

ASCE India Section Quarterly News

An engineering society for the advancement of the science & profession of Civil engineering & enhancement of human welfare through the activities of society members

Aug – Oct 2022

Web Edition

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International Collaborative Events

3rd International Webinar Series on Latest Advancements in Geoenviro-Structural Confluence | 15 – 16 September 2022

The 3rd International Webinar Series on Latest Advancements in Geoenviro – Structural Confluence was jointly organized by ASCE IS SR, ASCE New Zealand Group, ASCE Student Chapter – Malnad College of Engineering, ASCE Student Chapter – Mahendra Engineering College, and Indian Geotechnical Society (IGS) as a part of Engineer's Day Celebrations on 15th and 16th September 2022.

Dr. Mahendra Gowda, Principal, MEC namakkal welcomed all the guest and participants to the online vent. Dr. Vijay V, Assistant Professor, MCE Hassan and Dr. Y. Shantharam, Associate Professor, MEC Namakkal were the coordinators. The virtual event was inaugurated by the Chief Guest – **Prof.** Natarajan Krishnamurthy, Founder-President, Centre for Workplace Safety and Health, National Institute of Engineering, Mysuru. The main aim of this webinar series was to disseminate the latest advancements in Civil Engineering domains through the leading academicians, and researchers, industry personnel to share their experiences and research outputs with scholars, UG /PG students, faculty members, and Civil Engineering professionals across the globe. The event brought together 100+ research scholars, faculty members, UG/PG students, and industry personnel to witness the recent advances in the wide arena of Civil Engineering across the globe.



Session 1: 04:30 PM (IST) | 15 Sept 2022 | Thursday

Ms. April J. Lander., MEP JP, ENV SP., A.M.ASCE

ASCE Region 10 Director-elect., Founder & President of ASCE New Zealand Group

Topic: "Hurricane Ida extreme weather and flooding in the United States and disaster risk mitigation measures"

Session 2: 05:00 PM (IST) | 15 Sept 2022 | Thursday

Mr. Silas C Nichols, P.E.
Principal Geotechnical Engineer, DOT | FHWA
Office of Bridges & Structures, Washington D.C., USA
Topic: "Geotechnical Site Characterization"

P.E. HWA USA on"



Session 3: 06:00 PM (IST) | 15 Sept 2022 | Thursday

Prof. Ramancharla Pradeep Kumar, Ph.D.
Head, Earthquake Engineering Research Centre,
International Institute of Information Technology, Hyderabad, INDIA
Topic: "Salient Points from Draft Tall building Code"

Session 1: Ms. April J. Lander, ASCE Region 10 Director-elect

Topic: "Hurricane Ida extreme weather and flooding in the US and disaster risk mitigation measures"

Key takeaways:

- More extreme weather events like Hurricane Ida causing extensive floodings and deaths confirming ongoing climate change
- 2. Infrastructure NOT designed to current and future climatic conditions and its changes
- 3. Advocated the importance of hydraulic engineering to solving flooding problems
- 4. Opined about implementing Disaster Management Strategies in NYC









International Collaborative Events

3rd International Webinar Series on Latest Advancements in Geoenviro-Structural Confluence | 15 – 16 September 2022

Session 2: Mr. Silas C. Nichols, Principal Geotechnical Engineer, USDOT

Topic: "Geotechnical Site Characterization"

Key takeaways:

- Elaborated on various risks associated with project delivery which are directly or indirectly related to the scope and quality of subsurface investigation and site characterization work
- 2. Explained the common sources of delays and cost escalations during project delivery
- 3. Described various performance requirements for site characterization
- Outlined the benefits of employing optical and acoustic televiewers

Session 3: Dr. Ramancharla Pradeep Kumar, Registrar, EERC, IIIT Hyderabad

Topic: "Salient Points from Draft Tall Building Code"

Key takeaways:

- Described about the Seismic Hazard Assessment, the relevant frameworks for its assessments, to understand the behavior of building when subjected to ground motion
- Changes proposed to the draft tall building code were enlisted and justified
- 3. Improvisations in the draft code were highlighted

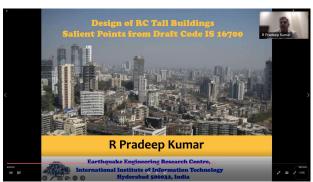
Session 4: Dr. Sanjay Rana, Parsan Overseas, New Delhi

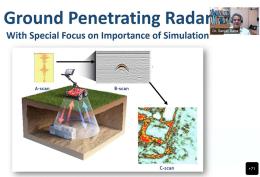
Topic: "Ground Penetrating Radar with special focus on importance of simulation"

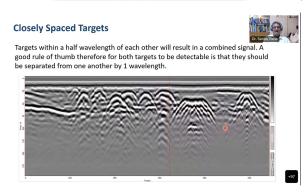
Key takeaways:

- 1. Explained about the various factors governing Ground Penetrating Radar (GPR), its suitability, and potential exploration depth
- 2. Provided case studies of the applications of GPR in fields
- Provided insights into the simulations performed using GPR and its limitations









Glimpses from the Virtual Event

International Collaborative Events

3rd International Webinar Series on Latest Advancements in Geoenviro-Structural

Confluence | 15 – 16 September 2022

Session 4: 03:00 PM (IST) | 16 Sept 2022 | Friday

Dr. Sanjay Rana, Ph.D.

