# Mar Ephraem College of Engineering and Technology Annual Report 2020-21

MAR EPHRAEM COLLEGE OF ENGINEERING AND TECHNOLOGY at Malankara Hills, Elavuvilai, Marthandam was blessed and inaugurated by His Beatitude Moran Mor Baselios Cardinal Cleemis Catholicos, The Major Archbishop of Malankara Catholic Church, on September 14, 2009. Mar Ephraem has grown well beyond an ever continuing explorative experience, in quality education, with five U.G Programs, three P.G Programs and one doctoral program. Mar Ephraem is accredited by NAAC with B+ grade in the year 2017.

#### 1. ACADEMICS

- This academic year we secured 100 percentage results in the Anna University examinations
- 184 under graduates and 33 post graduates have completed their degree and will receive their degrees.
- Ashmi Devi.D.A. secured 2<sup>nd</sup> Rank in M.E.Applied Electronics in anna University
- Dr. C P Sherly, Department of CSE has completed her doctoral degree under the supervision of Prof. Dr . A. Lenin Fred

## **Awards and Recognitions:**

#### Co-curricular

- Our student team from the School of Mechanical Engineering has designed a race car and participated in the SAE, SUPRA competition held at Formula one track, Noida conducted by Society of Automotive Engineers. Out of 110 Teams Mar Ephraem won the 1<sup>st</sup> position in the southern Tamilnadu.
- Amrithya Singh of Mechanical Engineering, Sachin of Civil Engineering, Shany of Computer Science and Engineering and Stephy of Electronics and Communication Engineering participated and won third position in South Asia level NICE 2019 organized by IET, Mumbai.
- Samson Joy won 2<sup>nd</sup> prize in CAD modeling at Symposium in Rohini College of Engineering

## **Extra-curricular Activities**

- Mar Ephraem has got the privilege of coordinating Anna University Zone 19 sports events.
- Mar Ephraem won the first prize in Football, second prize in Kho-Kho in Zonal Level and our Athletes have won Eight prizes in Zonal level Athletics Events.

Apart from the above, our students have won many awards in various national cocurricular and extra-curricular events.

## **Staff Accomplishments**

- Dr. A. Lenin Fred received the Intellectual Property Rights Award from Anna University, Chennai.
- Dr. A. Lenin Fred was appointed as the National Jury for India-International Science Festival, Kolkata.
- Prof. Dr. N. Austin, Academic Director is acting as the working president of Kumari Maha Sabha.
- Prof. John Iruthaya Raj is elected as the Managing Committee Member of SAE India, Southern Region.
- Prof.C.Gigin Durai , School of Mechanical Engineering is elected as Chairman of IET KKLN YP, Network.
- Prof.C.Gigin Durai acted as the Co-organiser for TEDxKanniyakumari and Startup weekend Kanyakumari
- Prof.C.Gigin Durai acted as resource person for various National workshops on Patent drafting
- **Dr. D. Dhanya acted as** Resource person for National level Online FDP on "Role of Industry 4.0 in Research and Higher Education" Vels Institute of Science, Technology and Advanced Studies, Chennai.
- Mrs. Ashy V. Daniel acted as the resource person for Webinar on "Introduction to Big Data Analytic Tools" organized Annai Velankanni College
- Prof.Dr.A.Lenin Fred, Dr.Lalin L Laudis, Mr.Anish John Paul, Mr.R.Leo Bright Singh and Mr.C.Gigin Durai attended Chief Innovative Officer Training organized by Cresent Innovation and Incubation Council.
- Our faculties attended 27 FDPs, 23 Workshops, 34 Conferences, 23 seminars and 45
   Webinars in this academic year

 15 faculty members from various schools completed NPTEL/SWAYAM online certification course and 15 faculty members AICTE Certificate Course during the academic year.

#### **Books Published**

- D.N.Austin, Dr.N.E.Godwin Pithalis and Mr.C.Manu Chandran published a book on ""
- Dr.D.Dhanya Secure IoT SioT Pandit publications, IDS in MANET., Pandit publications

# **Academic MoUs:**

## **Scholarship:**

During this academic year, we provided Rs. 72,41,825 as scholarship for our students from various state and national funding agencies.

#### **Association and Cell Activities:**

The School of Mechanical Engineering, School of Computer Science and Engineering and the School of Electronics and Communication Engineering organised national level technical symposiums respectively.

SCIFA 2019 was organized by the school of Science and humanities.

Our students were sent for internships to more than 50 reputed industries to improve their employability skills.

All the schools have organized industrial visits for their students, to gain industrial experience and for practical training.

Workshops were conducted on Arduino processor, Image processing using python and MatLab. Hands-on training workshops were conducted on Computational Fluid Dynamics, Automobile dismantling and Assembling, PCB fabrication, Trouble Shooting and rewinding of Electrical Machines and Product Development

Jesus youth is active in the campus which upholds the spiritual development of our students. The Jesus youth extends the spiritual activities such as regular prayer, fasting, adoration and helping the needy.

• The professional bodies in Mar Ephraem, IET, IEEE, SAE and ISTE were active and have conducted various activities in the campus. This academic year, American Society for Civil Engineers was started by the department of Civil Engineering.

## 2. TRAINING AND PLACEMENT:

- Last academic year, we received 105 job offers from various companies which includes 12 international job offers offered by Essel packaging, Poland and 93 multinational company offers from reputed companies like Infosys, UST Global, HCL Technologies, Tata Elxsi, Quest, STUP Consultant, Renault Nissan, ParasCadd, Mumbai, CADD Centre and TVS Sundaram Fasteners with the highest salary package of 9 lakhs/year.
- In this academic year, 2 students have been placed in CTS, 2 students in TCS, 1 student in WIPRO and 5 students in HCL Technologies through the pool drive conducted by Anna University and through Off Campus drives with the salary package of 4 lakhs/annum.

