# Conference on Geosynthetics and Sustainable Geonaturals in Engineering Applications

21-22 April 2025, at IIT Guwahati



### Organized by



Central Board of Irrgiation & Power



Knowledge Partner



Department of Civil Engineering, IIT Guwahati

#### ANNOUNCEMENT

The International Geosynthetic Society (India) is pleased to announce a Conference on "Geosynthetics and Sustainable Geonaturals in Engineering Applications," scheduled to take place on 21-22 April 2025, Hall - 1, Conference Centre, IIT Guwahati. In a world increasingly focused on sustainability, the construction and infrastructure sectors are witnessing a paradigm shift towards eco-friendly, resource-efficient, and natural fibre based solutions. Geo natural engineering focuses on the use of natural fibres like Coir, Jute, Sisal, Bamboo, Ramie, Hemp etc.in sustainable engineering practices. It also addresses the growing need to minimize environmental footprints while ensuring structural integrity and safety.

In a world demanding sustainable solutions, the construction and infrastructure industries are evolving. This conference, hosted by the IGS, explores the revolutionary intersection of geosynthetics and geonatural engineering.

#### SUB-TOPICS FOR DISCUSSION

- 1. Nature fibre based solutions in Geo-Engineering: Leveraging the power of nature to reduce environmental impact in construction and infrastructure projects.
- 2. Sustainable Soil Stabilization Techniques: Exploring eco-friendly materials and methods for improving soil properties in construction.
- 3. Geo-Environmental Engineering: Addressing the integration of environmental factors in geotechnical design and construction.
- 4. Use of Recycled and Natural Materials in Infrastructure Development: Innovations in utilizing sustainable materials for foundations, roads, and other civil structures.
- 5. Climate Resilience and Adaptation in Geotechnical Engineering: Best practices for creating infrastructure that can withstand extreme weather conditions and climate change impacts.
- 6. Geosynthetics and their Role in Sustainable Infrastructure: Exploring the advantages of geosynthetics for enhancing sustainability in construction.
- 7. Sustainable Practices in Tunneling and Underground Construction: Incorporating natural resources and sustainability principles in underground engineering projects.

#### WHO SHOULD ATTEND

- Engineers, geotechnical professionals, and researchers working in the fields of civil, environmental, and geo-environmental engineering.
- · Policy makers and regulators focused on sustainable infrastructure development.
- · Academicians and students interested in sustainability in engineering practices.
- · Consultants, contractors, and project managers in the infrastructure and construction industries.

#### WHY ATTEND?

This conference provides a unique platform to:

- Discover the Latest Advancements: Explore cutting-edge research and innovative applications of geosynthetics and sustainable geo naturals.
- Connect with Leading Experts: Network with researchers, engineers, and industry professionals from around the globe.
- Embrace Sustainable Practices: Learn how to minimize environmental impact while maximizing structural performance.
- Shape the Future of Infrastructure: Contribute to the development and adoption of eco-friendly construction solutions.
- Geonatural Engineering: Harnessing the Power of Nature

This conference highlights the potential of natural fibres like Coir, Jute, Sisal, Bamboo, Ramie, and Hemp in sustainable engineering practices. Learn how these materials can be used to:

- Reduce the Carbon Footprint: Embrace renewable and biodegradable alternatives to traditional materials.
- · Enhance Soil Stabilization: Utilize natural fibres for erosion control, slope stabilization, and ground improvement.
- Promote Biodiversity: Integrate natural materials to create environmentally friendly and ecologically beneficial solutions.
- · Geosynthetics: Enhancing Performance and Longevity

Geosynthetics, engineered polymeric materials used in civil engineering, play a crucial role in enhancing the performance and longevity of infrastructure projects. Discover how geosynthetics can be integrated with geonaturals to create synergistic solutions for:

 Reinforcement and Stabilization: Employ geosynthetics to reinforce soil structures, improving stability and load-bearing capacity.

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- Filtration and Drainage: Utilize geotextiles for effective filtration and drainage systems, preventing soil erosion and water damage.
- Separation and Containment: Implement geomembranes for containment applications, preventing contamination and protecting the environment.
- Road Construction: Employ Geogrid and other geosynthetics to improve performance of roads and pave the way for future road construction
- Coastal and River Bank Protection: Utilizing Geotubes and Geotextiles for protection of water bodies from Soil erosion
  This conference will delve into:
- · Case studies of successful geonatural and geosynthetic applications
- · Research on the long-term performance of sustainable materials
- · The economic benefits of adopting eco-friendly solutions
- Regulatory frameworks and best practices for sustainable construction

#### **KEY TAKEAWAYS FOR PARTICIPANTS**

- Insights into the latest advancements in geo-natural engineering practices and sustainable solutions.
- Practical knowledge of sustainable materials and construction techniques that reduce environmental impact.
- · Case studies and real-world examples of successfully implemented nature fibre based solutions in infrastructure projects.
- Networking opportunities with industry experts, researchers, and professionals working in the area of natural fibre based Geosynthetic products.
- Enhanced understanding of how to design, build, and maintain infrastructure in a climate-resilient and eco-friendly manner.

This event promises to provide participants with the knowledge and tools to integrate sustainability into their professional practices, helping them lead the charge in creating environmentally responsible infrastructure for the future.

#### CALL FOR ABSTRACT SUBMISSION

Abstract on the topics proposed and allied topics are invited. Intending authors may send the full text of their abstract, as per the guidelines given below. The last date for the receipt of the abstract is **10th April 2025**.

The abstract will be reviewed by the Technical Committee to assess its suitability for presentations. The abstract accepted for presentation will be notified by **15th April 2025**. A condition of acceptance of the case studies will be that the author, or one of the authors in case of multiple authors, will attend the Workshop and make the presentation.