Managing Director, PARSAN Overseas Pvt.Ltd., New Delhi, INDIA
Topic: "Ground Penetrating Radar-With special focus on importance of



Session 5: 04:00 PM (IST) | 16 Sept 2022 | Friday

Simulation'

Dr. Pankaj Kumar, Ph.D.

Senior Policy Researcher, Institute for Global Environmental Strategies (IGES) Kamiyamaguchi, Hayama, Kanagawa, JAPAN

Topic: "Sustainable Solutions for Urban Water Security: Innovative Studies"



PhD Chair of Structural Engineering, Deputy Director DISEG, Dept. of Structural, Geotechnical and Building Engineering, Politecnico di Torino - ITALY Topic: "Deep Learning in Structural Health Monitoring"



Session 5: Dr. Pankaj Kumar, IGES, Japan

Topic: "Sustainable solutions for urban water security: Innovative Studies"

Key takeaways:

- 1. Outlined the key factors water resources, and enlisted the common issues related to water pollution
- Introduced and enlightened about the concept of sociohydrology as a key approach for adaptation to water scarcity to achieve human well-being
- Explained how the new approach helps in the identification of possible locations in the geographical area to build Water Resource Recycling Facilities to improve the quality of water

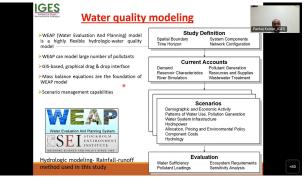
Session 6: Prof. Giuseppe C. Marano, Politecnico di Torino, Italy

Topic: "Deep Learning in Structural Health Monitoring"

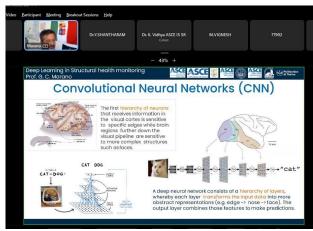
Key takeaways:

- Introduced to machine learning tools that provide innovative and vibrant developments in the field especially through the deep learning approaches
- Explained about the change of paradigm of the feature engineering approach because the feature extraction is automatically conducted in the learning phase of the network
- Provided insights into the most recent deep learning architectures such as convolutional neural networks adopted in the SHM field









International Events

Sustainability Trends, Global Risks and Building A Better World Through Application of The Envision Sustainability Rating System to Infrastructures

Envision was designed to help infrastructure stakeholders implement more sustainable, resilient, and equitable projects. Envision helps communities cut greenhouse gas (GHG) emissions, create goodpaying "green" jobs, address environmental justice, and meet climate-change targets. Infrastructure owners and design teams, community and environmental groups, constructors, regulators, and policymakers can all benefit from using Envision.

Envision is a flexible system of criteria and performance objectives to aid decision makers and help project teams identify sustainable approaches during planning, design and construction infrastructure projects that will continue throughout the project's operations and maintenance and end-of-life phases. The Envision system consists of different components: (1) The Envision Pre-Assessment Checklist can be applied early-phase and used to prepare later sustainability assessments; (2) the Envision Online Scoresheet provides for a detailed online self-assessment; (3) the Envision Verification provides for an independent third-party project review process; (4) the Envision Awards offer recognition for qualifying verified projects.

Tool Outcome

Depending on the component used, Envision provides decision makers and project teams with detailed information on the sustainability performance of infrastructure and thereby projects outlines possibilities for improvement and guides decision making. Using the Envision Verification, stakeholders receive a third-party evaluation of their projects' sustainability. Under the Envision Awards, projects that have completed the Envision verification receive a sustainability award depending on their sustainability performance (Verified - Bronze - Silver - Gold -Platinum).

Sustainability Criteria

The tool measures the sustainability of infrastructure projects across 64 criteria organized in 5 categories:

- Quality of life (14 criteria)
- Leadership (12 criteria)
- Resource allocation (14 criteria)
- Natural world (14 criteria)
- Climate & risk (10 criteria)









Glimpses from the Virtual Event

Student Chapter News

International Conference (Online) on Innovative Technology for Smart Construction Materials and Sustainable Infrastructure | 14 - 15 October 2022

The International Conference on Innovative Technology for Smart Construction Materials and Sustainable Infrastructure (ITSCMSI-2022) was successfully held on October 14th and 15th 2022. The ITSCMSI-2022 was organized by Department of Civil Engineering, Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada... Innovative and sustainable development is one of the leading civilization ideas in the field of Civil Engineering that has gained importance among the researchers in the recent past. In keeping view that the primary objective of the ITSCMSI-2022 to provide a platform to the researchers and practitioners from both academia as well as industry to meet and share cutting-edge development in the Civil Engineering in line with the conference theme "Building the World with Innovative Structures towards a Sustainable Future". The scope of the conference is to gather scientists, practitioners, members of technical committees and users of technical recommendations, to jointly at the same place discuss and envision the future sustainable development of materials, systems and structures in a holistic, global way. Thus, it aims at providing a premier platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered, and solutions adopted in the fields of Civil Engineering.

