

Report on the Webinar -

" GROUND IMPROVEMENT BY GEO SYNTHETIC ENCASED STONE COLUMNS "

March 31st, 2021

Geethanjali College of Engineering and Technology, Civil Engineering Department, organized an expert lecture for the students in collaboration with "Indian Geotechnical Society - Student Chapter" on **Ground Improvement by Geo synthetic Encased Stone Columns**. The webinar started at 10:30AM with an introductory speech by Mr.V.Abdul Raffi (Associate Professor) followed by a welcome speech by Mrs.K.Priyanka (Assistant Professor). The session was taken over by Dr.Rajesh Sathiyamoorthy, IIT Kanpur.

Topics covered in the session :


- 1)Soft Clays
- 2)Need for improving the deformation behaviour of soft clay
- 3)Various options available for improving soft clays
- 4)Stone Columns - Failure modes and mechanism
- 5)Performance enhancement by encasing stone columns
- 6)Various modelling approaches
- 7)Summary and Conclusions.

→ **Soft Clay:**

Soil behaves differently with the application of water in it. Soft clays are generally the soils with a large fraction of fine particles which have high moisture content and very high plasticity.

→ **Problems in soft clay were discussed as mentioned below:**

- Low Bearing Capacity
- Excessive Settlement
- Low permeability leading to very slow dissipation of excess pore pressure.


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The lecture strengthen the following POs & PSOs of the department:

PO 1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2: Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO 5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO 7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development

PO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs):

PSO 1: Apply knowledge in core areas of Civil Engineering such as Structural, Geotechnical, Water Resources, Transportation and Environmental Engineering to Civil Engineering practice.

PSO 2: Utilize Civil Engineering principles that are appropriate to produce detailed drawings, design reports, quantity and cost estimates, specifications, contracts and other documents appropriate for the design, construction, operations and maintenance of Civil Engineering projects.

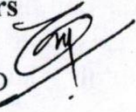

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PSO 3: Shall interact and collaborate with stakeholders; execute quality construction works applying Civil Engineering tools namely, Total Station, Global Positioning System (GPS), ArcGIS, AutoCAD, STAAD and other necessary tools.

Expert Lecture Coordinators

G.Raju, Asst.Prof, CED

D.Ramachander, Asst.Prof, CED



HOD/CE



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Geethanjali College of Engineering and Technology
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Department of Civil Engineering

30-03-2021

To,
The Principal,
Geethanjali College of Engineering and Technology,
Cheeryal(v), Keesara (M).

Respected sir,

Sub: Permission for organizing a Guest lecture on "Ground Improvement by Geosynthetic Encased Stone Columns" on 31st March-2021 -Reg.

The Department of Civil Engineering is planning to organize a Guest lecture as part of Indian Geotechnical Society (IGS) students chapter. In this connection **Dr. Rajesh Sathiyamoorthy** of IIT Kanpur has kindly consented to address our civil engineering students on the topic **Ground Improvement by Geosynthetic Encased Stone Columns**, on 31/3/2021 at 10:30 am

No financial commitment from our college, for organizing the guest lecture

Thanking you,

Regards

IGS faculty coordinators

K. Priyanka

K. Priyanka

V. Abdul Raffi

V. Abdul Raffi

For Forwarded

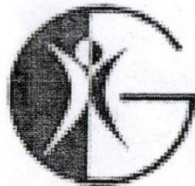
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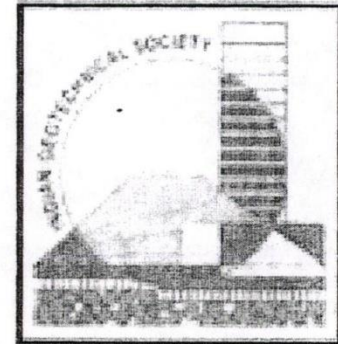
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Organized by
Department of Civil Engineering

Expert lecture
on

"Ground Improvement by Geosynthetic Encased Stone Columns"

Date: 31.03.2021 & Time: 10.30AM-11.30AM



Dr. Rajesh Sathiyamoorthy
IIT Kanpur.

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20-21

Speed Dial Meet - Webinar organized by CE Dept

meet.google.com/fux-phmc-vjf

K.PRIYANKA GCET is presenting 17R11A01A2 GUGULOTHU PRAK... and 11 more

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 Department of Civil Engineering
 Expert lecture on
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 Date: 31.03.2021 & Time: 10.30AM-11.30AM

Dr. Rajesh Sathiyamoorthy
 IIT Kanpur.

Turn on microphone (CTRL + D)

