





### **DEPARTMENT VISION**

To create technically competent and industry ready Civil Engineers having innovative and leadership qualities to serve the society and nation

### **DEPARTMENT MISSION**

- ◆ Provide technical skills par excellence to face the challenges in the field of civil engineering.
  - ◆ Promote innovative and original thinking in the minds of budding engineers.
- ◆ Generate research opportunities by undertaking collaborative projects through institute industry interaction.



# ADVANCED TRAINING PROGRAMME ON TOTAL STATION

Department



The Department of Civil Engineering in association with ALG International Institute of Technology organized a three-day Advanced Training Programme on Total Station from February 20<sup>th</sup> to 22<sup>nd</sup>, 2019. The program aimed to equip the participants with theoretical and practical concepts through hands-on training to meet the essential skill sets required for present surveying industry. The training program was inaugurated by Assoc. Manager Rev.Fr. Joseph Rajan Kizhavana . Prof. Dr. Babu T Jose, Director & Head , Department of Civil Engineering presided over the function. Felicitations were rendered by Dr. Philip Kurian, Principal and Mr. Kumar Sandeep, Business Head, ALG International.

Around 53 students from various engineering colleges across the state participated in the training program. The training included Basics of Total Station, Total Station Traversing, stake out, Topographical survey, Area Calculation, Height Calculation, Data transfer, Mapping etc. Certificates of participation were distributed during the valedictory function held on 22nd Feb 2019. Mr. Sreevishnu Gangadharan of fourth semester secured the Best Performer award.





## Workshop on Revit Architecture

The Department organized a one day workshop on “Revit Architecture” for 2016-2020 batch students on 24th November, 2018 in association with BIMLABS, Vytilla. The hands on session was delivered by Mr.Albin Thambi, a BTech alumna 2013-2017. The session highlighted advanced features of Revit Architecture . Students were enlightened with modern tools for higher architectural designs.



## Faculty Lecture Series

Assoc. Prof Liji Anna Mathew delivered a session on ‘Introduction to LaTeX ’ on March 2018 for the faculty members of Civil Engineering Department. LaTeX is widely used in academia for the communication and publication of scientific documents in many fields, including mathematics, statistics, science and engineering. She gave an overview about various tools used in LaTeX with examples .



## Department



## One day Technical Class for students of Navadarshan

The Department conducted a one day technical class on Civil Engineering for the students of Navadarshan on 1<sup>st</sup> May 2018. Assoc. Prof .Veena V, Asst. Prof. Sheeja M K, Mr..Hijan N along with a few students of Eighth semester carried out the session .The classes were made interesting with video presentations, activities and model exhibits.



## ‘One rupee a day’ Initiative

On 26th of November, a group of 5 members including two members of faculty and three students members of the Ashwas executive committee visited Asha Bhavan, a rehabilitation centre for the mentally ill cured persons in abandon. As a part of the “One Rupee a day ” initiative, lunch was served for the inmates of Asha Bhavan, Kakkanad.





## THEORY TO PRACTICE

With an aim to enhance the practical skill sets of students the department organized a 'Theory to Practice' program for the selected final year students. This included a series of site visits, technical lectures and interaction with eminent members in the field of Civil Engineering. Prof. Vincent K John, Vice Principal presented training certificates to the student members Ms. Nimmy Ansly, Ms. Satyalakshmi.V, Mr. Sanish Joseph, Ms. Ann Mary C M, Ms. Sangeetha T and Mr. Alan Christy Joshy during an august function held on December 2018.

## Department



## Orientation Program

A three day orientation program for the newly admitted students to the batch 2018-2022 was held at AISAT from 23<sup>rd</sup> July 2018. The program was organized to welcome the newcomers to the exciting arena of engineering education and also to make them aware of the expanding realm of this major profession. Assoc. Professor Veena.V of the department handled an activity session and delivered a lecture 'From Nature to Engineering' during the course.



A Project Expo was organized by first year students as a part of their micro project on 9th November 2018. Five project teams participated in the event. Several working models and design concepts were developed and exhibited on the day. This included the working model of Hydraulic bridge, Water level indicator, Hydraulic lift, Moisture detector and Aquaponics. Students and faculty members from various departments conveyed their feedback on the show cased models.