Dr. Lakshmi Keshav, Associate Professor, VRSEC welcomed the chief guest, keynote speakers and participants to the ITSCMSI-2022. Dr. Anuja Charpe, Assistant Professor, VRSEC, has given objective and themes of the conference. Dr. Hanuma Kasagani, Assistant Professor, VRSEC, has presented the outline of the schedule. Dr. Ch. Srinivas, HoD-CE, VRSEC addressed the gathering and welcomed the guest speaker. Also, welcomed the students and faculty participants from different colleges and universities. He addressed about the importance of the conference. She gave a brief introduction about the conference. Dr. C. B. Kameswar Rao. Professor. NIT Warangal. India. addressed the gathering. He talked about present scenario of Civil Engineering. All the presented papers in the sessions of ITSCMSI 2022 will be published in IOP Conference Series: Earth and **Environmental Science.**



Moments captured from ITSCMSI-2022

A total of 4 keynote sessions were organized as a part of ITSCMSI-2022. Four eminent and well distinguished experts in the field of civil engineering were invited to deliver their keynote speeches and share their knowledge along with their rich experience in the applications of the advancements in sustainable materials and infrastructure in civil engineering to the participants.

Dr. C. B. Kameswar Rao, Professor, NIT Warangal, India, delivered a keynote lecture on "Joints and connections in precast construction" on the Session-1 of first day of the conference, Ar. Sarly Adre Sarkum, Architecture futurist, Malaysiahas delivered a keynote lecture on "The importance of Carbon Measurement. the next step in Green Building Evolution" on the Session-2 of first day of the conference, Dr. Krishna R. Reddy, Professor, University of Illinois, Chicago has delivered a keynote lecture on "Soil and Groundwater Pollution: Problems and Solutions" on the Session-1 of second day of the conference and Dr. S. K. Shukla, Professor, Edith Cowan University, Australia has delivered a keynote lecture on "Fundamentals and Applications of Geosynthetic Engineering" on the Session-2 of second day of the conference.

Student Chapter News

Malnad College of Engineering, Hassan

- 1. Organized **One-day Technical Field Visit** to Chennakeshava Temple, Belur as a part of Mission Amrit Sarovar Jal Dharohar Sanrakshan Internship (AICTE Internship Program) on 16 July 2022.
- 2. 13 ASCE student members successfully completed the **Jal Dharohar Sanrakshan Internship** (AICTE Internship Program) submitting the deliverables to AICTE on 5th August 2022. The Internship Program was completely funded by AICTE.
- ASCE India Section Southern Region, ASCE New Zealand Group, ASCE Student Chapter Malnad College of Engineering, ASCE Student Chapter – Mahendra Engineering College and Indian Geotechnical Society jointly organized the 3rd International Webinar Series on Latest Advancements in Geoenviro-Structural Confluence during 15 – 16 September 2022
- 4. Instituted Alumni Interaction Series on 22 October 2022. **Er. Divya D. R.**, Alumnus 2020-21 Batch and Assistant Quantity Surveyor at Turner International (India) addressed the final year students.

Vedavyasa Institute of Technology, Malappuram

- 1. Organized a session on **Careers after Civil engineering** in association with ICI Calicut centre and ASCE IS SR on 17th September 2022
- 2. Organized a session on Lecture series on Skill development by M.tech students & Alumini in association with ICI Calicut centre and ASCE IS SR on 30th September 2022 and 21st October 2022
- 3. Organized an **Industrial visit to Cochin Shipyard Ltd. dry dock project** by L&T in association with ICI Calicut centre and ASCE IS SR on 7th October 2022
- Organized One day workshop on BIM in association with ICI Calicut centre and ASCE IS SR on 16th October 2022
- 5. Organized an **Industrial visit to Chellanam ULCCS coastal erosion project** in association with ICI Calicut centre and ASCE IS SR on 19th October 2022

Vellore Institute of Technology, Vellore

- 1. A session on "Connected and Autonomous Vehicles" was arranged on 14th September 2022. The speaker for the session was **Thiru.Satish Ukkusuri**, Reilly Professor of Civil Engineering, Purdue University. The session helped the participants to understand the various challenges in connection to vehicles.
- 2. An Alumni Talk with **Thiru.Mohammad Ajlan**, VIT Civil Engineering graduate of 2021 was arranged on 24th September 2022. The speaker is currently doing his Masters in Civil Engineering with specialization in Transportation Infrastructure and Systems Engineering at Virginia Tech University, Virginia, USA. The session was very useful and helped the participants to interact with the alumni and to get update on how to apply for Masters in abroad.
- 3. An eyeopener session "CASA: Awarness & Prevention of Substance Abuse" was arranged on 8th October 2022 by Ms. K. Vijayalakshmi, Founder, Detox your Mind Clinic, a highly acclaimed Psychologist and Motivational speaker. The lecture was very helpful for the students at this stage, since they all gone for certain depressions/health issues, so to address this and to overcome from those difficulties the session was very useful.
- **4. Dr. A. Sofi,** School of Civil Engineering, in association with ASCE VIT Student Chapter, arranged a video conferencing Foreign Expert Lecture (online) by **Dr. Flora Faleschini** (Assistant Professor Department of Civil, Environmental and Architectural Engineering, University of Padova, Italy) on the topic, "Green Concretes: How to Promote Sustainability in the Construction Industry Through the use of Recycled Materials". The session was on 22nd August 2022. Since sustainable concrete is an upcoming niche topic in the field of concrete, the session was a knowledge sharing platform from the International speaker. The session was also more an interactive session and students gained more knowledge on sustainable concrete.