The abstract shall contain:

- A descriptive, but brief title title, name(s) and affiliation of the author(s)
- Address for correspondence (including fax numbers and e-mail addresses)
- Detailed information about the objective, methods, results and conclusion, to enable a correct appraisal of the suitability
  of the proposed abstract for the Conference.
- · References at the end, with due reference in the text

The full text of the papers, not exceeding 08 pages of A4 size, in single space and 10 Point Normal Times Roman Font, both in MS Word and PDF, need to be sent through e-mail only at **contact@geosyntheticsindia.org** 

#### DATES & VENUE

The date for the event is 21-22 April 2025, Hall - 1, Conference Centre, IIT Guwahati.

#### OFFICIAL LANGUAGE

The official language for the event is English.

#### **REGISTRATION FEE**

- · The registration fee for members of IGS-India, CBIP and ISRM is Rs. 5000/- per participant
- For non-members the registration fees is Rs. 6000/- per participant
- 50% discount in the fee will be applicable for Young Participants (up to 35 years of age)
- The Speakers will be exempted from Payment of Registration Fee.

The registration fee includes a registration kit, working lunch, tea/coffee during the event only. The participants will have make their own arrangements for boarding and lodging, transport etc. Limited accommodation is available in IIT Guwahati guest house on a first come first basis. Registration fee once paid will not be refunded.

Spot registration facility will also be available provided prior Information is received.

#### PAYMENTS

The payment related to the event is to be remitted either through cheque in favour of IGS or through bank transfer to the following account:

All payments shall be made by Bank draft/cheque payable at par at New Delhi in favour of the "The Comm for the IGS". The payments can also be arranged by bank transfer as per details given below:

- Bank : Canara Bank
- Branch Name and Address : Delhi Diplomatic Enclave, 7/48, Malcha Marg, Chanakyapuri, New Delhi 21
- Account No. 0157101031508
   MICR Code No. 110015007
- Account Holder Name: THE COMM FOR THE IGS
- IFSC Code: CNRB0000157
   Swift Code: CNRBINBBDFS

Bank charges if any, must be borne by the participants and should not be deducted from the amount remitted.

#### **OPPORTUNITIES FOR SPONSORSHIP**

Exhibition pavilions are available at the following rate:

Platinum Sponsor :	Gold Sponsor :	Silver sponsor :
Rs. 3,00,000/-	Rs. 2,00,000/-	Rs. 1,00,000/-
<ul> <li>10 delegate passes for participation in the conference</li> <li>Company logo on main banner</li> <li>Circulation of Company Literature</li> <li>Announcement - Thanking sponsor</li> <li>Speaking Opportunity</li> <li>Table Space to display</li> <li>Invitation to the key person of the organisation as special invitee.</li> <li>Complimentary Advertisement in the Key Journal Published immediately after the event covering report of the event.</li> <li>One year complementary Institutional membership of IGS to Platinum sponsor besides other privileges</li> </ul>	<ul> <li>05 delegate passes for participation in the conference</li> <li>Company logo on main banner</li> <li>Circulation of Company Literature</li> <li>Announcement -Thanking sponsor</li> <li>Speaking Opportunity</li> <li>Table Space to display</li> <li>Invitation to the key person of the organisation as special invitee.</li> <li>Complimentary Advertisement in the Key Journal Published immediately after the event covering report of the event</li> </ul>	<ul> <li>03 delegate passes for participation</li> <li>Company logo on main Banner</li> <li>Announcement - Thanking sponsor</li> <li>Circulation of Company Literature</li> </ul>

#### **EXHIBITION FEE**

The tariff for the exhibition stall of 6 ft x 6 ft size is as under:

Exhibitors	Facilities		
Rs. 50,000/-	Chair 2; Table 1; 5, 15 Amp. Socket 1; Waste Basket 1;		
		100	

One free nomination will be allowed to the exhibitor for participation in the conference. For additional nominations, registration fee shall be payable.

#### SECRETARIAT

All correspondence relating to the event should be addressed to:

Shri A.K. Dinkar, Secretary, CBIP, and Member Secretary, IGS - Email : secretary@cbip.org Shri K.K. Singh, Director (WR), CBIP and Treasurer, IGS - E-mail: kksingh@cbip.org C/o CBIP, Plot No. 4, Institutional Area, Malcha Marg, Chanakyapuri, New Delhi-110 021 Phone: 91-11-26115984 / 26116567; Website: www.geosyntheticsindia.org

#### **Contact Person:**

Prof. Arindam Dey, IIT Guwahati, 8011002709; E-mail: arindamdeyiitg16@gmail.com Prof. T.V. Bharat, IIT Guwahati, 8486456715; E-mail: tvb@iitg.ac.in

For Accommodation in the campus or nearby, SPOC from IITG. Contact : Shri Mahesh Rongali : 9490072238

Shri Vishan Dutt, Adviser, CBIP, M: 9811431554, E-mail: vishandutt@cbip.org

Ms. Sakshi Praliya, Manager (WR) M : 8826434222, Email : Sakshi@cbip.org

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## Conference on Geosynthetics and Sustainable Geonaturals in Engineering Applications

21-22 April 2025, at Hall - 1, Conference Centre, IIT Guwahati (Monday & Tuesday)

### **REGISTRATION FORM**

(To be filled in block letters preferably typed)

1. Name			and the second states of	Store -
	(First Name)	(Middle Name)	(Surname)	
2. Position	A NOTE OF		- 10.11	
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Place:				(Signature)
Date :			The States	

#### SECRETARIAT

CBIP, Plot No. 4, Institutional Area, Malcha Marg, Chanakyapuri, New Delhi-110 021 Phone: 91-11-26115984 / 26116567