

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

May – July 2022

Web Edition

EDITOR-IN-CHIEF: Er. Narsimha Chary Poloju, Sr, C.Eng, P.E., S.E., M.ASCE

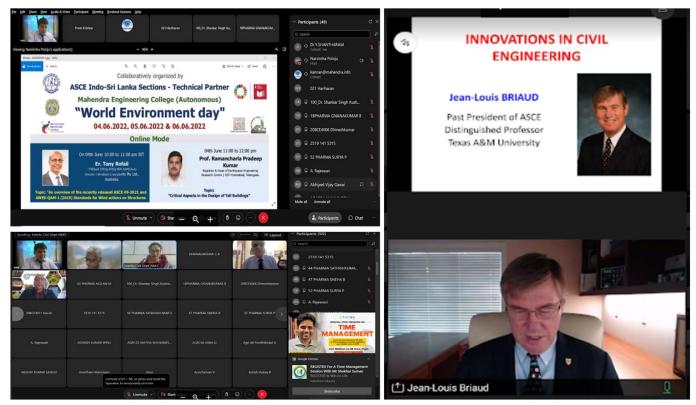
EDITOR: Dr. Vijay V. Nair, Ph.D., C.Eng. (India), M.ASCE



OVERVIEW OF THE ISSUE

International Events	01
Collaborative Events	05
Student Chapter News	07
ASCE India Section Accolades	11
Research and Publication News	13
Forthcoming Events	15
Obituary	16
ASCE India Section – A Brief History	17

The ASCE Indo-Sri Lanka Sections collaboratively organized the 2nd International Conference on Latest Advancements in Geoenviro-Structural Confluence under the banner of ASCE IS SR & SL sections and Technical partner, Department of Civil Engineering, Mahendra Engineering College, Namakkal, Tamil Nadu jointly organized the program on the "World Environment Day". The program was conducted in Hybrid mode, the program scheduled as online mode was held on 4th and 6th June 2022. On 5th June 2022, the event was organized at Mahendra Engineering College on the World Environment Day. A sponsorship of INR 30,000 was provided by ASCE IS SR for the conduct of the offline event.



Glimpses from Inaugural Session

A focus on innovations in the field of Geo-Environmental and Structural domain was the highlight on the conference. The valuable insights and the remarkable presentations were extremely useful for the naturalist, to emphasize and for safeguarding the environment. This conference also led to discussions on the significant topics related to the structural behavior under the wind impacts, earthquake forces, Structural health monitoring techniques for sustainable use, various risk management methodology, case studies on school buildings under the seismic forces. In offline mode, experts delivered a modern approach solid waste management and reinforcement for soil structure. The event was packed with enriched knowledge and updated the current technologies for the structural engineering professional members, practicing civil engineers, researchers, academicians, and public health engineers. The national and international speakers shared their knowledge and life experiences with all the participants.

Dr. R. Bharathi Ganesh, Secretary, ASCE IS SR delivered her welcome address followed by the inaugural address by **Er. Narsimha Chary Poloju**, President, ASCE IS SR. The Chief Guest **Jean-Louis Briaud**, former president of ASCE presided the virtual gathering and he motivated all participants to update the technical skills to make the world better and in a sustainable way. Special Guests - Prof. Narendra Samadhiya, IGS president and Prof. Prem Krishna, Governing Council Member, IAStructE presided over the gathering. The program coordinator provided a profile presentation of the resource person, concluding remarks of this program and vote of thanks

Day 1: 4th June 2022

Session 1: Er. Tony Rofail

Topic: "An Overview of recently released ASCE 49-2021 and AWES-QAM-(2019) Standards for Wind Actions for Structures"

Key Takeaways:

- 1. Delivered the topic on boundary layer simulation techniques under the wind impact for the various high-rise structures
- 2. Discussed on wind tunnel surface measurements by adopting the model study
- 3. Wind shear study for airport buildings were explained

Session 2: Prof. Ramancharla Pradeep Kumar Topic: "Critical Aspects in Design of Tall Buildings"

Key Takeaways:

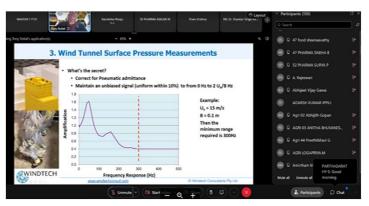
- 1. Emphasized on the seismic force actions on tall buildings and design of tall buildings including the site-specific hazard assessment location
- 2. The study was extensively used by the researchers working in the dynamic behavior of tall buildings
- Highlighted the topics like seismic micro zonation map for off built and on built environment.