Student Chapter News

SRM Institute of Science and Technology, Chennai

- 1. Professional Development Program was organized to **Train the Trainers** for School of Design Thinking 2nd August 2022 FinTech Design Center, Siruseri, Chennai
- 2. A Social Activity on Palm Seed Collection was organized as a part of Unnat Bharat Abhiyan, SRMIST and ASCE SRM Student Chapter. 15000 seeds from Pathiri Lake, Thindivanam were collected.
- 3. A Social Activity on Massive Palm Seed Sowing was organized as a part of Unnat Bharat Abhiyan, SRMIST and ASCE SRM Student Chapter. 10000 seeds were sowed near Thirutheri Lake, Near Mahindra City, Kattankulathur Block.

Society News

STRATEGIC PLAN – ASCE (2023 – 2028)

VISION

Engineered and natural systems work in harmony for the benefit of humanity.

MISSION

Lead the civil engineering profession to sustainably advance and protect the health, safety and welfare of all.

COMMITMENT TO OUR MEMBERS

Inspire, connect, and serve our global membership to maximize their professional and personal growth and magnify their lifelong professional impact.

STRATEGIC SHIFTS

SOCIETY

Innovate. Define and drive creative development and renewal of future-ready infrastructure.

Advocate. Promote and facilitate civil engineering leadership in developing equitable solutions to global challenges.

PROFESSION

Inspire. Energize and cultivate a diverse, inclusive, and engaged civil engineering community.

Stimulate. Accelerate development and adoption of emerging technologies, analytics, and systems thinking.

MEMBERSHIP

Magnify. Amplify our collective impact through a vibrant, engaged, and growing membership.

Deliver. Effectively manage our resources to provide exceptional value to members.

Promotions

NEWSLETTER SPONSORSHIP OPTION

Entitlements	DIAMOND SPONSOR	SUPPORTER	Bank details for fund transfer Via NEFT / RTGS / IMPS
Advertisement in ASCE IS SR Quarterly Newsletter published as Web edition	One Color Page (for four issues) INR 3,00,000 + 18% GST*	One Color Page (for one issue) INR 1,00,000 + 18% GST*	Account Name: ASCE India Section Southern Region Account No.: 0683101027959 IFSC: CNRB0000683 SWIFT Code: CNRBINBBBFD Bank: Canara Bank, IISc Bangalore Branch

Logo in Poster & all related correspondence through asceissr36@gmail.com / +91 95158 39079

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Click to read our Past Quarterly Newsletters:

- 1. ASCE IS Newsletter May Jul 2022
- 2. ASCE IS Newsletter Feb Apr 2022
- 3. ASCE IS Newsletter Nov 2021 Jan 2022
- 4. ASCE IS SR Newsletter Aug Oct 2021
- 5. ASCE IS SR Newsletter May Jul 2021



Promotions

ASCE IS SR Prize 2022

ASCE – IS SR Prize

In support of innovative projects carried out by the students of Civil Engineering, the ASCE India Section Southern Region has established the ASCE - IS SR Prize in recognition of:

Exceptional Bachelor's and Master's theses, which combine scientific advances with application areas of practical relevance in the domain of Civil Engineering with special emphasis on

Structural Engineering **Geotechnical Engineering** Transportation Engineering **Concrete Innovations Environmental & Water Resources Engineering**

This is a ASCE India Section Southern Region - wide award, which would be awarded annually to winners from a pool of candidates across all ASCE active Student Chapters in the technical institutions that offer undergraduate / graduate degrees in Civil Engineering.

Panel Members



Dr. Brajesh Kumar Dubey, FIE, C.Eng IIT Kharagpur



Prof. R. Pradeep Kumar

Southern Region

Applications are invited from all active Student Chapters across ASCE IS SR offering a Bachelor's / Master's degree in Civil Engineering

Applications may be submitted by latest 15th October 2022



Shamsher Bahadur Singh Prof. Prem Krishna, FNAE BITS Pilani



Gurgaon

support of innovative research in the domain of Civil Engineering, ASCE IS SR has **ASCE** established the IS SR Prize in recognition of exceptional Master theses, combine which scientific advances with application areas of practical relevance the domain of Civil Engineering.

This is an India Section Southern Region-wide award, awarded annually to a winner from a pool of candidates across all Southern Region Institutions that offer an undergraduate degree in Civil Engineering.











Required Documentation

- 1. An electronic copy of the Bachelor's / Master's thesis in PDF
- 2. A formal document mentioning the awarded grade for the thesis undersigned by the Head of the Institute / Department
- 3. A letter of recommendation written by the supervisor of the thesis or other professional, which highlights the contributions and justifies the value of the work
- 4. Any further supporting documentation (Eg.: further letters of support ~ max 3)
- 5. Curriculum Vitae of the student (max 2 pages)

The complete documentation should be forwarded by the supervisor of the corresponding thesis via email: To: ASCE - IS SR <asceissr36@gmail.com>

CC: Dr. Vijay V < vijayv92.11@mail.com >

For any queries, contact:

Er. Narsimha Chary Poloju, P.Eng., S.E, M.GI, M.ASCE, M.AEI, M.SEI President - ASCE IS SR | asceissr36@gmail.com Dr. Vijay V, Ph.D., C.Eng.(I), M.ASCE Coordinator | vijayv92.11@mail.com

ASCE - IS SR Prize

Terms & Conditions

- The author of the Bachelor's / Master/s thesis must be an ASCE Student Member
- The prize is established in recognition of exceptional Bachelor's & Master theses, which combine scientific advances with application areas of practical relevance in the domain of Civil Engineering
- Applications are welcomed from the Institutions across all active ASCE IS SR Student Chapters (and inception active ASCE IS SR Student Chapters (and inception student chapters) offering a Bachelor's / Master's degree in Civil Engineering
 The award categories are grouped in four focus areas:

