A Two-day National Workshop on "Geosynthetics for Infrastructure Sustainability and Resilience" (GEOINSURE 2023).

Resource efficiency plays a crucial role in development. sustainable The usage of geosynthetic materials has a significant effect on reducing adverse environmental impacts such as climate change (floods and droughts or urban heat islands). It promotes a resource-efficient and lowcarbon economy and helps in reducing energy consumption and CO₂ emissions in comparison with conventional solutions. Thus, geosynthetics are widely used in construction and environmental engineering as they have a positive impact on the strength and durability of structures and also save time, natural resources and limit the investment cost.Combining recycled materials with geosynthetics creates additional benefits and plays a crucial role in providing efficient drainage, protecting slopes against erosion, and supporting vegetation of plants for biotechnical soil stabilization.

Hence, а Two-day National Workshop on"Geosyntheticsfor Infrastructure Sustainability and Resilience (GEOINSURE 2023) was designed conducted by the and Dept. of Civil Engineering.Sasi Institute of Technology and Enginrring, Tadepalligudem in association with IGS Guntur chapter on 4th August and 5th August 2023 to impart field knowledge to the young students, faculty and engineers, on applications of geosynthetics, fostering the development of sustainable and resilient infrastructure.The workshop has covered various topics on Geosynthetics and their applications in various fields such as the construction of airport and eco-friendly runwav embankments. and sustainable solutions using geosynthetics in River Bank Protection, Drainage and Reinforced Soil Walls & Slopes, Use of geosynthetics with natural fibres.Overall,six expert lectures were arranged and the title of each lecture with the experts given below.

An overwhelming response was received during the registration period. About 133 students, young engineers, research scholars and professionals have registered for this two-day workshop. All the lectures were supported by real field scenarios, and data analyses were discussed from the field studies. The participating students in this workshop immensely benefitted from the interaction with the experts. A few photographs are attached along with the report.

| | 4 th August, 2023 (Friday) |) | | 5 th August, 2023(Saturda | y) |
|-------------------|--|--|--|---|----------|
| 9.00-9.30 AM | Registration | 1 | 9.00- | 5."Centrifuge-based Physical model studies on Geosynthetic Reinforced Soil | 60 |
| 9.30-10.15 AM | Inauguratio | n | 10.15 AM | Structures" by Prof.BVS Viswanadham, IIT Mumbai | Č. |
| 10.15-10.30 AM | Tea break | | 10.15- 10.30 AM | Tea break | |
| 10.30-11.45 AM | 1."Construction of airpor runway embankments as Kannur International Airpor using geosynthetics"(6th Pro Srirama Rao Lecture) by E Rajagopal, Rtd. Prof. Civil Engg & PK Aravindan Chair Professe at IIT, Madras and Adjund Professor at A.U, Vizag | rt f. g. sr | 10.30- 11.45 AM | 6." Engineered Landfills" by Prof. BVS Viswanadham, IIT Mumbai | |
| 11.45-1.00 PM | 2. "Ecofriendly an sustainable solutions usin geosynthetics "by Sukra Pandit, Senior Enginee (Technical),Maccaferri Environmental Solutions Pv Ltd., Gurugram, Haryana | er | 11.45-1.00 PM | 7."Geosynthetics for sustainable solutions in River Bank Protection, Drainage and Reinforced Soil Walls & Slopes' Slopes' by Dr Deepak Manjunath, Vice President – Design & Engineering, Terre Armee India, New Delhi | |
| 1.00-2.00 PM | Lunch brea | k | 1.00-2.00 PM | Lunch break | |
| | 3."Polymer Science an Manufacturing o | of | | 8. POSTER COMPETITION | |
| 2.00-3.15 PM | Geosynthetics ⁴⁷ by Dr. Da Naidu Arnepalli,Professo Department of Civ Engineering,Indian Institute of Technology Madra Chennai, Tamil Nadu | r, il of | 2.00-3.15 PM | 8. POSTER COMPI | ETITION |
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