-329.
- Venugopal, I, Prabu, T, Muthukkumaran, K and Annadurai, M. (2020). Development of a Novel Lunar Highland Soil Simulant (LSS-ISAC-1) and Its Geotechnical Properties for Chandrayaan Missions. Planetary and Space Science, 194 (2020) 105116. (ELSEVIER) https://doi.org/10.1016/j.pss.2020.105116.
- Venugopal, I, Muthukkumaran, K. Annadurai, M, Prabu, T and Anbazhagan, S (2020). Study on Geomechanical Properties of Lunar Soil Simulant (LSS-ISAC-1) for Chandrayaan Mission. Advances in Space Research, 66, 2711–2721. (ELSEVIER) https://doi.org/10.1016/j.asr.2020.08.021.
- **Prabu, T,** Muthukkumaran, K, and Venugopal, I. (2022). Study on Low Gravity Effect on Bearing Capacity of a New Lunar Highland Soil Simulant (LSS-ISAC-1) for Futuristic Moon Colonization. Advances in Space Research. (**ELSEVIER**) (Accepted with Revision)
- **Prabu, T,** Muthukkumaran, K, Venugopal, I, and Anbazhagan, S. (2022). Similarity Assessment of Lunar soil Simulant (LSS-ISAC-1) for Lunar Habitation Materials and Structures. Journal of Aerospace Engineering (**ASCE**). (Revision Submitted)

## **Scopus Indexed Papers:**

- Prabu, T, Venugopal, I, Muthukkumaran, K. (2021). Geotechnical Properties of Lunar Simulant. 7<sup>th</sup> International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics. Lecture Notes in Civil Engineering, Soil Dynamics, 85-94. (SPRINGER)
- Venugopal, I, Muthukkumaran, K, Sriram, K.V, Anbazhagan, S, Prabu, T, Arivazhagan, S. and Sanjay Kumar Shukla. (2020). Invention of Indian Moon Soil (Lunar Highland Soil Simulant) for Chandrayaan Missions. International Journal of Geosynthetics and Ground Engineering, 6, 44 (2020). (SPRINGER) http://doi.org/10.1007/s40891-020-00231-0.
- Sachin Prabhu, P, Prabu, T and Eswarmoorthi, P. (2017). Influence of Nanosized Cement & Flyash Particles on the Behavior of Soil. International Journal of Civil Engineering and Technology, 10, 337-344.
- Eswarmoorthi, P, Sachin Prabhu, P, Prabu, T and Indrajith, A.J. (2017). Contamination of Soil by Tannery Waste Effluent. International Journal of Civil Engineering and Technology, 8, 1674-1680.
- Eswarmoorthi, P, Senthil Kumar, V, Sachin Prabhu, P, Prabu, T and Lavnaya, S. (2017).
   Influence of Nanosized Silica & Lime Particles on the Behavior of Soil. International Journal of Civil Engineering and Technology, 9, 353-360.

## **Book Chapters:**

Muthukkumaran, K., Prabu, T., Venugopal, I. (2021). Dynamic Characterization of Lunar Soil Simulant (LSS-ISAC-1) for Moonquake Analysis. In book: Latest Developments in Geotechnical Earthquake Engineering and Soil Dynamics, 513 – 523. (SPRINGER) <a href="http://doi.org/10.1007/978-981-16-1468-2">http://doi.org/10.1007/978-981-16-1468-2</a> 26

## **Publications Count**

• SCI Papers :7 Nos

• Scopus Papers: 5 Nos

• Conf. Papers : 5 Nos

• Book Chapters: 1 No

# Address for Correspondence

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Kovil Street.

Kodumudi (Po),

Erode - D.t

Pin-638151

## CONSULTANCY PROJECTS INVOLVED

I have involved in various geotechnical consultancy projects such as,

- Geotechnical investigation and foundation recommendation for the proposed construction of Barriages, Bridges, Buildings, ATC Toweres, Terminal buildings, Aprons etc.
- Vertical and Latteral Pile Load testing for bridges, Plate Load Tests for Aprons, Earth Resitivity Test (ERT) for Solar and Mining Projects etc.
- **Ground Penetration Radar** (**GPR**) study for measuring the surface crack propogation on the runways at **Chennai Airport**, **Chennai**.
- Detailed field study based on the GPR survey for the Proposed Construction New Taxi-Links at Cochin International Airport, Cochin.
- Comprehensive Scientific study for the stability of the structures falling within 45 m of the proposed inland mining IREL (India) Pvt. Ltd, Manavalakurichi & Kollam.
- Technical Studies to evaluate the **Settlement Behavior of Breakwater** under construction at Vellapallam, Nagapattinam.

### REFERENCES

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National Insitute of Technology (NIT),

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