 Outstanding UG Thesis (Men's Category)
 Outstanding PG Thesis (Men's Category)
 Outstanding PG Thesis (Wen's Category)
 Outstanding PG Thesis (Women's Category)

- The prize is awarded annually
 The Bachelor's / Master's thesis should have been
 formally accepted by the corresponding institution by the
 submission deadline
- The acceptance date of the thesis should lie within one year since the submission deadline
- The applications are assessed by the Panel comprising of experts in the Civil Engineering domain formed by the
- The prize winners of all categories will be tentatively
- announced on 15th November 2022 The cash awards of ASCE IS SR Prize will be presented during a ceremony organized by ASCE IS SR



The results of 2022 entries will be shortly announced.

Research and Publications News

Amrita School of Engineering, Coimbatore

- Soda P R K, Chakravarthi E K, Mogal A & Mini K M (2022) Statistical and experimental investigation on self-healing of microcracks in cement mortar by encapsulation of calcite precipitating bacteria into expanded perlite, Construction and Building Materials 342, Part A DOI: 10.1016/j.conbuildmat.2022.127985
- 2. Kadamban C A M, Aravinth Kumar V, Divyapprasanth M, Hari Prasad K V & Poornima V (2022) Usage of Non-metallic Fraction Recycled from Printed Circuit Board in Concrete Paver Blocks and Paver Tiles, Materials Today Proceedings
- Amaan Mohammad S, Naga Chaitanya Krishna T, Saketh T, Yashwanth Ganesh Y & Dhanya Sathyan (2022) Fresh and hardened state properties of waste tire fiber and steel fiber reinforced concrete, Materials Today Proceedings
- 4. Yogesh P, Ravi K, Karthik R, Bhavana M, Muthukumar S & Sathyan D (2022) Strength and Workability characteristics of Hybrid Bamboo and Steel Fiber Reinforced Concrete, Materials Today Proceedings
- Yogesh P, Ravi K, Karthik R, Bhavana M, Muthukumar S, Sathyan D (2022) Strength and Workability characteristics of Hybrid Bamboo and Steel Fiber Reinforced Concrete, 2022 Second Global Conference on Recent Advances in Sustainable Materials (GC-RASM 2022), A.J. Institute of Engineering & Technology, Karnataka, 28 - 29 July 2022 [Best Paper]
- Kumaresh Ravi (2022) Strength and Workability characteristics of Hybrid Bamboo and Steel Fiber Reinforced Concrete, 2022 Second Global Conference on Recent Advances in Sustainable Materials (GC-RASM 2022), A.J. Institute of Engineering & Technology, Karnataka, 28 - 29 July 2022
- 7. Saketh T, Mohammad S A, Krishna T N C, Ganesh C Y, Sathyan D (2022) "Fresh and hardened state properties of waste tire fiber and steel fiber reinforced concrete, 2022 Second Global Conference on Recent Advances in Sustainable Materials (GC-RASM 2022), A.J. Institute of Engineering & Technology, Karnataka, 28 29 July 2022
- Poornima V (2022) Usage of Non-metallic Fraction Recycled from Printed Circuit Board in Concrete Paver Blocks and Paver Tiles, 2022 Second Global Conference on Recent Advances in Sustainable Materials (GC-RASM 2022), A.J. Institute of Engineering & Technology, Karnataka, 28 - 29 July 2022

Velagapudi Ramakrishna Siddhartha Engineering College, Vijayawada

- Kumar, B. V., Charpe, A., Krishnamurthy, N. R., & Raut, A. (2022). Effect of bio-cementation process on sandy soil. In IOP Conference Series: Earth and Environmental Science (Vol. 1086, No. 1, p. 012017). IOP Publishing.
- 2. Prathipati, S. T., Paluri, Y., Vijay, K., & Chowdary, V. B. (2022). Evaluating the feasibility of blending fly ash and quarry dust in high-strength concrete to develop a sustainable concrete: A Study on the Mechanical and Durability Properties. In IOP Conference Series: Earth and Environmental Science (Vol. 1086, No. 1, p. 012060). IOP Publishing.
- 3. Prasad K S R, Pogula G, Janga S, Budi H & Sanagala H (2022) Study on Coastal Area Pollution by Anthropogenic Activities Along The Krishna Eastern Delta, Undergraduate Academic Research Journal: 1: (2), DOI: 10.47893/UARJ.2022.1027



ASCE India Section Accolades

Congratulations to **Mr. Pradeep** for being recognized as **Certified Trainer - Design The Thinking** - received on 26.08.2022 - Issued by SRM Institute of Science and Technology & School of Design Thinking



Congratulations to Mr. Satyansh Singh, Aff. M. ASCE of R V College of Engineering, Bengaluru for being recognized and awarded the 2022 Student Leadership Award

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Research and Publications News