Webinar organized by CE Dept

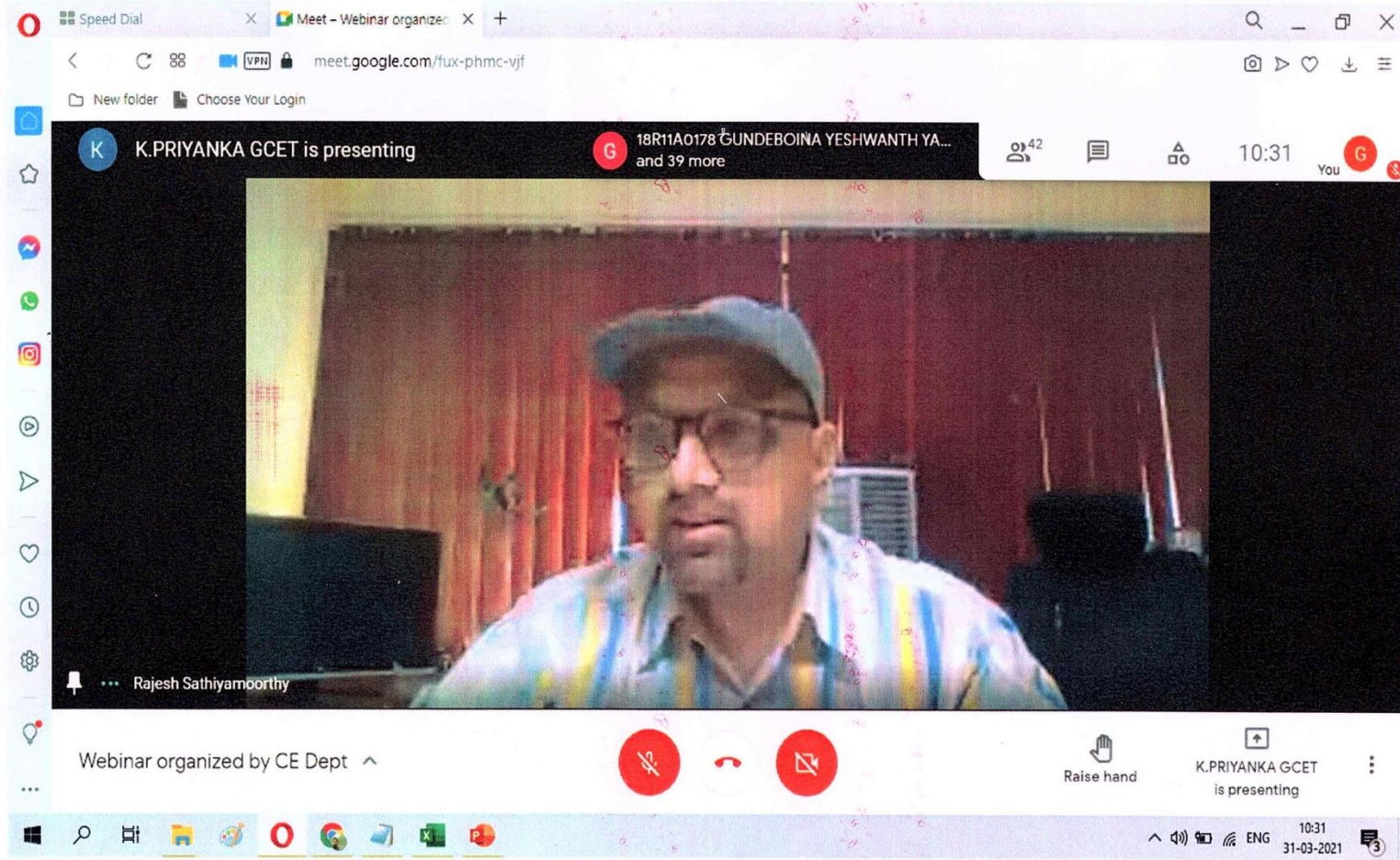
Raise hand K.PRIYANKA GCET is presenting

18R11A0134 MAGGIDI RAKESH REDDY (outside Geethanjali College of Engineering and Technology)

10:25 31-03-2021

**Ground Improvement by Geo-Synthetic encased Stone Columns-
31/3/21**

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Ground Improvement by Geo-Synthetic encased Stone Columns-
31/3/21

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Timestamp	Email Address	Name of the Student	Number(20RXXX)	Year	Section	Name of the Speaker	Topic	WEBINA WERE	RELEVANT TO	INTERACTION	THE SPEAKER WA	THE SPEAKER W	THIS WEBINAR EX	OVERALL
3/31/2021 11:38:07	sureshgaurraju@gmail.com	G suresh	19R15A0104	III Year	A	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Agree	Agree	Agree	Strongly Agree	Strongly Agree	Agree	Good
3/31/2021 11:38:22	17r11a0121@gcet.edu.in	K V N V Snigdha Sree	17R11A0121	IV Year	A	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Strongly Agree	Agree	Excellent
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3/31/2021 11:39:35	celinagrace6@gmail.com	Celina Grace	18R11A0172	III Year	B	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Agree	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Agree	Good
3/31/2021 11:39:40	anishkormatha@gmail.com	anish kormatha	18R11A0187	III Year	B	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Agree	Excellent
3/31/2021 11:40:06	prudvibk@gmail.com	Prudvi	19r15a0110	III Year	B	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Agree	Agree	Agree	Agree	Strongly Agree	Strongly Agree	Excellent
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3/31/2021 11:40:48	pallavireddyvusike@gmail.com	Pallavi Reddy	18R11A01B6	III Year	B	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Agree	Agree	Agree	Agree	Agree	Agree	Good
3/31/2021 11:40:52	kundarapuabhinav119@g	KUNDARAPU ABHINAV	18R15A0102	IV Year	A	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Agree	Agree	Agree	Agree	Agree	Agree	Good
3/31/2021 11:41:03	preethamkumardarga123@	Darga Preetham kumar	18R11A0171	III Year	B	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Strongly Agree	Agree	Agree	Strongly Agree	Agree	Strongly Agree	Good
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3/31/2021 11:41:48	mekalavarsha2001@gmail.com	Mekala Varsha	18R11A0197	III Year	B	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree	Good
3/31/2021 11:42:10	mangalapallymahalaxmi90	M. Mahalaxmi	18R15A0104	IV Year	A	Dr. Rajesh Sathyamurthi,	"Ground Improvement by	Agree	Satisfactory	Agree	Agree	Strongly Agree	Strongly Agree	Excellent
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