Day 2: 5th June 2022 (Offline Mode) Session 1: Prof. Madhavi Latha

Topic: "An Overview of Latest Trends in Geocell Reinforcement"

Key Takeaways:

- Highlighted the structural behavior of soil under the dynamic forces
- 2. Highlighted the geocell application in various soil structures to mitigate the soil failure
- 3. Explained the mechanism of geocell under the static and dynamic forces
- 4. Enriched with knowledge on several geosynthetics and various cell applications





Glimpses from the Virtual Sessions on Day 1



Glimpses from the Physical Sessions held on Day 2 at Mahendra Engineering College, Namakkal

2nd International Conference on Latest Advancements In Geoenviro-structural Confluence (Hybrid Event) |4 - 6| June 2022

Day 2: 5th June 2022 (Offline Mode) Session 2: Prof. Krishna R. Reddy

Topic: "Electrokinetic Remediation of Contaminated Sites"

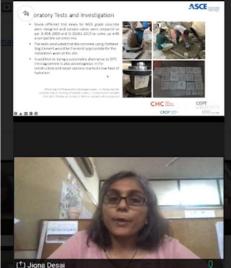
Key Takeaways:

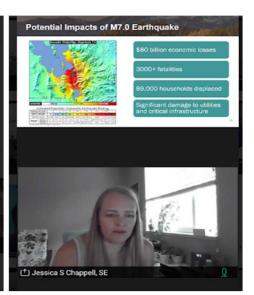
- Enlightened about solid waste disposal by Electrokinetic method
- 2. Described about the functions of electro-kinetic methods and disposal techniques
- 3. Demonstrated the electrokinetic system for contaminated sites in a remarkable



Glimpses from the Physical Session on Day 2







Glimpses from the Virtual Sessions on Day 3

Day 3: 6th June 2022 (Online Mode)

Session 1: Prof. Jigna Desai

Topic: "Sustainability, Climate Change & Conservation, where do we go from here?"

Key Takeaways:

- Presented architectural aspects of the building & retrofitting outdated buildings for the current uses
- 2. Showed the Muller's color scale analysis the origin of the material used in the constructions
- Discussed on the cost benefits analysis of buildings and recovery and regeneration of the buildings for the utilization of the existing resources

Session 2: Prof. Natraja Krishnamurthy
Topic: "Holistic approach to Risk Management"
Key Takeaways:

Enlightening about the negligence of hazards & developing risks

- Discussed different holistic approach for the risk mitigations
- 3. Delivered a valuable insight about the risk and its classifications

Session 3: Ms. Jessica Chappel

Topic: "Lessons from the Utah K-12 public school Inventory"

Key Takeaways:

- Explained case studies in a remarkable manner, especially the school building damaged by seismic activity.
- 2. Explained the potential of the M7.0 earthquake and its ill effects.
- 3. Described the repurposed and retrofitting of the school building.

Webinar on Precast Bridges-Accelerated Bridge Construction and Seismic Resilient Technologies | 27 July 2022

A Webinar on Precast Bridges- Accelerated Bridge Construction and Seismic Resilient Technologies was collaboratively organized by ASCE New Zealand Group, ASCE IS Western Region (WR) and ASCE Australia Section on 27 July 2022.



Ms. April Lander (Director-Elect, ASCE R10) and Er. Ravindrra J Ringshia (Corr. Member- Board of Governors, R10, ASCE, President, ASCE IS WR, & President-Elect, ASCE IS), delivered their welcome address to all the audience. Dr. KN Gunalan (President, ASCE 2020) addressed the audience about the benefits of being a part of ASCE and his journey so far. Dr. Elias B. Sayah (Director, Region 10, Board of Governors, ASCE), the Chief Guest addressed the audience outlining the need of the discussion on the topic of the webinar.

The keynote speaker - **Dr. Mustafa Mashal**, Associate Professor, Idaho State University on Accelerated Bridge Construction (ABC), which has been gaining popularity in the United States and other parts of the world. ABC advantages include, but not limited to rapid construction, less traffic disruption, better quality and durability for bridge components, improved safety, and less environmental effects. The webinar provided a practical guide for integrating precast concrete elements in actual ABC applications. Several applications of ABC in seismic and non-seismic regions were discussed. The state-of-the-art seismic resilient technologies for ABC from the United States and New Zealand were presented, accompanied by examples from the actual implement.