KPR Institute of Engineeirng and Technology, Coimbatore

- P. V. Nidheesh, Akeem Adeyemi Oladipo, Nael G. Yasri, A. R. Laiju, V. R. Sankar Cheela, Abdoulaye Thiam, Yemane G. Asfaha, S. Kanmani, Edward (Ted) P.L. Roberts (2022) Emerging applications, reactor design and recent advances of electrocoagulation process, Process Safety and Environmental Protection 166, 600-616, ISSN 0957-5820, https://doi.org/10.1016/j.psep.2022.08.051.
- 2. Jayaprakash Sridhar, Ganesh Bhausaheb Shinde, D Vivek, Khalida Naseem, Piyush Gaur, Pravin P Patil, Misganaw Tesfaye Tesema (2022) Response Surface Methodology Approach to Predict the Flexural Moment of Ferrocement Composites with Weld Mesh and Steel Slag as Partial Replacement for Fine Aggregate, Advances in Materials Science and Engineering 2022, 9179480. https://doi.org/10.1155/2022/9179480
- 3. Lalitha Gnanasekaran, A.K. Priya, Ayman A. Ghfar, Karthikeyan Sekar, Madhappan Santhamoorthy, M. Arthi, Matias Soto-Moscoso (2022) The influence of heterostructured TiO₂/ZnO nanomaterials for the removal of azo dye pollutant, Chemosphere 308(1), 136161, https://doi.org/10.1016/j.chemosphere.2022.136161.
- 4. A.K. Priya, Lalitha Gnanasekaran, Kingshuk Dutta, Saravanan Rajendran, Deepanraj Balakrishnan, Matias Soto-Moscoso (2022) Biosorption of heavy metals by microorganisms: Evaluation of different underlying mechanisms, Chemosphere 307(4), 135957, https://doi.org/10.1016/j.chemosphere.2022.135957.
- 5. G. Anusha, R. Dineshkumar (2022) Study on paver blocks using waste plastics and sugarcane bagasse ash, Materials Today: Proceedings, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2022.08.367.
- 6. S. Manisha, S. Vinoth, M. Suresh Shunmugaraj, M. Manoj Kumar, Yanamala Pavithra Yadav (2022) Double skin rubberized steel fiber mixed composite column, Materials Today: Proceedings, ISSN 2214- 7853, https://doi.org/10.1016/j.matpr.2022.08.418.
- 7. S. Yuvaraj, K. Nirmalkumar, V. Rajesh Kumar, R. Gayathri, K. Mukilan, S. Shubikksha (2022) Influence of corrosion inhibitors in reinforced concrete A state of art of review, Materials Today: Proceedings, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2022.09.118.
- 8. V. Rajesh Kumar, S. Vinoth, S. Yuvaraj, K. Nishaanth, D. Naveen, S. Haribalan (2022) A review on effects on CBR value by using geosynthetics, Materials Today: Proceedings, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2022.09.176.
- 9. B S Meenakshi, S Narmatha, S Manodivya, M Mythili (2022) Potential usage of E waste as tiles with latex coating, Materials Today: Proceedings, ISSN 2214-7853, https://doi.org/10.1016/j.matpr.2022.08.372.
- 10. Dharmaraj R, Narayanan K, Ramalingam M, Vinodhini P, Rajalinggam P (2022) Effect of organic inhibitor on the corrosion behaviour of reinforced cement concrete. Materials Today: Proceedings., https://doi.org/10.1016/i.matpr.2022.09.353
- 11. Dharmaraj R, Manikandan P, Narayanan K, Malathy R, Alagumurugan R, Rajalinggam P (2022) Study of impact of crumb rubber used as an aggregate in concrete mix. Materials Today: Proceedings., https://doi.org/10.1016/j.matpr.2022.08.371
- 12. Dharmaraj R, Dhivakaran PN, Narayanan K, Sridhar R, Kumar SS, Rajalinggam P (2022) Strength characteristics properties of papaya leaf extract as green inhibitor in concrete. Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2022.09.104
- Dharmaraj R, Logeswaran S, Narayanan K, Ramalingam M, Prakash VC, Rajalinggam P (2022) An
 experimental investigation on improvement of concrete serviceability by using ferro sialate based bacterial
 concrete development. Materials Today: Proceedings. https://doi.org/10.1016/j.matpr.2022.08.498
- 14. Elavarasan S, Poornima S, Priya AK (2022) Steel fiber on the recycled aggregate hardened properties of concrete. Materials Today: Proceedings. https://doi.org/10.1016/j.matpr.2022.08.415
- Elavarasan S, Priya AK, Bharath S, Satheeshkanna R, Arunraj D (2022) Experimental studies on pervious concrete reinforced with polypropylene fiber. Materials Today: Proceedings. https://doi.org/10.1016/j.matpr.2022.08.492
- 16. Siddarth Selvaraj was awarded Honorable Mention for the 2022 ASCE FED Student "Three Minutes" Failure Case Studies Competition.

Research and Publications News

SRM Institute of Science and Technology

- 1. Sivanantham, P., Gurupatham, B. G. A., Roy, K., Rajendiran, K., & Pugazhlendi, D. (2022). Plastic Hinge Length Mechanism of Steel-Fiber-Reinforced Concrete Slab under Repeated Loading. Journal of Composites Science, 6(6), 164.
- 2. SRM Institute of Science and Technology (2022). Concrete structures with steel fibers (Patent No. 406757). The Patent Office, Gol.
- 3. Sivanantham P, Bagavadeen A H S, Pugazhlendi D, Jeyachandran N, Kannan N (2022). A concrete casting mould (Patent Filed)
- 4. Ganesh A B (2022) Infilled frame on hill slope construction and method. (Patent Filed)