## ‘Post Rehabilitation Program’- Kerala Floods

The students of Albertian Institute of Science and Technology joined hands in the rehabilitation process by providing a helping hand to the society with full-fledged 24x7 support in the various activities of the flood affected areas . In co-ordination with Cheranalloor Panchayat for assessing the extend of damages a fieldwork was scheduled in Kadamakudy, Pizhala and Kothad the worst affected areas of Ernakulam .



AISATians organized themselves into 25 teams and were set to play their part in reshaping the society. Although students were volunteering in

other parts of the District they united themselves for ‘Post Rehabilitation Program’ under AISAT’s initiative. It was a 10 days mission and had full attendance throughout and gave best of their efforts to cover areas containing 40 wards with around 3,200 - 4,000 houses which were evaluated on the basis of partially damaged and fully damaged under the supervision of Mrs. Rachel Augustine, Assistant Engineer, Mrs. Valsamma, Overseer, and staffs, Cheranalloor Panchayat.

The objective of the work was to collect as many data as possible from the flood victims, analyze, inspect, estimate the damages and put forward most assuring actions on behalf of Executive Engineer, Cheranalloor Panchayat, which would help them to lead a normal life as before.

The affected areas were weak both in terms of Structural and Geotechnical aspects . Most of the building were over 50 years old and the students suggested immediate repair works and aids under the supervision of Assistant Engineer on duty. With this Post Rehabilitation Program for Kadamakudy Panchayat, the students of Albertian Institute of Science and Technology is entitled

to stay positive and united for a greater good of the society and nation as a whole. Let’s pray for a brighter future together, stronger and smarter!

Department







## Helping Hand

The Soothing Touch programme of AISAT Ashwas centre for the month of February 2018 was carried out by the Department of Civil Engineering. Assistant Professors Mr. Aswin Subhan, Ms. Aswathy M Mohan, Mr. Neeraj U. K along with the final year students Mr. Saneesh and Ms. Sangeetha, handed over a cheque of Rs. 4000/- to Sr. Theresa, House of Providence, Kaloore on 28th February 2018.



## 75th Birthday Celebration of our Beloved Director

AISAT family celebrated the 75th birthday of our beloved Director Prof. Dr. Babu T Jose on 12th October 2018. A documentary unveiling the contributions made by the great visionary and affectionate guru was presented during the event. Rev. Fr. Denny Mathew Peringatt, Manager, AISAT presented an Album 'Architect of AISAT' during the occasion. Rev. Fr. Joseph Rajan Kizhavana, Assoc. Manager and Dr. Philip Kurian, Principal felicitated Prof. Dr. Babu T Jose.



## Adarav - Farewell Ceremony

In an emotionally surcharged atmosphere the students, staff and management of the College bid adieu to the Students of 2014-2018 Batch at a grand farewell function. Prof. Dr. Philip Kurian, Principal delivered the welcome address. Rev. Fr. Denny Mathew Peringatt, Manager in his presidential address urged the students to dream high and wished them all the success. Junior students gave a perfect gift for their seniors by presenting a video highlighting their yesteryears. The Outgoing student representatives from all the branches shared their experiences and wonderful moments at AISAT. The day was a fiesta devoted to the years spent together with friends and teachers to reminisce joyous moments.

Department





## Office Bearers : 2018-19



**Meera Krishna**  
(2015-19 Batch)  
President



**Andrea Babu**  
(2015-19 Batch)  
Secretary



**Sreelakshmi M**  
(2016-20 Batch)  
Treasurer



**Femin Maria**  
(2015-19 Batch)  
Event Co-ordinator



**Aldia D'Cruz**  
(2016-20 Batch)  
Event Co-ordinator



**Amal Dev Manohar**  
(M.Tech 2017-19  
Batch )  
Event Co-ordinator



**Fathima Rizana**  
(2018-20 Batch)  
Event Co-ordinator

## Concrete Day Celebration

AISAT ICI Student Chapter and Civil Engineering association ACEA celebrated Concrete day on 7<sup>th</sup> September, 2018 –the formation day of Indian Concrete Institute . A technical talk on “Cement-Emerging trends and innovations” was delivered by Er. Sebin Jose, AGM-Technical services, Heidelberg cement India

limited. Ms. Shabna K Abdul Salam S5 Civil introduced the speaker. Er. Sebin gave an overview about the types of cements, manufacturing sequences and their applications. He also threw light on the global scenario of cement manufacturing across the world and the various job opportunities available in the building material industry especially cement industry. Final year, pre-final year and M.Tech students along with members of faculty attended the talk. .Ms.Gopika C L of seventh semester proposed the vote of thanks.