Accelerated Bridge Construction (ABC)

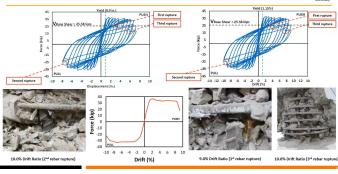


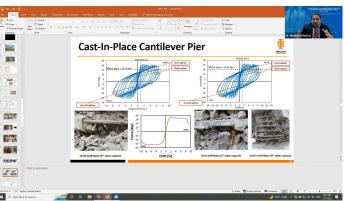
- "Reduced on-site construction time does not necessarily mean reducing the quality, instead, it implies to construct a cost-effective resilient bridge with increased safety and minimum traffic disruption (Ralls, 2014)."
- Precast concrete plays a major role within the context of ABC.
- Precast Concrete is defined as "The concrete that is cast elsewhere than its final position."



Cast-In-Place Cantilever Pier







Click to read our Past Quarterly Newsletters:

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

Collaborative Events

ASCE's Report Card for America's Infrastructure & IIJA | 27 May 2022

A Live Webinar on ASCE's Report Card for America's Infrastructure & IIJA was collaboratively organized by ASCE IS SR and Malnad College of Engineering, Hassan on 27 May 2022.



ASCE's Report Card for America's Infrastructure had been grading the country's infrastructure since the early 1990s. Greg DiLoreto, President 2013 - ASCE presented latest grades for the America's Infrastructure and IIJA during the event. DiLoreto outlined one of the best infrastructure grading mechanisms meant for future development and for continuous improvement and evaluation. The annual progress indicates the benefits that can result from analyzing and assessing the shortfalls in the existing infrastructure, possible technological advancements, and in addition understanding the required level of infrastructure investment and the public sector's ability to finance it in a community.

Nearly 250+ registrations from pan-India and Region 10 were recorded. For the live webinar. The participants were mainly students, research scholars, practicing engineers, and researchers.

Although it was highlighted that there were modest improvement as compared to the grade of D+ that was assigned in both the 2017 and 2013 report cards by ACSE on the America's Infrastructure, the Region 10 participants, especially the participants from India were curious to know more about the grading mechanisms and the criteria. The queries mainly focused on the scops of implementing such a grading mechanism for Indian Infrastructure and if it has already been used elsewhere outside USA.









Collaborative Events

Expert Seminar on "Solid and E-Waste Management" | 17 June 2022

An expert seminar was organized by the Department of Civil Engineering, the Institute of Aeronautical Engineering (IARE), Dundigal, Hyderabad on 17 June 2022. Er. Narasimha Chary Poloju, President, ASCE IS SR and the International Resource Speaker - Prof. Krishna R. Reddy, University Scholar, Distinguished Researcher, and Professor of Civil & Environmental Engineering, Director of Sustainable Engineering Research Laboratory (SREL) and the Geotechnical and Geo-environmental Engineering Laboratory (GAGEL), University of Illinois, Chicago, USA visited the IARE campus. The event was supported by ASCE IS SR.



Moments from the collaborative event held at IARE, Dundigal

The inauguration was followed by an expert talk titled "Solid and E-Waste Management" by Prof. Krishna R. Reddy. Prof. Reddy explained various types of solid and e-waste and how they harm the environment, as well as the various steps taken by the US government to manage solid waste and compared to Indian context in managing the Solid and E- Waste. The speaker gave the audience an overview of E-waste and the typical measures used to manage and address this issue.

This informative seminar was attended by the heads of the Civil and Mechanical Engineering Departments, as well as faculty and students from the Civil Engineering Department. Dr. V. Anand Reddy and Dr. V. V. S. H. Prasad - the Conveners of the event; Mr. K. Anand Goud, Dr. M. Venu, Mr. M. Madhusudhan Reddy, Mr. K. Tarun Kumar, Mr. G. Praveen Kumar, and other Civil Department faculty members, as well as student coordinators.

International Conference on Structural Engineering and Construction Management (SECON'22) | 1 - 3 June 2022

SECON'22, was the 6th Edition of the Annual Conference and the 3rd International Conference organised by the Department of Civil Engineering, Federal Institute of Science and Technology (FISAT), Kochi, India. The 3day conference was held from 1st to 3rd June 2022. The conference emphasized on the main theme "Green Technology and Infrastructure Developments" along with the following ten tracks. which discussed advancements and innovations in various streams of Civil Engineering. The intend of the conference was to create a platform for researchers to present, discuss and bring out the outcomes of the research and developments in the broad domain of Civil Engineering with focus on nature's sustainability and the development of infrastructure. SECON'22 was conducted in a hybrid mode enabling participation of all delegates around the globe.

The conference was organized in association with Springer publications, ASCE FISAT Chapter ISTE Kerala Section, ICI Kochi Chapter, IEI Kochi Chapter and Paradigm, Kochi. A Financial Support of Rs 10000/- was offered by ISTE Kerala Section for the conduct of SECON'22. We had received immense support from the international advisory committee members from various universities and the national advisory committee members from different institutes and industries.