Vedavyasa Institute of Technology, Malappuram

- 1. Abhinav C .V., Chandana M., Review on Use of Sea Sand and Bamboo As Building Materials International Journal of Research in Engineering and Science 10(7), 19-22.
- Anishma A., Anjusha R. (2022) Study on the buckling behaviour of cold formed steel lipped and unlipped column, International Journal for Research in Applied Science and Engineering Technology 10(6), ISSN: 2321-9653.
- 3. Arundathi K.V., Sukanya S., (2022) Transient analysis on bridge deck slab under the action of moving load and wind load, International journal of research in engineering and science 10(5), 19-25, ISSN(Online):2320-9364, ISSN(print):2320-9356.
- 4. Bareera A., Chandana M. (2022) Comparative study on effective usage of frp and steel external bonding for strength enhancement of RC beams: A review, International journal of advanced research and innovative ideas in education 8(3), ISSN(O)-2395-4396.
- 5. Burhana P., Divya K.K., Study on the shear capacity of concrete beam reinforced with glass fiber reinforced polymers grid reinforcement, International Journal for Research in Applied Science and Engineering Technology 10(7), ISSN: 2321-9653.
- Fahma Looha M.C., Anjusha R. (2022) A study on bond strength between steel fibre reinforced concrete and ultra-high-performance concrete as an overlay repair material, 10(6), 1201-1212, ISSN (Online): 2320-9364, ISSN (Print): 2320-9356.
- Muhammed H, Anjusha R. (2022) Study on the performance of cfat slender column with shapes and aspect ratio of the column under static loading, International Journal of Research and Analytical Reviews 9(2), 229-238, E-ISSN 2348-1269, P- ISSN 2349-5138.
- 8. Mumthaz M, Sukanya S. (2022) Static load investigation on cold formed steel quadruple-limb built-up column, International Journal of Research and Analytical Review 9(2), E-ISSN 2348-1269,P-ISSN 2349-5138.
- Rahnau M., Sukanya S. (2022) Deformation study on cavity column; a bamboo biomimicry approach ., International Journal of Research and Analytical Reviews.
- 10. Sandra P. K., Chandana M. (2022) Investigation of behavior of double skin composite wall under compressive loading 10(6), 1870-1880, ISSN (Online): 2320-9364, ISSN (Print): 2320-9356.
- 11. Sreelakshmi T. and Divya K.K. (2022) Study on axial load carrying capacity of concrete-filled double skin slender waist-shaped stub column, International Journal for Research in Applied Science and Engineering Technology 10(6), ISSN: 2321-9653.
- 12. Sreenidh V. Divya K.K. (2022) Study on partial replacement of cement with wood ash and CaCO₃ in M25 concrete and analysing its strength variations, International Journal of Research and Analytical Reviews, E-ISSN 2348-1269, P-ISSN 2349-5138.

Sree Vidyanikethan Engineering College, Tirupati

1. Orekanti, E. R., & Puram, R. (2022). Pullout Behaviour of Micropiles Stabilized with Fly Ash. *International Journal of Geosynthetics and Ground Engineering*, 8(6), 1-13.

Forthcoming Events

- 4th International Webinar Series on Latest Advancements in Geoenviro-Structural Confluence to be jointly organized by the ASCE IS SR, ASCE New Zealand Group, ASCE Greater China Section, and ASCE Australia Section in association with B. V. Raju Institute of Technology and ASCE Student Chapter -Marian Engineering College as a part of 170th ASCE Day Celebrations on 4th and 5th November 2022
- 2. International Conference on Recent Advances in Civil Engineering (ICRACE-2022) would be held in association with Habilete Learning Solutions Pvt. Ltd during 1 3 December 2022, and will be hosted by Cochin University of Science and Technology (CUSAT), Cochin, Kerala, India
- Register for the 11th International Perspective on Water Resources and the Environment (IPWE-2023)
 Conference jointly organized by the Institute of Water and Flood Management (IWFM), Bangladesh University of Engineering and Technology (BUET), and the Environmental and Water Resources Institute (EWRI) of ASCE in Dhaka, Bangladesh during 4 6 January 2023
- 4. The 2nd International Conference on Civil Infrastructure and Construction CIC 2023 will be held in Doha, Qatar, 5 8 February 2023. ASCE President Maria Lehman will attend as one of the invited keynote speakers by the organizer Qatar University.
- **5. Architectural Engineering Institute (AEI)** of ASCE is organizing **10th Biennial Professional Conference**, *Denver*, *Colorado*, April 12 14, 2023
- 6. 3rd International Conference on Innovative Trends in Engineering for Sustainability (IC-ITES) to be jointly organized by Toc H Institute of Science & Technology and Habilete Learning Solutions in association with ASCE IS SR, IEI, ICI, ISTE, IGBC and Universidad Católica de Temuco during 11 13 April 2023

ASCE ORGANIZATION PARTNERS PROGRAM

An individual member may know what benefits an ASCE membership offers, but what about a group membership. ASCE is an international leader in providing civil engineering technical content, offering technical and professional conferences, providing continuing education courses, and is the world's largest publisher of civil engineering content. ASCE also offers a Partner Program with organizations of all types and sizes, offering additional benefits in exclusive discounted rates in membership, training courses, recruiting services, and technical content. There are three programs to choose from: **Partners**, **Associate Partners**, and **ASCE DOT Partners**.

