

## EVENT: 'TECHNICAL TALK ON "REINFORCED BUT VULNERABLE: SURVEYING GEOTECHNICAL FAILURES ALONG NH-66'

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### ABOUT THE EVENT

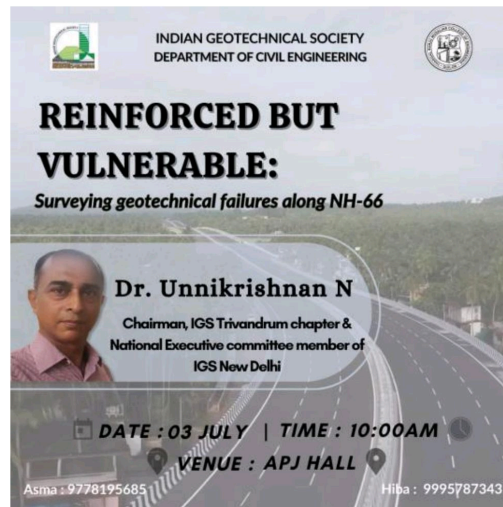
A technical talk was organized at APJ Hall of the Department of Civil Engineering, TKM College of Engineering on 3rd July 2025. The session titled **"Reinforced but Vulnerable: Surveying Geotechnical Failures along NH-66"** was delivered by **Dr. Unnikrishnan N**, Professor and Head (Retd.), Department of Civil Engineering, College of Engineering Trivandrum; Chairman, IGS Thiruvananthapuram Chapter; and Member, National Executive Committee, IGS. The talk drew an audience of **120 students**, comprising mainly of undergraduate students and department faculties.

The event commenced with a warm **welcome address by Dr. Adarsh S**, Head of the Department of Civil Engineering, TKMCE. This was followed by a brief **report on the activities of the IGS Students Chapter for the academic year 2024–25**, along with the **formal inauguration of the new Executive Committee for 2025–26**, presented by **Mr. Muraleekrishnan B**, Student Head (2024–25) of the Chapter. The session witnessed the esteemed presence of **Dr. Sajeeb R**, Former Principal of TKMCE, whose presence added significance to the event.

The keynote talk by Dr. Unnikrishnan N focused on **case studies of geotechnical failures along NH-66**, specifically addressing failure-prone areas such as **paddy fields, bridge approaches, and embankments over soft soils**. He highlighted key reasons for these failures, including **lack of proper soil investigation, high pore water pressures, and inadequate drainage systems in retaining structures**. Through engaging visuals and **videos of actual failures**, he demonstrated how such issues could be mitigated using solutions like **Mechanically Stabilized Earth (MSE) walls, soil nailing techniques**, and the use of **reinforced soil structures**, which, as he emphasized, often provide greater long-term stability than conventional reinforced concrete systems. An **interactive Q&A session** followed, where students actively engaged with the speaker to gain deeper insights.

The program concluded with a vote of thanks delivered by **Dr. Amal Azad**, Assistant Head of the Department and Faculty Coordinator of the IGS Students Chapter, who expressed heartfelt appreciation to the speaker, dignitaries, and all participants for making the event a success.

The talk helped students gain clarity on the practical aspects of geotechnical engineering and emphasized the importance of proper investigation and design in infrastructure projects.



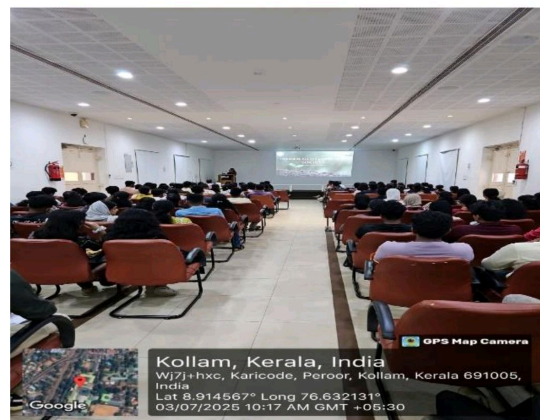
*Event Poster*



*Dr. Unnikrishnan handling the session*



*Presenting token of appreciation*



*Event participation*

# “STRONG ROADS ARE BUILT FROM A STRONG FOUNDATION”



Unnikrishnan N

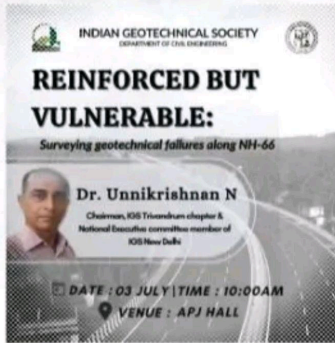
10h · 🌐

After my lecture "Reinforced but vulnerable: Surveying Geotechnical Failures along NH66". Excellent and enthusiastic crowd. Really enjoyed the questions from the students. TKM College of Engineering continues to impress with its committed faculty and well-disciplined student community. Thank you for the opportunity!

