#### Overview

It has been observed that quite often Highway pavements constructed over/with weak soils fail miserably due to settlement and shear failure under heavy structural loads. In such situations, soil needs to be improved for overall safety and stability of Highway. Different techniques of ground improvement are used to modify and achieve the different geotechnical characteristics i.e. Increase in Bearing capacity; Increase in shear strength: Reduction in total and differential settlements; decrease in liquefaction potential of soil, reduction of swelling and cracking of soils: Improvement in drainage etc. Choice of a ground improvement technique depend on in situ geotechnical characteristics of sub soil, fill material; Drainage conditions and most importantly, the cost and time available to complete the project. This webinar focusses on different types of Ground improvement techniques viz. Stone columns; Prefabricated Vertical Drains, vacuum consolidation; and TAM Grouting. It also covers ground stabilization with soil nailing and Reinforced Earth Wall techniques.

#### Registration

Registration fee for attending this webinar is Rs. 1000/- for domestic delegates and USD 20 for foreign delegates, which can be directly paid through RTGS/Net banking in CRRI bank account. Visit  $\frac{https://forms.gle/nRy4wGov7EcVvbDt5}{to fill up the form for registration. You may also get the link for this form by scanning the adjacent QR code.}$ 



In case of any technical difficulty, the details for registration can be send to <a href="mailto:gtewebinar@gmail.com">gtewebinar@gmail.com</a> for completing the registration. Certificate of Participation will be issued to all registered delegates.

#### Payment details

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# INTERNATIONAL WEBINAR

Ground Improvement Techniques for Highway Construction

> MAY 29 – 30, 2020 10.00 -14.00 (IST)



Organized by
Geotechnical Engineering Division
CSIR-Central Road Research Institute
New Delhi, India

#### Supporters



















#### CONTACT DETAILS

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## Lecture Schedule

29 <sup>th</sup> May 2020	Time (IST)	SESSION 1 <u>Panelists</u> Sh. Anant Kumar (ADG, Technical, CPWD, New Delhi) Sh. Ravi Sundaram (Director, Cengrs India Pvt. Ltd.)
	10.00-10.05	Welcome address - Prof. Satish Chandra, Director, CSIR-CRRI
	10.05-10.10	Introduction - Shri. U. K. Guru Vittal, Chief Scientist, CSIR-CRRI
	10.10-10.55	Road/Rail Underpass Construction by Box Jacking with Soil Nailing - Dr. Kanwar Singh, Senior Principal Scientist, CSIR-CRRI
	10.55-11.05	Panel discussion & Q&A
	11.05-11.50	Construction and monitoring of PVD installed high embankment on soft sub soil - Dr. A.K. Sinha, Principal Scientist, CSIR-CRRI
	11.50-12.00	Panel discussion & Q&A
	12.00-12.45	Vacuum consolidation: Design and case studies - Er. Jerome Racinais, Engineering Director, Menard, Nozay, France
	12.45-12.55	Panel discussion & Q&A
	12.55- 13.40	Ground improvement using Vibro Techniques— Er. Vetriselvan Arumugam, Segment Head - EERS and Ground improvement works, L&T GeoStructure, Chennai, India
	13.40 -13.50	Panel discussion & Q&A
30 <sup>th</sup> May 2020	Time (IST)	SESSION 2 <u>Panelists</u> Dr. Rajesh Sathiyamoorthy (Associate Prof., IIT Kanpur) Sh. Shahrokh Bagli, (CTO, Strata Geosystems India Pvt. Ltd.)
	10.00-10.05	Introduction - Dr Vasant G. Havanagi, Chief Scientist, CSIR-CRRI
	10.05-10.45	Analysis and design of remedial measures for distressed Reinforced earth Wall: Case studies - Smt. Parvathi G.S., Senior Scientist, CSIR-CRRI
	10.45 -10.55	Panel discussion & Q&A
	10.55-11.40	Challenges in Design and Construction of Tam Grouted Micropile Bridge - Shri. Nitin Goyal, Managing director, Spar Geo infra Pvt. Ltd., New Delhi, India
	11.40 -11.50	Panel discussion & Q&A
	11.50-12.35 12.35- 12.45	Case Studies of Ground Improvement –CRRI's Experiences- Dr. P. S. Prasad, Senior Principal Scientist, CSIR-CRRI Panel discussion & Q&A
	12.45- 12.50	Vote of thanks: Dr Pankaj Gupta, HOD (Geotechnical Division), CSIR-CRRI



### Organizing Committee

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Dr. Vasant G. Havanagi Chief Scientist, CRRI

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