The Partner's Program is tailored for organizations with at least 50 members, with employees receiving discounted membership rates, and receiving additional technical membership, along with special discounted member rates on ASCE publications.

The Associate Partners Program (Small Business Partners) focuses on organizations with four or more members, but less than 50 members. The Associate Partners program is a two-year commitment and section dues as part of the purchase agreement. Benefits include: 20% discount individual memberships for up to 49 employees, 75% discount on ASCE journals, 10 free PDHs per year, Civil Engineering magazine, with additional discount on ASCE Continuing Education products (Live or On-Demand Webinars, P.E. exam review courses, and ASCE Guided Online Courses.

The ASCE DOT Partner Program is an exclusive option for U.S. Departments of Transportation through an agreement with the American Association of State Highway and Transportation Officials (AASHTO). With only a minimum of four employees participating, members receive reduced rates for membership, full conference registration, and select continuing education products. With 35 members or more, employee members receive a 20% discount on ASCE continuing education products, live on demand webinars and seminars, P.E. exam review courses, and guided online courses. Employee members also receive 10 PDHs, Access Engineering – an online references library, additional discounts on specialty conferences, education, and publications, like ASCE 7 standard. DOT employee members also receive 25% discount on ASCE national membership dues when they join or renew.

For more information on ASCE Organization Partners Program, send an email to partner@asce.org, or visit the website:

https://www.asce.org/membership/corporate-engagement/organization-partners/government-partners-and-resources

Forthcoming Events





An International Symposium on

Current Trends in Water and Wastewater Infrastructure Modeling and Treatment

Organized by Department of Civil Engineering, IIT Hyderabad

Venue: Indian Institute of Technology Hyderabad Date: 9 Jan 2023

Eligibility Registration Organizers

P.G. Students / Research Scholars
/ Professionals from Academia
and Industry

Last Date: 15 Dec 2022
Dr. Debraj Bhattacharyya
Dr. K.B.V.N. Phanindra
Rs. 1,000 /- (Others)

Registration Link: https://forms.gle/7mqqPUkiLEUESmgR7

Session A Water Infrastructure Modeling

Speakers

• Brian Parsons, P.E.

(MD, ASCE-EWRI, USA)

Title: Opening Remarks, Opportunities with ASCE / EWRI

• Sri Kamojjala, P.E.

(Las Vegas Valley Water District, USA)

Title: Optimizing Water System Functions with Digital Twins

Srinivasa Lingireddy, Ph.D., P.E.

(University of Kentucky, USA)

Title: Looking beyond surge analysis methods and software tools for effective protection of critical pipeline infrastructure

• Jejal Reddy Bathi, Ph.D., P.E.

(University of Tennessee at Chattanooga, USA)
Title: Watershed Nonpoint Source Hydrology and Pollutant
Load Modeling: Model Set-up and Uncertainty Analysis

• K.B.V.N. Phanindra, Ph.D.

(IIT Hyderabad, India)

Title: Hydraulic Transients in Distribution System-Analysis, Design, and Application Session B
Water and Wastewater Treatment

Speakers

• Shirley Clark, Ph.D., P.E.

(Penn State University, USA)

Title: Intermittent Filtration Performance: Impacts of Competing Ions, Contact Time, and Quiescent Time

Venkata Ramana Gadhamshetty, Ph.D., P.E.

(South Dakota School of Mines and Tech., USA)

Title: Advanced bioelectrochemical wastewater treatment technologies

Lee Odell, P.E.

(Murraysmith Inc., Oregon, USA)
Title: Optimizing Wastewater Treatment Trends in the
United States

• Krishna Kumar Upadhyayula, Ph.D.,

(Umea University, Sweden)

Title: Sustainability Performance Assessment of Municipal Wastewater Treatment Plants Contributing to Circular Economy

• Debraj Bhattacharyya, Ph.D.

(IIT Hyderabad, India)

Title: Wastewater Treatment using Microalgae

ASCE India Section - A Brief History



ASCE, the oldest national professional engineering society in the US founded on 5th November 1852, represents more than 150,000 members of the civil engineering profession in 177 countries out of 196 countries worldwide. The global HQ of ASCE is in Reston, Virginia. USA. Through the expertise of its active membership, ASCE is a leading provider of technical and professional conferences and continuing education, the world's largest publisher of civil engineering content, and an authoritative source for codes and standards that protect the public. The Society advances civil engineering technical specialties through nine dynamic Institutes and leads with its many professional- and public-focused programs.

ASCE comprises 9 Regions in North America and 1 Region that includes 23,245+ members that reside outside of the USA, Mexico, and Canada. Region 10 is composed of 18 Sections, 6 Branches, 12 International Groups, and 94 Student Chapters. International Sections, Branches, and Groups of ASCE are formed to promote the technical and professional development of members, engagement for ASCE members through meetings, guest speakers, networking, and technical content. ASCE encourages the spirit of cooperation among engineers, and with other engineering societies and educational institutions in matters of common interest.

ASCE India was established in 1988 as an International Group and promoted to a Section within one year, due to an exceptional growth of the membership and extraordinary technical activities performed during that period. Dr. Anil Krishnakar became the 1st President of the ASCE India Section. In 2012, the four Regions were formed under the umbrella of the India Section: IS-Eastern Region, IS-Northern Region; IS-Southern Region; and IS-Western Region. ASCE India Section Southern Region has more than 8,064 members out of 15,050+ members in India Section, inclusive of Student Members with free student membership.



