

KPR Institute of Engineering and Technology

(Autonomous, NAAC "A")

ASCE Student Chapter KPRIET

Annual Report
February 2022 – January 2023
American Society of Civil Engineers Student Chapter
India Section - Southern Region

Contact Information



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ASCE Student Officers



| ASCE STUDENT OFFICERS - 2022 | ASCE STUDENT OFFICERS - 2023 |
|--|--|
| Mr FAHEEM AHMED A – III 'B' CIVIL PRESIDENT 20cel06@kpriet.ac.in | DHARANI KRISHNA N P - III 'A' CIVIL PRESIDENT 20ce013@kpriet.ac.in |
| Mr PRASANTH S – II 'B' CIVIL VICE PRESIDENT 20ce051@kpriet.ac.in | MANOBHARATH P - II 'A' CIVIL VICE PRESIDENT 21ce058@kpriet.ac.in |
| Ms SARANYA R – III 'A' CIVIL TREASURER 19ce039@kpriet.ac.in | THITHEASHWAR K K – II 'B' CIVIL TREASURER 20ce107@kpriet.ac.in |
| Ms SHIYAMALA R - II 'B' CIVIL CORRESPONDING SECRETARY 20ce066@kpriet.ac.in | CHANDRAGOWRI M J - III 'A' CIVIL CORRESPONDING SECRETARY 20ce011@kpriet.ac.in |
| Ms FATHIMATHUL FUHAIMA P P - II 'A' CIVIL RECORDING SECRETARY 20ce016@kpriet.ac.in | SIDDARTH S - III 'B' CIVIL RECORDING SECRETARY 20ce068@kpriet.ac.in |

KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

Advisors





Dr. G. ANUSHA
FACULTY ADVISOR
PROFESSOR & HEAD
DEPARTMENT OF CIVIL ENGINEERING
KPRIET, COIMBATORE, TAMILNADU
INDIA



Prof. (Retired) RAJAYOGAN
PALANICHAMY
PRACTITIONER ADVISOR
PRESIDENT, ASCE INDIA SECTION
VIRUDHUNAGAR, TAMILNADU
INDIA



Er. L. BALAJI M.E., F.I.E., F.I.V., LLB.,
PRACTITIONER ADVISOR,
INTERNATIONAL PROFESSIONAL
ENGINEER, CHARTERED ENGINEER
& GOVT REGISTERED VALUER,
BALAJI & ASSOCIATES.
MADURAI, INDIA

KPRIET Proposed ASCE Student Chapter Recognition









- ➤ Siddarth S, III year from Department of Civil Engineering, KPR Institute of Engineering and Technology, received Honorable mention award in the "Three Minutes Failure case studies competition", A International Level Technical Event Organized by ASCE.
- ➤ Monika S (Batch 2018-22), from Department of Civil Engineering, KPR Institute of Engineering and Technology, received outstanding UG thesis award 2022, Organized by ASCE IS SR

Mission Statement



"At KPRIET - The American Society of Civil Engineers Student Chapter (ASCE) is a student organization that reinforces the life of civil engineering students through technical events and industrial interactions."



Goals



- To make all students to join the ASCE Student Chapter and thereby create opportunities for them to connect with the civil engineering community around the world
- To provide a platform wherein students develop their skills and knowledge by organizing programs like industrial lectures, field trips, conferences etc
- Equip members to take up community service projects to benefit the society



PLANNING MEETING WITH ALL MEMBERS

Conducted on 18.02.2022



- Proposed ASCE Student Chapter of KPRIET, has conducted the meeting for students regarding upcoming events and members are motivated to participate in competitions.
- Student members are invited to present their suggestions on the scheduled upcoming events.
- Importance of developing leadership skills and public relationship skills among the students is delivered.