## AISAT - ICI Student chapter

### Laurels to AISAT ICI Student Chapter

Dr. Anil Joseph, Adjunct faculty and Assoc. Prof. Liji Anna Mathew was designated to the position of Vice President and Treasurer respectively of Indian Concrete Institute Kochi Centre in the installation Ceremony held on 14th August 2018 at Hotel Radisson Blu, Kadavanthra.



### Academic Toppers



**Ms. Nimmy Ansly (CGPA-7.81)**  
**B.Tech 2014-18 Batch**



**Ms. Elsa Thomas (CGPA- 8.84)**  
**M.Tech 2016-18 batch**

## In House Training programs

To bridge the gap between theory and practice, regular in-house training programs are given to the students.

- ICI student Chapter representatives conducted an intra college quiz competition for third and fifth semester students of the department. Ms. Sreelakshmi of fifth semester coordinated the program.
- The third semester students were given a hands-on training on the field-testing methods to ensure the quality of cement. Asst. Prof. Aswin Subhan coordinated the session. .
- To improve the communication and presentation skills, chapter provides ample opportunities to the student members. Student members made technical presentation on Nondestructive testing -its applications and Practices on 5<sup>th</sup> and 7<sup>th</sup> November 2018.
- A technical session on Concrete mix design was handled by Assoc. Prof. Liji Anna Mathew and Asst. Prof. Sheeja M.K for S5 and M.Tech students on 1<sup>st</sup> August 2018. The three stages in concrete's life that needs to be considered while developing the mix was explained during the session. A demonstration of concrete mixing and workability tests were carried out by the students. .



## AISAT - ICI Student chapter

### ‘RECENT INNOVATIONS IN CIVIL ENGINEERING’

Indian Concrete Institute Kochi Centre in association with ICI Student Chapter of Albertian Institute of Science & Technology, Kalamassery organized a technical talk on ‘Recent Innovations in Civil Engineering’ on 21<sup>st</sup> February, 2019. Ms. Deva Priya S, Student coordinator welcomed the gathering. Dr. Anil Joseph, Vice Chairman, ICI Kochi Centre who has a vast experience in structural and geotechnical consultancy delivered the talk. He enlightened the students with the upcoming technologies. The talk was enriched with video presentations on SAT felicitated the speaker. Ms. Sifna Drones, Robots, Building Information P A, Student Coordinator proposed Modelling, the future technologies to conquer the field of Civil Engineering.



Er. M.A. Joseph, Chairman, ICI Kochi Centre addressed the gathering. Prof. Paul Ansel V, Vice Principal, AI-SAT felicitated the speaker. Ms. Sifna P A, Student Coordinator proposed vote of thanks.

### AWARD DISTRIBUTION CEREMONY

ICI Kochi centre recognized the meritorious AISAT ICI Student chapter members of second, third and final year on 21<sup>st</sup> February 2019. Er. M A Joseph, Chairman congratulated the semester toppers and distributed the prizes. The office bearers of the ICI Kochi Centre Dr. Elson John, Secretary, Assoc. Prof. Liji Anna Mathew, Treasurer and Dr. Job Thomas, Exec. Member were present during the occasion.





## Academy Industry Partnership

### Study Tour

An industrial visit was organized for the fifth semester Civil Engineering students from 15<sup>th</sup> to 20<sup>th</sup> October 2018 to Dakshina Kannada Nirmithi Kendra, Mangalore and Banasura Sagar Dam, Wayanad. The team was accompanied by two staff from Civil Engineering department. They started off with visiting the Dakshina Kannada Nirmithi Kendra, a Technology Transfer centre under Government of India for promoting and to propagate the proven technologies from research institutes to the field. The experienced employees of Nirmithi Kendra demonstrated the arch construction and showed the mechanism of critical joints to be considered in an arch construction.