## 3. FUNDED RESEARCH

Mar Ephraem received Rs.10,02,28,675/- for Research and Development from the Ministry of Science and Technology; Government of India, NITI Aayog, Government of India; Defence Research and Development Organisation; Government of India.

For all the above projects, Principal Prof. Dr. A. Lenin Fred and Prof. Dr. J. Jerusalin Carol are the Principal Investigators. Prof. Dani, Prof. Lalin L Laudis, Prof. R. Leo Bright Singh, Prof. John Pradeep, Prof. Dr. Anand Regilin and Prof. John Thangam are the Co-Principal Investigators.

Our College has approved by MSME as a host institute named Mar Ephraem MSME Incubation Centre on 16<sup>th</sup> March 2022.

Our NewGen IEDC block was inaugurated by Dr. Surappa, Former Vice Chancellor, Anna University, Chennai on 22<sup>nd</sup> February 2020. The sq.Ft of NewGen IEDC block is 7012 sq.ft.

#### **Research Achievements:**

• This academic year, one of our candidates from the Computer Science Research centre has been awarded doctoral degree.

- A faculty from our college, Dr. S.N. Kumar has been awarded doctoral degree in this
  academic Year in his thrust area.
- Our faculty published 90 publications in peer reviewed journals.

#### **Reviewer Status:**

**Dr. A. Lenin Fred is a** Academic Editor of PLoS ONE, Taylor and KSII Transactions on Internet and Information Systems.

**Dr. Jerusalin Carol is the** Reviewer of PLoS ONE, Taylor and KSII Transactions on Internet and Information Systems.

**Dr. Dhanya D. is the** Reviewer of SIA publishers and Distributors Pvt. Ltd, American Journal of Engineering and Technology Management, WSEAS Transactions on Communications, Advances in Science, Technology and Engineering Systems

## **Research MoUs:**

- This academic year we have signed MoU with Kalam Institute of Health Technology, Visakhapatnam (KIHT) for technology transfer.
- We have signed MoU with Nanyang Technological University (NTU) Singapore for International Collaborative Research.

## 4. FUNDED CONSULTANCY

The department of Civil engineering generated Rs. 52,000 in consultancy for Southern railway, Ideal construction and PWD.

## 5. INFRASTRUCTURE

### **ENTREPRENEURSHIP DEVELOPMENT CENTRE:**

In order to turn the innovative ideas of students into Business start-ups, The National Science & Technology Entrepreneurship Development Board (NSTEDB) /Department of Science and Technology (DST); Government of India granted 2.87 crores for setting up NewGen IEDC in Mar Ephraem Campus. Ten innovative projects were selected for the grant up to Rs. 2.5 lakhs per project.

Three Entrepreneurship Awareness Camps were conducted to promote entrepreneurial activities in the campus. The camps were sponsored by Government of India. Challenge identification competition and idea scouting competitions were conducted and the best challenges and ideas were rewarded.

## 6. ATAL COMMUNITY INNOVATION CENTRE:

NITI Aayog, government of India has sanctioned ACIC which is a section8 company named "ACIC Mar Ephraem Incubation Forum" on 7<sup>th</sup> October 2021. The directors of the SPV are Rev.Fr. Josephin Raj, Prof. Dr. A. Lenin Fred, Rev. Fr. Satheesh Kumar.The CEO of SPV is Prof. Anish John Paul, Incubation Manager is Prof. Gigin Durai, Project coordinator is Prof. Dr. Rajeev, Finance Manager is Prof. Anne GS Sheaba.

## 7. MAR EPHRAEM – CAMPUS COMPANY

Our college has a campus company named Mar Ephraem Digital Solution to develop soft wares for banks and hospitals. For the above campus company Principal Prof. Dr. A. Lenin Fred is the director. Shri. Kesava Prasad is the Senior software developer and Prof. Jino Singh, Prof. Sherin Paul are the junior software developers.

#### 8. MAR EPHRAEM INSTITUTIONAL SOCIAL RESPONSIBILITY

#### **Science Heritage Research Initiative (SHRI)**

Mar Ephraem is concerned about the tribal settlement of our Kanyakumari district. For the technology intervention to the traditional practice of tribal community, We received Rs...... From DST,Govt of India and ended with the products like Virgin Oil extraction Machine, Palm Jaggery making machine, Support to pottery making, Areca leaf making machine and digital documentation of traditional cultural practices.

## **Robotics Training**

We have provided robotics training to more than 1200 students belong to 15 schools from Tamilnadu and Kerala .

## **Career Guidance Program**

We have presented around 23 career guidance programs by which approximately 3525 students have got good guidance to set their goals in life.

## **School Teachers' Training Program**

We have also hosted 7 training programs for the school teachers of kuzhithurai and Thiruvattar Educational Districts and around 1140 school teachers have participated in the programs.

From the inception of the Institution, Mar Ephraem College of Engineering and Technology has taken lot of initiatives to uphold its goals for providing value based education, general, specific and soft skills, initiating research activities, participating in community activities, establishing linkages and MoUs.

Successful and fruitful completion of each academic year is the result of dedicated work of everyone in the campus. The management, teaching & non teaching staff and the students have contributed their might unfailingly. All these have been made possible by the grace of the Almighty God who always lead our way Towards Light (ERGA LUMEN)

Let me conclude my report by thanking one and all for your co-operation and efforts.

Thank You.