ICI SPONSORED SEMINAR

CONCRETE AND COMMON SENSE – 26.02.2022



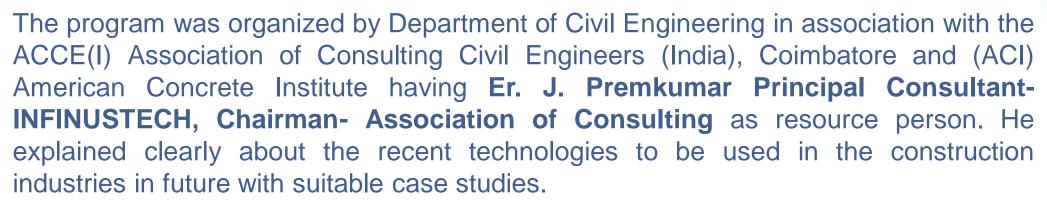
Dr. A. Sudhakar, M.E, Ph.D, CEO – Dimensions, President – Indian Concrete Institute, Coimbatore Chapter addressed the gathering on work flow in construction projects, effective use of concrete and the challenges in practice, thrust areas, application of Indian Standard codes, innovative approaches in concrete technology and opportunities for civil engineers. And He cleared the doubts raised by the students.





ACCE CEMENT AND ACI SPONSORED WEBINAR

RECENT ADVANCEMENT IN CIVIL ENGINEERING – 01.03.2022









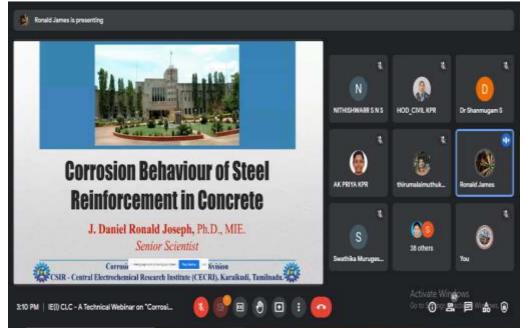
IEI SPONSORED WEBINAR

Corrosion Behaviour of Steel Reinforcement in Concrete – 11.03.2022



Dr. J. Daniel Ronald Joseph, Senior Scientist, Corrosion and Materials Protection Division, CSIR - Central Electrochemical Research Institute (CECRI explained about specific design tools and preventative techniques for the prevention of steel corrosion. He explained about the corrosion mechanism, resistivity methods, Electro chemistry and polarization techniques.





EXPERT TALK

CIVIL ENGINEERING CONCLAVE 15.03.2022



Dr. V. K. Raina who has been a team leader in the multi billion **USD** highways & bridges projects in the Middle East for than 10 years in the UN team of experts has delivered an expert talk on "Development of the Bridge-Form Globally over the Past 35 Centuries". He has enlightened the gathering through his efficacious, informative and thought-provoking speech about historical revolution in Bridge Engineering.. He has also actively interacted with students, members of faculty and participants.



SOCIAL FUNCTION

INDUSTRY CONCLAVE 23.03.2022



Industry Conclave 2022 Organized by the Department of Civil Engineering of KPR Institute of Engineering and Technology took place at Raagam hall in the college premises with **Dr. PSK. R. Periasamy, the chairman of PSK group of Institutions**, Namakkal as the special guest. The conclave was marked with the presence and participation of 30 eminent managing directors and Association heads like BIA COCENA and 18 construction companies who were felicitated and honoured with mementos by the KPR Institute of Engineering and Technology.





KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

NATIONAL LEVEL TECHNICAL SYMPOSIUM



CIVISTRA 2022- 25.03.2022

The Workshop on "Sketchup" and Seminar on "Career Guidance" was conducted to the students in the morning session after inauguration. Mr. M. Ram Vivekananthan, Draftsman, BIM-COE demonstrated about the sketchup software. Mr. A. Vasudev, Trainer, KPR Civil Academy educated the students about the opportunities of Civil Engineers in public and private sectors.

In the afternoon session, the events like Tech connect, Code Cracking, Cadd Contest, gully cricket and Spot events were conducted.







KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

PLANNING MEETING

WORKSHOP - 01.04.2022



- Student leaders are motivated to increase the members of the team
- Student members are encouraged to participate in the conference competitions
- Student leaders are asked to conduct the Industry Expert talk, Conferences and Guest Lecture effectively for the upcoming events.
- Student leaders are asked to explore the possibilities of industry internships and placements



KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

PLANNING MEETING

Conducted on 06.05.2022



Proposed ASCE Student chapter of Department of Civil Engineering, KPR Institute of Engineering and Technology organized meeting for the academic year 2021-2022 on 06.05.2022. Student members were appreciated for their effective conduction of scheduled events and their participants in various conferences, social functions and community projects by faculty advisor Dr. G. Anusha, Professor & Head/Civil.



FIELD TRIP

VISIT TO BUILD EXPO BY CNI - 16.07.2022



The Department of Civil Engineering arranged a visit to build expo'22 organized by CNI (Construction Network of India) at Brindhavan hall, Coimbatore on 16.07.2022. **OBJECTIVES:**

- 1. The main objective of this visit is to understand the different components of building construction materials available in the market.
- 2. To learn and understand the materials that are used in construction.





INDUSTRY EXPERT TALK

CNI - 22.07.2022



Er. C. SatchithanandaMoorthy, Proprietor, Silent Valley Construction spoke to the students about the various fields in the construction industry, such as civil contractor, LBS, bank valuer, digital surveyor, soil investigator, real estate developer, demolishing contractor, equipment supplier, interior work, material manufacturer, and gypsum plastering contractor, among others. Along with his prior experiences, he also clearly defined the first financial requirement for the start-up in each of the aforementioned

disciplines.





EXPERT TALK

ORIENTATION PROGRAM ON ASCE STUDENT CHAPTER - 30.07.2022



Mr. Narsimha Chary Poloju, President, ASCE India Section, Southern Region, addressed the students on the various opportunities available to enhance the knowledge and skills of the students through ASCE Student Chapter. Mr. Narsimha Chary Poloju focused on the skills to be developed by the students to win the competitions. He also shared the scholarship schemes & awards provided from ASCE. Finally he interacted with students and cleared their doubts.





PLANNING MEETING

Conducted on 08.08.2022



ASCE Student chapter of Department of Civil Engineering, KPR Institute of Engineering and Technology organized planning meeting for the academic year 2022-2023 on 08.08.2022. Announced students regarding the establishment of ASCE Student chapter in our Institute. Student officers and office bearers for the academic year were selected after brief introduction of ASCE Student chapter in the classes and Students are motivated to participate in the various conferences, social functions and community projects by faculty advisor Dr. G. Anusha, Professor & Head/Civil. Student officers are asked to prepare the event schedule for the academic year 2022-2023.





INDUSTRY EXPERT TALK

FUTURE SURVEYING TECHNIQUES – 10.08.2022

The session was organized by Department of Civil Engineering in association with the ACCE(I), Coimbatore. **Er. T. Thilak Ranjith, Partner, Land Coordinate Technology, Chennai** Life member - ACCE(I) explained clearly about the recent surveying technologies used to perform surveying works and also future technology with suitable case studies. This event enhanced the knowledge of Civil Engineering students and will help to upgrade themselves. Resource person also clarified the doubts raised by the students and interacted with them.







INDUSTRY EXPERT TALK

GUEST LECTURE ON CONSTRUCTION PROJECT MANAGEMENT – 24.08.2022



Dr. S. Jayachandran, Vice President, Marudham Group addressed the gathering on various Job opportunities in Construction Project Management sector. And He explained about them to the various roles of a construction project manager with real time case studies. In his presentation he addressed about all the major facets of **construction Project management** including Project initiation and planning, scheduling techniques, organizing methods, controlling process and Resource

allocation



ICI SPONSORED STUDENT CONFERENCE

CONCRETE MARATHON 2022– 07.09.2022



activities variety of including technical paper presentations, poster presentations, code cracking, and connections were held. More than 170+ participants from various institutions took part in the event. External participants actively took part into the events and participated. In the valedictory function, prizes were given out to the winners.