For SECON'22, we had received 415 abstracts that included 6 International papers from 5 Countries and several papers from different prestigious colleges in India like NIT, IIT, VIT etc. We had a panel of 65 Reviewers around the country with PhD degree to review the papers in their respective area of specialization. The selection of papers was based on the score received from the internal and external reviewers.

The selected 100 papers will be published in Lecture Notes in Civil Engineering, the Scopus indexed publication by Springer as done in the previous publications of proceedings of SECON'19, SECON'20 and SECON'21, that had put great challenge on the organizers to keep on raising its standard in the selection of papers and the conduct of the conference. There were 5 keynote lectures by eminent personalities around the world and 100 paper presentations in 4 parallel sessions during these three days.

SECON'22







Moments captured from the Inaugural session of SECON'22

International Conference on Structural Engineering and Construction Management (SECON'22) | 1 - 3 June 2022

The keynote speakers were:

- (i) Prof. Shahria Alam, Professor, Civil Engineering, School of Engineering, The University of British Columbia, Canada
- (ii) Prof. Alessandro Palermo, Professor in Structural Engineering and Materials, Department of Civil and Natural Resources Engineering, University of Canterbury, Christchurch, New Zealand.
- (iii) Prof. Moncef L. Nehdi, Professor and Chair Department of Civil Engineering, McMaster University, Canada
- (iv) Dr. MO Kim Hung, Senior Lecturer, Department of Civil Engineering, Faculty of Engineering, University of Malaya, Kuala Lumpur, Malaysia.
- (v) Dr. Piyush Chaunsali, Assistant Professor, Building Technology and Construction Management Division, Department of Civil Engineering, IIT Madras.



The inauguration of SECON'22 was held on 01.06.2022 at the main seminar hall, FISAT. Dr. Jiji Antony, HoD Civil & General Convenor, SECON'22 welcomed the audience and Ms. Preethi M, Convenor, SECON'22, elaborated the theme of the conference. The conference was inaugurated by Mr. Shimith P R, Chairman FISAT and Dr. Manoj George, Principal, FISAT presided over the function and the felicitation was done by Prof. Jaya Kumari.V, Professor in Civil Engg. (Retd), ISTE Kerala Section Managing Committee Member, Er. P A Salahudheen FIE, Chairman, IEI Kochi Local Centre, Dr. Anil Joseph. President, ICI Kochi Chapter, Dr. C Sheela, Vice Principal, FISAT, Dr. Mini P R, Dean, FISAT. As the convergence of the inaugural session Dr. Unni Kartha G, Joint Convenor SECON'22 proposed the vote of thanks.

The conference concluded with a valedictory function on 03.06.2022. There was an award for the best paper which was given to the authors Fida A, Prince Thankachan and Madhavan Pillai T M for the paper "Optimization of Artificial Neural Network Using Cuckoo Search Algorithm For Damage Detection".



Sustainable Infrastructure: Role of Civil Engineers | 30 June 2022

Koya Srinivasarao Endowment Lecture was organized by the Department of Civil Engineering, V R Siddhartha Engineering College, India. A Lecture on "Sustainable Infrastructure: Role of Civil Engineers" was delivered by Dr. Krishna R. Reddy, Professor of Civil and Environmental Engineering, University of Illinois, Chicago, USA. The event was organized by IGBC V R Siddhartha Student Chapter in association with the ASCE Student Chapter V R Siddhartha Engineering College.



Prof. Reddy explained about:

- Sustainability, resilience and sustainable features which are being implemented in the Chicago region
- 2. The future technologies which are in development and research
- 3. Explained in detail about how one can work on sustainability.
- 4. Building resilient and sustainable structures
- 5. Case studies of his ongoing research projects







Moments captured form the Lecture Series

Malnad College of Engineering, Hassan

- Hosted Dr. C. Gifferd Satyadas Memorial Lecture Series (Dr. CGSML Series) A monthly webinar series
 on topics related to Civil Engineering covering a wide range of issues associated with all specializations of
 Civil Engineering including Structural Engineering, Construction Technology & Management, Geotechnical
 Engineering, Transportation Engineering, Environmental & Water Resources Engineering, and Utility &
 Development. The 2nd Edition of Dr. CGSML series was organized by the Students' Club of Civil Engineering
 Association of MCE Hassan.
 - 18 June 2022: An enlightening talk on "Only One Earth What Next?" was delivered by Dr. K. S. Lokesh, Professor and Former Registrar, JSSSTU, Mysuru (KA)
 - ii. 21 May 2022: A technical talk on "Corrosion Behavior of Steel Reinforcement in Concrete" was delivered by **Dr. J. Daniel Ronald Joseph**, Senior Scientist, CSIR-CECRI, Karaikudi (TN)
- 2. Organized an **Annual Techno-Sports Event** during 14 15 May 2022. Intra-department Sports events (Cricket and Throwball) and 2-day workshop on Total Station promoting peer-learning by inviting participants from polytechnic colleges were organized by the Students' Club of the Civil Engineering Association.
- 3. Organized a LIVE WEBINAR on "ASCE's Report Card for America's Infrastructure & IIJA" jointly organized by ASCE IS SR in association with Malnad College of Engineering, Hassan on 27 May 2022