Students had an opportunity to have a detailed view of different arch models, structures such as ferrocement floating boats, bottle brick constructions, etc. They had an interaction section with the employees of the Nirmithi Kendra and got a clear picture of different types of construction methods.

Then the second visit was to Banasura Sagar Dam, Wayanad. It is the largest earth dam in India and the second largest of its kind in Asia. The dam is made up of massive stacks of stones and boulders. Students were highly benefited from the visit by closely experiencing the features of an exceptional Civil Engineering marvel.



### Industrial Visits

With an intention to expand the industrial knowhow, an industrial visit was organized for the third Semester Civil Engineering students to the Bulk Cement and bagging terminal -Zuari Cements Limited at Wellington Island on 24th November 2018. During the visit, the students had the opportunity to observe the silo extraction, caricamat floor, packaging of cement etc. Students visited the quality control lab where the various equipments used for quality control of cement was explained with the IS specifications and how quality is ensured by testing the cement.

The students were also given a session on safety practices in a cement plant. Er. Sebin Jose, Er. Shine, Er. Shaju and Er.Sreejith interacted with the students and also enlightened them on the job opportunities in the cement manufacturing industry. The students had a valuable time with their elders in profession to clarify their doubts about cement manufacturing industry.



### Internship

Batch 6 students completed their summer internship at various construction companies such as SFS Homes, NCC Urban Infrastructures Ltd etc.



## Academy Industry Partnership

### Site Visit -1

A site visit was organized for the students of first semester MTech (Geomechanics and Structures ) on 5th November 2018. The students visited a worksite where Standard Penetration Test was being carried out. The site was at Edappally, near to Oberon Mall. Testing was done by BoreTech Services, Koonammavu, Ernakulam. Students were accompanied by three faculties namely Asst.Prof.Aswin Subhan, Asst Prof. Saranya Ullas and Assoc.Prof.Liji Anna Mathew.



Students had the opportunity to witness sample extraction and recording N value (Standard Penetration Number). The supervisors of the site gave a detailed explanation about the field bore logs and gave the students a hands-on experience in field identification of soil samples. The frequent site visits helped the students to widen their level of understanding about the practical features of engineering concepts.



### Site Visit -2

A site visit was organized for Indian Concrete Institute Student Chapter Members of AISAT to Kochi Metro Chambakkara bridge site. Project Manager Er. Lalichan explained the details of the site and special features of the bridge with the help of structural drawings. The existing Chambakkara Bridge is being widened to a four-lane bridge. The bridge under reconstruction has a total length of 310 metres and a width of 8.5 metres. The visit to the site where the construction of 'Bowstring Bridge', a bridge formed of an arch of concrete is completed, was an enlightening experience for the students. 44 ICI student members visited the site and learned the construction practices and design techniques adopted. Assoc.Prof. Liji Anna Mathew and Mr. Arun Gopinath, Technical Staff accompanied the students.





## Academy Industry Partnership

### AISAT- IGS Award for Best M. Tech Thesis

The IGS-AISAT Award, for the best M Tech thesis in Geotechnical engineering in Kerala was awarded to Sangeetha K M of IES College of Engineering, Chittilappilly for her exceptional work on ‘Assessment of liquefaction potential using SPT and cyclic triaxial test’. The award which comprised of a citation and a cash prize of Rs. 10,000/-, was presented to her, by Prof. G.L.

Sivakumar Babu , IGS National President during an august function at the seventh Praphulla Kumar Lecture on 22nd September 2018 at Hotel Mercy, Ravi-puram, Ernakulam.

The event was jointly organized by Indian Geotechnical Society Kochi Chapter and Association of Piling Specialists, Kochi. Prof.Dr.A.Sridharan, Former deputy director ,IISc Bangalore , Mr. M.D Nair, Chairman, IGS – Kochi Chapter , Dr.Babu T. Jose- Patron, IGS – Kochi Chapter & Director-AISAT, Dr. Anil Joseph, Secretary, IGS Kochi chapter ,Mr. B. Chandramohan, President, APS – Kochi and Prof. Vincent K John- Vice Principal AISAT were the dignitaries present for this blissful event. The annual lecture was delivered on the topic “Corrective measures to address Differential Settlements – Case Studies” by Prof.Dr.A.Sridharan, Former deputy director ,IISc Bangalore ,an exceptional talent who has contributed to the growth of Geotechnical Engineering in the country.