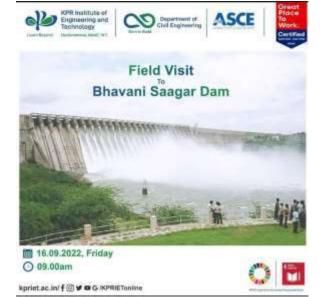


FIELD TRIP

FIELD VISIT TO BHAVANISAGAR DAM - 16.09.2022

Students from III year civil visited the dam. The water is fed into the Bhavani river known as Upper Bhavani. The eastern catchment area includes the Upper Bhavani, Avalanche and Emerald lakes, Kundha, Gedhai, Pillur and Nellithurai. Students were able to understand the types of dams mainly about the earthen dam. Assistant Engineer explained students about the spillways and types of spillways. A field trip to Dam was arranged with an aim to make learning experience more powerful and

impactful.





PLANNING MEETING

Conducted on 26.09.2022



- ASCE Student Chapter of KPRIET organized a planning meeting and presentation session for community service projects
- Student members involved in the community service projects were reviewed by the faculty members of department of civil engineering and Faculty Advisor and Head/Civil Engineering Dr. G. Anusha.
- Smart Irrigation System, Implementation of AI based Smart Rain gauge in Rural Village were the two project ideas selected for the further development.



IEI SPONSORED SEMINAR

ALL INDIA SEMINAR ON "ADVANCES IN HAZARDOUS WASTE MANAGEMENT TECHNOLOGY"- 29.09.2022 & 30.09.2022



The first Technical session started at 10:00 am and was on Entrepreneurship and Sustainability" "Ewaste Mr. Prasanth Omanakuttan. The speaker shared experiences in developing a new start-up company and the challenges faced in developing waste management. The second Technical session commenced at 11:15 pm delivered by Dr. G. Anusha, Professor and Head, Department of Civil Engineering, KPRIET shared her expertise on 'Hazardous Waste Management'. The Third Technical session commenced at 02:00 pm delivered by Dr M Kaarthik, Assistant Professor, Department of Civil Engineering, Coimbatore Institute of Tech., Coimbatore shared his views on 'Waste to wealth'. He presented about the recent technologies in waste recycling and recover. This was followed by paper presentation -Technical Session IV where 4 papers were presented.



The Institution of Engineers (India) **Coimbatore Local Centre**



in association with

Department of Civil Engineering

KPR Institute of Engineering and Technology Coimbatore

Cordially invites you for

All India Seminar

Advances in Hazardous Waste Management Technology





Mr. Prasanth Omanakuttan Green Era Recyclers, Coimbatore



Assistant Professor







Dr S Shanmugam FIE Chairman

Venue: Thanam Hall Time: 09.00 AM - 04.00 PM

Dr J Krishnamoorthi FIE Honorary Secretary



IEI SPONSORED SEMINAR

ALL INDIA SEMINAR ON "ADVANCES IN HAZARDOUS WASTE MANAGEMENT TECHNOLOGY" – 29.09.2022 & 30.09.2022



Session V on "Urban Waste Management" commenced at 09.30 AM delivered by **Dr. M Ibrahim Bathusha**, **Professor(CAS)**, **PSG College of Technology**, **Coimbatore**. He elaborated on the development of urban waste Management and its development. **In Session VI, 4 papers were presented**. Session VII on "Solid Waste Management" commenced at 02.00 PM delivered by **Dr. S Subramanian**, **Professor & Head**, **Department of Chemical Engineering**, **KPR Institute of Engineering and Technology**, **Coimbatore**. He elaborated on the development of waste Management and its development. **This was followed by paper presentation – Technical Session VIII where 2 papers were presented**.



EXPERT TALK

INTRODUCTION TO ONLINE RCC BUILDING DESIGN SOFTWARE: MVDAD - 08.10.2022



The Guest Speaker Mr. B. P. Karamchandani, MvDAD Software Developer, Maharashtra, handled the session for students through Google Meet. He explained about the online RCC Building Structural Design Software: MvDAD, in which any layman can just select the 12 data from the drop-down box, upload the Centre Line Plan with Column Location, and lastly, enter only the Bearing Capacity of Soil. The software is a 5 in 1 process which includes analysis, design, drawing, step-by-step calculations, bill of quantities, cement, and steel reinforcement.