Mahendra Engineering College, Namakkal

- 1. Workshop on "Startups The First Few Innovation Steps" organized by Department of Civil Engineering on 26 May 2022
- 2. 2nd International Webinar Series on "Latest Advancements in Geoenviro Structural Confluence" organized by ASCE Indo-Sri Lanka Sections and Department of Civil Engineering., Mahendra Engineering College, Namakkal (Technical Partner) during 4 6 June 2022.
- 3. An Awareness Program on Rainwater Harvesting in around the campus Near Mallasamudram, Thiruchengode, Namakkal.

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

Communication Address: Er. Narsimha Chary Poloju, c/o ASCE India Section Southern Region, #1-121/SA/202 Sonata Apartment, Allwyn X Road, Miyapur, Hyderabad, Telangana 500 049

ASCE India Section Accolades



ASCE HQ and Region 10 Board of Governors approved the application for the establishment of ASCE Student Chapters at College of Engineering (Trivandrum), Sree Buddha College of Engineering (Alappuzha), KPR Institute of Engineering and Technology (Coimbatore), and Malnad College of Engineering (Hassan)

American Society of Civil Engineers



STUDENT ORGANIZATION

CHARTER

In recognition of the organization of the

College of Engineering Trivandrum Student Chapter

of the American Society of Civil Engineers on July 12, 2022 Board of Governors has caused this Charter to be is said Student Chapter all the rights and privileges p in the Constitution and Bylaws of the Societ Issued: July 19, 2022





American Society of Civil Engineers



STUDENT ORGANIZATION

CHARTER

In recognition of the organization of the

Sree Buddha College of Engineering Student Chapter

of the American Society of Civil Engineers on July 12, 2022 of Governors has caused this Charter to be issued and by it grants to Student Chapter all the rights and privileges provided in the Constitution and Bylaws of the Society. Issued: July 19, 2022



American Society of Civil Engineers





STUDENT 🧱 ORGANIZATION

CHARTER

In recognition of the organization of the

KPR Institute of Engineering and Technology Student Chapter

of the American Society of Civil Engineers on July 12, 2022

Board of Governors has caused this Charter to be issued an said Student Chapter all the rights and privileges provider in the Constitution and Bylaws of the Society.

Issued: July 19, 2022





American Society of Civil Engineers



STUDENT ORGANIZATION

CHARTER In recognition of the organization of the

Malnad College of Engineering Student Chapter

of the American Society of Civil Engineers on July 12, 2022

Board of Governors has caused this Charter to be issued and by it grants to said Student Chapter all the rights and privileges provided in the Constitution and Bylaws of the Society. Issued: July 19, 2022

Dennis D. Truax, Ph.D., P.E., BCEE, D.W.RE, F.ASCE ASCE President 2022

Them W. hind m Thomas W. Smith, III, ENV SP, CAE, F.ASCE ASCE Evecutive Disserter

New Memberships & Advancements

- 1. Dr. ABHAY GUPTA New Affiliate Member
- Dr. CHANDRA BOGIREDDY Retention Member
- 3. Mr. C A PRASAD Retention Member
- 4. Dr. VEMULA ANAND REDDY New Member

Research and Publications News

Amrita School of Engineering, Coimbatore

- 1. Sivasubramanian, A., Krishna, S. A., Nair, D. H., Varma, K., Radhakrishnan, R., & Sathyan, D. (2022). Experimental validation of compressive strength prediction using machine learning algorithm. Materials Today: Proceedings.
- 2. Ardhira, P. J., Ardra, R., Santhosh, P. P., & Sathyan, D. (2022). A review on structural performance of geopolymer beam and geopolymer for strengthening the beam. Materials Today: Proceedings.