#nh66kerala

#kooriyad

#geotechnicalengineering #geotechnical



## ‘ദേശീയപാത നിർമ്മാണത്തിലെ വിഴ്ച മണ്ണ്’ പരിശോധന ശക്തിയായ ഭിത്തിയിൽ നടത്താത്തത്

കൊല്ലം • മണ്ണ് പരിശോധന ശക്തിയായ ഭിത്തിയിൽ നടത്താത്തതാണ് ദേശീയപാത നിർമ്മാണത്തിലെ ചിലയിടങ്ങളിലെ വിഴ്ചയ്ക്കു കാരണമെന്ന് ഇന്ത്യൻ ജിയോളജി സൊസൈറ്റി (ഐജിഎസ്) തിരുവനന്തപുരം ചാപ്റ്റർ അധ്യക്ഷൻ ഡോ.എൻ.ഉണ്ണികൃഷ്ണൻ.

നിലവിലെ ദേശീയപാത നിർമ്മാണം റീഇൻഫോഴ്സ്ഡ് എർജ് പാനൽ (ആർഇ പാനൽ) ഉപയോഗിച്ചാണ്. എന്നാൽ, കേരളത്തിലെ മണ്ണിൽ മെക്കാനിക്കൽ സ്റ്റ്രെംഗിതൈസ്ഡ് എർത്ത് (എം.എസ്.ഇ) പാനൽ ഉപയോഗിച്ചിരുന്നുവെങ്കിൽ നിർമ്മാണം കൂടുതൽ കാര്യക്ഷമമാകുമായിരുന്നുവെന്നും അദ്ദേഹം പറഞ്ഞു.

ട്രക്കെഎം എൻജിനീയറിങ് കോളജിലെ സിവിൽ എൻജിനീയറിങ് വിഭാഗം, ഐജിഎസ് സ്റ്റുഡന്റ്സ് ചാപ്റ്ററും സഞ്ചുക്തമായി സംഘടിപ്പിച്ച സെമിനാറിൽ മുഖ്യപങ്കാളിത്തം നടത്തുകയായിരുന്നു അദ്ദേഹം.

മുൻ പ്രിൻസിപ്പൽ ഡോ. ആർ. നജീബ് അധ്യക്ഷനായിരുന്നു. സിവിൽ എൻജിനീയറിങ് വിഭാഗം മേധാവി ഡോ. എസ്. ആദർശ്, ഉപമേധാവി ഡോ. അമൽ ആസാദ്, ഐജിഎസ് സ്റ്റുഡന്റ് ഹെഡ് ബി. മുരളികൃഷ്ണൻ എന്നിവർ പ്രസംഗിച്ചു.



## Technical Talk session -Feedback Form Responses

Timestamp	Name	Year & Batch	How valuable was this session to your learning or	What was the most interesting takeaway from the	Any suggestions for upcoming events?
7/4/2025 5:56:36	Ebin Antony Elenjikkal	3rd Year, CSA	Very insightful and engaging	Very Needful Session.	GIS Workshop
7/4/2025 6:05:54	Aliya Nasrin B S	3rd year, CSA	Very insightful and engaging	About the techniques	
7/4/2025 6:57:01	Aami S Nath	3rd c5a	Very insightful and engaging	Engaging interaction	
7/4/2025 9:44:32	Sanjana Naushad	3rd year CSA	Very insightful and engaging	Case study on recent failures	More case study
7/4/2025 9:45:24	Athira Venugopal	3rd yr,CSA	Very insightful and engaging	About kooriyad	No
7/4/2025 9:46:17	Yadhu Krishnan J J	3rd year CSA	Neutral	Was able to know more about the failures occurred	
7/4/2025 9:47:38	Hanna P M	3rd year civil CSA	Very insightful and engaging	Visuals of each sites in the presentation helps to understand	
7/4/2025 9:56:29	Hiba Hanan V G	2nd year A batch	Very insightful and engaging	Reason for NH 66 failure	
7/4/2025 10:01:34	Mohammed Adeeb Ersh	CSA	Very insightful and engaging	About kooriyad site	
7/4/2025 10:04:01	PRATHUL K	CSA	Very insightful and engaging	Truth of NH66 failure from a field professional	Nil
7/4/2025 10:06:04	Athira. B. R	3rd year civil A batch	Very insightful and engaging	It was good to know about different work sites.	
7/4/2025 10:24:40	Vishnuvardhan	C5 A	Very insightful and engaging	An introduction to foundation engineering	No
7/4/2025 14:49:21	Abhijith S	Third Civil	Very insightful and engaging	The key reason behind the failure of the construct	

Reinforced but vulnerable:Surveying Geotechnical Failures along NH66

TECHNICAL TALK HELD on 3rd july	02-07-2025 Jul	Momento for guest	Event expense	300	-300	-300
	02-07-2025 Jul	Train ticket:TVM to Kollam (LTT Garib Rath)	Travel	244.05	-244.05	-544.05
	02-07-2025 Jul	Train ticket: Kollam to TVM (Vande Bharat)	Travel	444.05	-444.05	-988.1
	02-07-2025 Jul	Water bottle ( 6no.s)	Refreshments	58	-58	-1046.1
	02-07-2025 Jul	Print and A4 (from TKM store)	Stationery	8	-8	-1054.1
	02-07-2025 Jul	Biscuit	Refreshments	10	-10	-1064.1
	02-07-2025 Jul	Print from ellvila	Stationery	75	-75	-1139.1
					0	-1139.1