EXPERT TALK

IRRIGATION ENGINEERING – 15.10.2022



Dr. S. Punitha, Assistant Professor, MIT College of Agriculture and Technology Trichy, explained students about the concept of the works involved in irrigation engineering may oversee the installation of pipelines and sprinklers or be involved in directing water from dams, canals and rivers and the work is done in the field to evaluate terrain, soil and climatic characteristics to optimize the use of water for lawns and agricultural crops. She also shared his knowledge in crop management, types of canal and type of dam in Tamilnadu.





STUDENT CONFERENCE

MINIATURE BY US – 19.10.2022

The event comprises of Technical and non technical events including a scale down model making competition, paper presentation, Bridge modelling, CAD contest and non technical events on Reels, Start Music, Connections. The external participants had presented their technical paper presentation on recent advancements and innovation in construction. The overall outcome of the event was to educate the importance of sustainable practice in construction which relies up on materials used, method of construction, innovation in practice and creative thinking.





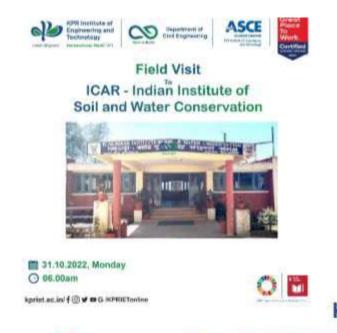


FIELD VISIT



FEILD VISIT INDIAN INSTITUTE OF SOIL AND WATER CONSERVATION— 31.10.2022

The Principal Scientist from ICAR explained students about ICAR and its functions all over the world. The Institute and Research Centers have focused on evolving strategies for controlling land degradation following watershed approach, tackling special problems such as ravines, landslides, mine spoils and torrents, demonstration of technologies for popularization and imparting training besides developing technologies for water harvesting, Saving, and recycling.





KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

EXPERT TALK

INTERACTION WITH RAIN MAN – 23.11.2022



Dr. S. R. Ramanan advised the students to have a dream and asked them to work hard for making it true. He explained the various flood prediction methods & software used in the meteorological department. He also explained the importance of news channels to reach the public the most. And he addressed the students on the opportunities available for civil engineering students in the meteorological department. Students actively took part in the session and cleared their doubts about climatic action and other queries about meteorological department.





NATIONAL LEVEL COMPETITIONS

QUIZ ON IS456-2000: 27.08.2022 & MIX DESIGN CONTEST: 28.10.2022



For the IS 456-2000 National Level Quiz Competition, 255 people signed up in total. 229 of the registrations were from Tamil Nadu, and the remaining 26 came from Karnataka, Assam, Uttar Pradesh, and Andhra Pradesh. Out of 255 registrations, 72 turned up to participate in the competition. The competition has attracted 59 students from various.

Mr. Avinash Kumar Reddy N from Dr. YSR Architecture and Fine Arts University, Karnataka secured first prize

For National Level Mix Design Contest on Special Concrete, 10 participants from various institutions participated. 6 participants from SSM Institute of Engineering and Technology, Dindigul, 2 participants from Government College of Engineering - Erode (IRTT), 1 from PSG Institute of Technology and Applied Research, and 1 from St.vincent pallotti college of engineering and technology, Maharashtra.

Sathyashree V from PSG Institute of Technology and Applied Research (Psg Itech) secured first prize.







KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

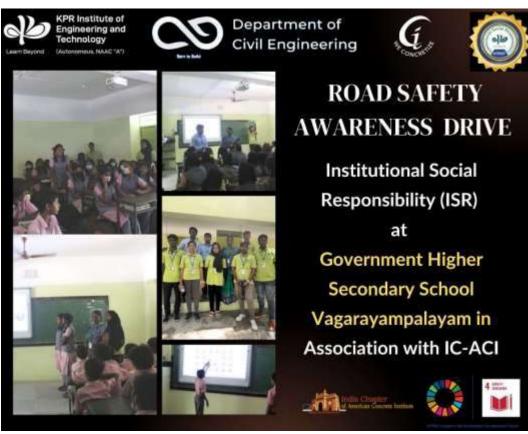
COMMUNITY SERVICES







Free eye camp by Aravind Eye Hospital, Coimbatore on 27th August 2022



Road Safety Awareness Program at Government Higher School, Vagarayampalayam on 26/07/2022

COMMUNITY SERVICES







Students of KPRIET painted a block consisting of six class rooms in Govt Hr Sec School, Somanur on 08/01/2023

Students of Kongu kalvi nilayam School, Avinashi have given Career guidance & mental health awareness on 28/01/2023

1. AIRBORNE WIND TURBINE

Goals, objectives

The main objective of our idea is to harness the strong high-altitude winds, for the purpose of generating the electricity. Our plan is to develop a airborne wind turbine to float on top of the buildings with the help of Inflatable balloons

Project impact

With the aid of this newly developed levitating Airborne wind turbine (AVT), military outposts will be provided with electricity. Additionally, because the AWT is designed to float in high altitudes, it may also be used as a surveillance tool when equipped with a camera

Participation

Team Members: Mr.S.Vinoth, Ap/Civil, Thitheashwar K, Vasanthan S,

Vinumitra G, Srinithi S

Duration : Two months





2. SMART IRRIGATION SYSTEM

Goals, objectives

• The main objective of the proposed irrigation system is to supply the required amount of water through drip irrigation and it helps in reducing the wastage of water. If we implement this idea in a large scale we can control and reduce carbon and harmful gases in the atmosphere by using Aloe Vera plant.

Project impact

Nowadays we are facing numerous problems like carbon emission, global warming, Vehicular pollution
etc., due to these problems we face lot of issues like change in temperature, change in climate and
abundant level of carbon dioxide in atmosphere. In order to reduce and to control these problems we have
implement a smart solution "Smart irrigation and Roof gardening system" in a large scale.



Participation

Team Members: Ms. K. Dhivya, Ap/Civil & team

Duration : One month

KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

3. SMART ONION STORAGE SYSTEM



Goals, objectives

This research project aims to analyse the effect of volatile atmospheric conditions such as temperature and relative humidity (RH) on onion cultivation and provide an early alert to maintain a favourable environment for better yielding of onions by using a smart farming system.

Project impact

- The long shelf life of onions is of high importance in the onion industry. Several factors determine the shelf life and storability of onions, e.g., the cultivar, growing conditions.
- Onion cultivation is affected by changes in climatic conditions. The climatic parameters such as temperature and relative humidity (RR) will directly or indirectly affect the quality of the onion produced.



Participation

Team Members: Mrs.B.S.Meenakshi, Ap/Civil & team

Duration : One month

4. SMART RAIN GAUGE



Goals, objectives

> To measure the rainwater level frequently (everyday) and show a complete rainfall analysis all over an area.

Project impact

- > Rain gauges aren't mostly placed in uninhabited areas, so the amount of rainfall in these areas goes unmeasured. Even if they are measured, it doesn't happen frequently.
- Our team has identified this problem and have come up with a simple yet effective solution. This project aims at developing a Sensor based Rain Gauge so we don't need to manually measure the rain gauge.



Participation

Team Members: Mrs.B.S.Meenakshi, Ap/Civil & team

Duration : One month

Questions?



What were the most significant events of the year?

- Successful social gatherings and community services
- Winner in Outstanding UG Thesis competition conducted by ASCE IS SR
- Received Honorable mention award in the "Three Minutes Failure case studies competition conducted by ASCE
- Organized an international expert talk on "Development of the Bridge-Form Globally over the Past 35 Centuries" by Dr. V. K. Raina

What were the most significant challenges?

- Transition in the mode of events from virtual to physical
- Performance of students after COVID19

Future plans?

- Conducting ASCE IS Student symposium 2023 in KPRIET on March 28 & 29