Mahendra Engineering College, Namakkal

- 1. Youvaraj, K., Amjath, B., Mani Shankar. S., Prasanth, R. R. and Mounika, M. (2022) Study on recycled aggregate and steel fibers in self compacted concrete, Scopus Indexed Conference Proceedings.
- Deepa, S., Mukeshraj, A. B., Sivakumar, C. T., Mohan, S. and Shanmugavadivu (2022) Determination on properties of Geopolymer Concrete using Industrial by-products , Scopus Indexed Conference Proceedings.
- 3. Gunasekaran, D., Srinivasan, K. V., Vignesh, M., Shantharam, Y. and Gnanapriya (2022) Experimental investigation of mechanical properties on concrete using foundry waste sand, Scopus Indexed Conference Proceedings.
- 4. Kannan, N., Saranya, M., Vignesh, M., Vidhya, K. and Arun, M. (2022) An experimental investigation on flexural behaviour of ferrocement composite slab, Scopus Indexed Conference Proceedings.
- 5. Saranya, S., Manikandan, S., Saradha, P., Nithya, B. and Vignesh M. (2022) Determination of properties of concrete using ecofriendly materials, Scopus Indexed Conference Proceedings.
- 6. Suresh Babu, J., Thimothy, R. W., Shantharam, Y., Arun, M. and Sivakumar, C. T. (2022) Enhancing the compaction properties of frictional-cohesive soil by adding the industrial ash products, Scopus Indexed Conference Proceedings.
- 7. Ahamed, M. Z., Subash, R., Shantharam, Y., Mani Shankar, S. and Suganthi. M. (2022) Investigation of soil settlement at mumbai harbour by incorporating soil index properties and augmentation of soil characteristics by adding cementitious compound, Scopus Indexed Conference Proceedings.
- 8. Arunraj, D., Sasirekha, V., Suganthi, M., Vidhya, K. and Manirasu, R. (2022) Seismic analysis and design of high rise building by using ETABS in different seismic zones, Scopus Indexed Conference Proceedings.
- 9. Harikaran, J., John, A. S., Nithya, B., Vidhya, K., Mohan, S. (2022) experimental investigation on fly ash based geo-polymer concrete using alkaline activators, Scopus Indexed Conference Proceedings.
- 10. Vignesh, A. H., Gokularaghavi, R., Shanmugavadiu, V., Vidhya, K. and Mohan S. (2022) Experimental investigation on flexural behaviour of RC beam using hybrid fibre (banana fibre & steel fibre) with copper slag as partial replacement, Scopus Indexed Conference Proceedings.
- 11. Vimalarani, L., Vikraman, R., Nithya, B., Dhamodharan, P., Sathishkumar, M. (2022) Experimental investigation on significance of energy efficient materials in enhancing compressive strength property of concrete, Scopus Indexed Conference Proceedings.
- 12. Ajay Krishnan, S., George, J., Mohan, S., Saradha, P. and Ranjan, H. (2022) Cost analysis and benefits of construction of segmental bridges, Scopus Indexed Conference Proceedings.
- 13. Priyanka, S., Anbarasu, R., Mani Shankar, S., Shantharam, Y. and Mounika, M. (2022) Experimental investigation on sustainable paver blocks, Scopus Indexed Conference Proceedings.
- 14. Ganapathy, R., Kannan, M. G., Vidhya, K., Mani Shankar, S. and Sakthivadivelan, S. (2022) Experimental investigations on effect of temperature in brick using industrial byproducts, Scopus Indexed Conference Proceedings.
- 15. Sivabalan, B., Sridhar, S., Manirasu, R., Vidhya, K. and Sudharson, N. (2022) Experimental investigation on properties of blended cement concrete, Scopus Indexed Conference Proceedings.
- 16. Lakshmipathi, K., Jayaprakash, S., Dhamodharan, P., Mani Shankar, S. and Sudharson, N. (2022) Enhancement of strength and durability characteristic of ternary blended reinforced concrete, Scopus Indexed Conference Proceedings.
- 17. Youvaraj, K., Amjath, B., Mani Shankar, S., Prasanth, R. R. and Mounika, M. (2022) Study on recycled aggregate and steel fibers in self compacted concrete, Scopus Indexed Conference Proceedings.
- 18. Suganthi, M. and Ramesh, N. (2022) Treatment of water using natural zeolite as membrane filter, Journal of Environmental Protection Agency 23(2), 520-530