### Procomp

The fifth edition of Procomp-an annual project competition for the final year B.Tech students of engineering colleges under M.G university was jointly organised by Graduates’ Association of Consultant Engineers (GRACE) and Department of Civil Engineering, AISAT . The presentation of the projects qualified to the final round was held at AISAT on 29<sup>th</sup> June, 2018. The sessions were judged by Dr. Deepa.G.Nair, SOE CUSAT and Er. Abilash Joy, President, GRACE.

Fifteen innovative projects were shortlisted for final presentation. The winners were selected by a panel of experts in the field of Civil Engineering. The Mokshagundam Visvesvaraya ever rolling trophy and a cash prize of Rs. 15,000/-, for the best project was bagged by the team consisting of Ms. Manisha Vijayakumar, Ms. Lakshmy S S, Ms. Krishnendu M R, Mr. Joel Joy of Sree Narayana Gurukulam College of Engineering, Kadayirippu. The winners of second prize worth Rs.10000/- were Mr. Shaun Thomas Alex, Ms. Amala V Mathew , Ms. Babitha Davis, Mr. Kevin Shelly Fernandez of Rajagiri School of Engineering and Technology, Kakkanad. Citations were also awarded to the project guides of the winners. The winning teams were awarded with a cash prize and certificates at the glorious ceremony during Seventh Praphulla Kumar Lecture Series on 22<sup>nd</sup> September, 2018. Prof. Dr. Babu T Jose, Director, AISAT, and the faculty members were also present to foster the young innovative minds.





## Voice of ACEA

### ACEA Day Celebrations

The activities of AISAT Civil Engineering Association (ACEA) for the academic year 2018-19 were inaugurated on 16<sup>th</sup> March 2018. The chief guest Sri. Raman Bhattathiripad, Executive Director, Vastu Vidhya Pratishthanam inaugurated ACEA activities for the academic year 2018-19. Rev. Fr. Joseph Rajan Kizhavana, Assoc. Manager, Dr. Babu T. Jose, Director, AISAT, Prof. Vincent K. John, Vice Principal & President ACEA were present on the occasion. During the event the fifth edition of 'Srishti', the annual newsletter was released by the chief guest, Sri. Raman Bhattathiripad.



A Deminar on NDT was conducted and it was inaugurated by Rev. Fr. Denny Mathew Peringatt, Manager, AISAT. Students got an opportunity to get more knowledge about Non Destructive Testing.



“BUILDER BRAINS”- An inter collegiate quiz competition on civil engineering was conducted. There was excellent participation of students from various colleges across the state. The winners were honored with cash prizes and certificates.



### AISAT Alumni Meet



The third annual alumni meet of AISAT Alumni Association was held on 26th January 2019 in the college campus. A small video highlighting the memories of their college days was displayed during the event. This meeting was followed by cultural programs and fun games organized by the alumni.





### News from Faculty

- Asst. Prof. Neeraj U.K has participated short-term course on Research Avenues in Coastal Engineering in TKM College of Engineering Kollam on January 2019.
- Assoc. Prof. Liji Anna Mathew, Asst. Prof. Sheeja M.K, Asst. Prof. Aswathy M Mohan, Asst. Prof. Rinku John attended FDP on Design of Steel Structures in Federal Institute of Science & Technology, Mookannor on July 2018.
- Assoc. Prof. Veena V, Assoc. Prof. Liji Anna Mathew, Asst. Prof. Saranya Ullas participated in the short term training programme on Green energy, Environment, Engineering & Technology for Sustainable future in School of Engineering CUSAT Kalamassery on December 2018.
- Asst. Prof. Neeraj U K attended a faculty development programme on 'Entrepreneurship' conducted by Technology Business Incubator of NIT, Calicut on December, 2018
- Assoc. Prof. Veena.V, Assoc.Prof. Liji Anna Mathew, Asst. Prof. Megha Vargheese , Asst. Prof. Aswathy M Mohan ,Asst. Prof. Aswin Subhan attended the Seventh Praphulla Kumar Lecture Series held at Hotel Mercy, Ravipuram on September 2018.
- Assoc. Prof. Liji Anna Mathew attended talk on Make in India– An Insight on Giant Engineering Marvels in India organized by Ultratech Cement Limited in association with ICI on July 2018.
- Assoc. Prof. Liji Anna Mathew attended a round table discussion on 'Enhancing employability through skill development short term courses' organized by NITCAA on April, 2018.
- Asst. Prof. Neeraj U.K. attended a session on 'Skilling in Engineering Colleges' at CET, Trivandrum on June, 2018.
- Assoc. Prof. Liji Anna Mathew, Asst. Prof. Aswin Subhan attended a one day workshop on quality Concrete construction ICI-QC<sup>2</sup> 2018 Series-II at Taj Gateway Hotel on May 2018