Research and Publications News

KPR Institute of Engineeirng and Technology, Coimbatore

- 1. Priya, A. K., Jalil, A. A., Dutta, K., Rajendran, S., Vasseghian, Y., Qin, J., & Soto-Moscoso, M. (2022). Microplastics in the environment: Recent developments in characteristic, occurrence, identification and ecological risk. Chemosphere, 134161.
- 2. Thanigaivel, S., Priya, A. K., Dutta, K., Rajendran, S., Sekar, K., Jalil, A. A., & Soto-Moscoso, M. (2022). Role of nanotechnology for the conversion of lignocellulosic biomass into biopotent energy: A biorefinery approach for waste to value-added products. Fuel, 322, 124236.
- 3. Vinoth, S., Kumar, V. R., Dhivya, K., & ArjunKumar, S. (2022). Effect of self-compacting concrete added with concrete debris and steel slag aggregate. Materials Today: Proceedings.
- 4. Bharani, S., & Gulshantaj, M. N. A. (2022). Seismic Response of Composite Bridges: A Review. In Proceedings of International Conference on Innovative Technologies for Clean and Sustainable Development (ICITCSD–2021) (pp. 503-514). Springer, Cham.

Malnad College of Engineering, Hassan

1. Jayaprakash, S., & Swamy, V. (2023). Spatial SWOT Analysis: An Approach for Urban Regeneration. In Recent Advances in Civil Engineering (pp. 21-38). Springer, Singapore.

Mar Baselios College of Engineering and Technology, Trivandrum

1. Prasanthi, A. P., Bharath, B. L., Rahul, S., & Nair, R. S. (2022) Transportation and Development with K-Rail, Tech Conclave Competition - Technical Fest DRISHTI 2022, College of Engineering Trivandrum [1st PRIZE]

Marian College of Engineering, Trivandrum

 Krishna, D. A., Priyadarsini, R. S., & Narayanan, S. (2022). Effects of Compressive Strength of Concrete on RC Columns Subjected to Elevated Temperatures. Journal of The Institution of Engineers (India): Series A, 103(2), 423-431.

Research Outputs by Members

- 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. Rajapriyadharshini, J. R., & Sudalaimani, K. (2022). Tsunami wave impact assessment for residences in Pattinapakkam, Chennai coast using DualSPHysics. Regional Studies in Marine Science, 49, 102127.
- 3. Rajapriyadharshini, J. R. (2021). An improved smoothed particle hydrodynamics approach using new inverse kernel function. Journal of Ocean Engineering and Science.
- 4. Rajapriyadharshini, J. R., & Sudalaimani, K. (2020). Dam break analysis of Mullaiperiyar reservoir for environmental protection-a numerical approach. Journal of Environmental Protection and Ecology, 21(4), 1404-1413.
- Indian Patent titled, "New Inverse Logarithmic Kernel Function for SPH to solve Coastal Engineering problems", filed and published on Nov. 2019. Patent Application Number: 201941048258. Inventor: J.R.Rajapriyadharshini
- 6. Permana, A. S., Bandhari, B. S., & Ovhal, N. A. (2022). The Engineering of Zero Waste: Between Sustainability and Waste Production: This paper aims to understand the cradle to grave process in zero-waste at landfill site of municipal waste management system. Innovative Engineering and Sustainability Journal, 1(1), 38-49.

Research and Publications News

Vedavyasa Institute of Technology, Malappuram

- 1. Abhinav C .V., Chandana M., Review on Use of Sea Sand and Bamboo As Building Materials Volume 10, Issue 7, pp: 19-22, International Journal of Research in Engineering and Science (IJERS)
- Anishma A., Anjusha R., study on the buckling behaviour of cold formed steel lipped and unlipped column ISSN: 2321-9653; Volume 10 Issue VI June 2022, International Journal for Research in Applied Science and Engineering Technology (IJRASET)
- 3. Arundathi K.V., Sukanya S., Transient analysis on bridge deck slab under the action of moving load and wind load,19-25,ISSN(Online):2320-9364,ISSN(print):2320-9356 10(5), 19-25, International journal of research in engineering and science
- 4. Bareera A., Chandana M., Comparative study on effective usage of frp and steel external bonding for strength enhancement of RC beams: A review, ISSN(O)-2395-4396, Vol-8 Issue-3 2022, International journal of advanced research and innovative ideas in education (IJARIIE)
- Burhana P., Divya K.K., Study on the shear capacity of concrete beam reinforced with glass fiber reinforced polymers grid reinforcement ISSN: 2321-9653; IC Value: 45.98; SJ, Impact Factor: 7.538 Volume 10 Issue VII July 2022 International Journal for Research in Applied Science and Engineering Technology (IJRASET)
- 6. Fahma Looha M.C., Anjusha R., A study on bond strength between steel fibre reinforced concrete and ultrahigh performance concrete as an overlay repair materiaL, ISSN (Online): 2320-9364, ISSN (Print): 2320-9356 www.ijres.org Volume 10 Issue 6 || 2022 || PP. 1201-1212
- Hafeez Muhammed, Anjusha R., Study on the performance of cfat slender column with shapes and aspect ratio of the column under static loading, E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.9, Issue 2, Page No pp.229-238, May 2022, International Journal of Research and Analytical Reviews
- 8. Minu Mumthaz, Sukanya S., Static load investigation on cold formed steel quadruple-limb built-up column,E-ISSN 2348-1269,P-ISSN 2349-5138,Volume 9, Issue 2,IJRAR June 2022, International Journal of Research and Analytical Review (IJRAR)
- 9. Rahnau M., Sukanya S., Deformation study on cavity column; a bamboo biomimicry approach ., International Journal of Research and Analytical Reviews (IJRAR)
- 10. Sandra P. K., Chandana M., Investigation of behavior of double skin composite wall under compressive loading. ISSN (Online): 2320-9364, ISSN (Print): 2320-9356www.ijres.org Volume 10 Issue 6 ▮ 2022 ▮ PP. 1870-1880
- Sreelakshmi T. and Divya K.K., Study on axial load carrying capacity of concrete-filled double skin slender waist-shaped stub column. ISSN: 2321-9653; Volume 10 Issue VI June 2022- Available at www.ijraset.com, International Journal for Research in Applied Science and Engineering Technology
- Sreenidh V. and Divya K.K., Study on partial replacement of cement with wood ash and CaCO₃ in M25 concrete and analysing its strength variations (E-ISSN 2348-1269, P- ISSN 2349-5138), International Journal of Research and Analytical Reviews