### Student Achievements

- Akheel Mohammed A, Anandakrishnan G, Antony Clestil Arjua, Ashik Joy, Denil Yesudas, Shamil Augustine , Krishnajith V and Rony M.J of S6 actively participated state level ICI cube competition held on March 2018
- Anadakrishnan G of S6 participated in all Kerala mathematics quiz competition (state level) held at FISAT on March 2018.
- Amal Dev Manohar and K U Sridev won 1<sup>st</sup> and 2<sup>nd</sup> prize respectively in book review competition as a part of library week celebration conducted on April 2018.
- Amal Dev Manohar got 1<sup>st</sup> prize in paper presentation conducted as a part of library week celebration on April 2018
- Students from S2, S4, and S6 were actively participated in the event Aakhasham'18 conducted as a part of AISAT DAY celebration.
- Akhil Thomas N A of S1 participated in IEEE day pes quiz 2018 - state level competition held at Bishop Jerome institute, Kollam on October 2018.
- Hafeeda Nooh, Kevin Noha, Prince Tom of S1 and Daisy Manual, Winston Pereira of S3 participated in an online course of Start up India learning programme on October 2018.
- Anandhu A of S5 attended IEDC Summit (State level) Programme conducted at Amal Jyothi college of engineering, Kottayam on November 2018.
- Aiswarya K A , Akhil Thomas N A, Mariya V T, Mohammed Fabinsha M K, Nimmi U, Prince Cristy Tom, Sandra Arakkal, Sona P A, Susan Samson and Ujwal Roy OF S1 participated in Excel 2018– Technocultural event held at Govt. Model engineering college, Kochi.
- Daisy Manuval of S3 and Shabna . K . Abdul Salam of S5 were selected in Purple League of AISAT.
- Sreevishnu Gangadharan of S4 won best performer award in the advanced training Programme on Total station conducted on February 2019.



*Kudos...*

*Proud achievers...*



## PURPLE LEAGUE



DAISY MANUEL  
S4, CE



SHABNA K ABDUL SALAM  
S6, CE

## BEST PERFORMER



SREEVISHNU GANGADHARAN  
S4, CE



AKZAM ABDUL KAREEM  
S6 CE

**‘ADVANCED TRAINING PRO-  
GRAMME ON TOTAL STATION’.**



**Ms. Liji Anna Mathew of the De-  
partment was elevated to the post of  
Associate Professor**

**COVER PAGE DESIGNER  
SRISHTI 2019**



**Dr. Anil Joseph won the IGS EC  
Elections with thumbing majority.**

## Placements

- Five students of 2014-2018 batch, Mili Anna Chacko, Milu Treesa Siby, Farzana V A, Sandra and Sangeetha T received job offer from Sutherland Global Services in the placement drive held at AISAT on 12<sup>th</sup> January 2018.
- Annrin K Thomas of 2014-2018 batch got placement as Business Development Associate at Advenser Engg. Services Ltd during the drive held on 24<sup>th</sup> February 2018.
- Gopika C L, Devapriya S, Sifna P A, Meera Krishna K V, Kavya Shanu of 2015-2019 batch got selected to SSB on clearing the INDIAN NAVY UES examination 2019.
- Reeta Jojo and Andrea Babu of 2015-2019 batch got placed at Sutherland Global Services, during the placement drive exclusively conducted for the AISAT students on 27<sup>th</sup> November 2018.
- Andrea Babu of 2015-2019 batch got placed at Amazon during the placement drive conducted at RSET on 5<sup>th</sup> February 2019