Forthcoming Events

- 1. Webinar on "Sustainability trends, global risks, and building a better world through application of the Envision sustainability rating system to infrastructure projects" will be jointly organized by ASCE IS SR, ASCE New Zealand and IARE Dundigal (Technical / Media Partner) group on 13 August 2022.
- 2. The 9th Civil Engineering Conference in the Asian Region (CECAR9) is organized by Asian Civil Engineering Coordinating Council (ACECC) and supported by ASCE during 21- 23 September 2022 at Taj Resort and Convention Centre, Goa
- 3. Register for ASCE 2022 CONVENTION, Anaheim, California, October 23 -26, 2022
- 4. 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
- 5. 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
- 6. Architectural Engineering Institute (AEI) of ASCE is organizing 10th Biennial Professional Conference, Denver, Colorado, April 12 - 14, 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, AccessEngineering – 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-

OBITUARY

In Memoriam Er. Kesavan Gangadharan



Er. Kesavan Gangadharan F.ASCE

Kesavan Gangadharan, a structural consultant at lyer & Mahesh Consultants, Kerala, India, and an ASCE life member whose exemplary career spanned nearly six decades in six countries, has died. He was 88.

Gangadharan, P.E., F.ASCE, was behind the design and construction of a wide variety of public, private, commercial, recreational, agricultural, and marine structures. He oversaw the construction of multimillion- and multibillion-dollar projects in Bahrain, Saudi Arabia, India, Qatar, and Kuwait as head of structural engineering and in senior engineer roles. Beginning his career in 1965 with the state of Kerala's Public Works Department (PWD) designing public buildings, government offices, commercial complexes, roads, and bridges, he then continued with multinational consulting engineering companies in the Middle East. In the early 1990s he worked as the senior structural/civil engineer for the Bahrain Defense Force, constructing projects worth more than 200 million Bahrain dinars (\$530.5 million).

A point of pride for him as a civil & structural engineer was being as conversant with the design practices & construction techniques of the Middle East as he was with British, ACI, international, Euro, CEB-FIP, & Indian codes.

Gangadharan was a life member of ASCE, Bahrain SE, ACI, IASC, and ISSE, and a fellow at FIE, FACCE, FIA Struct E, FICI, among numerous other professional bodies.

He worked as manager of the structural engineering department of Mohammed Salahuddin Consulting Engineering Bureau, Bahrain, overseeing the design and structure of many commercial projects, shopping malls, showrooms, and factories. Later he lent his expertise to Bonyan Design, Consulting, Architects, Planners & Engineers in Kuwait, and was designated as the senior structural engineer for their major projects in Kuwait.

Entering the 2000s, Gangadharan was senior civil engineer for GMEC-KUK, the German consultant on construction of Al Saad Stadium, Doha, for the Qatar Asiad 2006. Although technically retired, he continued to be professionally active almost until his death in Thiruvananthapuram, Kerala.

ASCE India Section is mourning the loss of the Engineer behind massive Indian and Middle Eastern projects, but also celebrating his successful life.

Rest in peace Er. Kesavan Gangadharan.

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 92 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 7,200+ members, inclusive of Student Members with free student membership.

