



**PERIYAR  
MANIAMMAI**  
INSTITUTE OF SCIENCE & TECHNOLOGY  
(Deemed to be University)  
Established Under Sec. 3 of UGC Act, 1956 • NAAC Accredited  
think • innovate • transform



# ANNUAL REPORT 2018 - 19



**PERIYAR MANIAMMAI INSTITUTE  
OF SCIENCE AND TECHNOLOGY**  
[DEEMED TO BE UNIVERSITY]  
PERIYAR NAGAR, VALLAM, THANJAVUR - 614403.

## **ANNUAL REPORT**

It gives me immense pleasure to present the 31<sup>st</sup> annual report of Periyar Maniammai Institute of Science & Technology (Deemed to be University) to this august audience. The Institute has been making strides in all fronts with the best wishes, support and co-operation of the management, academicians, staff and students. From the inception, this institute; continues to dedicate itself to the development of students and society at large.

This institution strives to achieve excellence in curricular, co-curricular and extra-curricular activities as well as research and development by maintaining rapport with reputed institutions both at National and International levels.

At this juncture, I record my sincere gratitude to our Esteemed Chancellor, Pro Chancellor, Members of Board of Management, Planning and Monitoring Board, Academic council, Research board and Finance Committee for their constant support and encouragement to elevate the status of this institute.

The institute scrupulously follows the rules and regulations suggested by UGC, AICTE, COA (Council of Architecture), NCTE (National Council for Teachers Education) etc. in all the academic programmes.

### **Salient features of the institute**

The total land area of this institute is 219.08 acres and the total built up area (including hostel) is 92,084.90 sq.m. (value of about Rs.154 Crores).

The total strength of students on roll as on 31.03.2019 is 3127, 194 teaching faculty and 235 supporting staff.

The institute is one of the senior member institutions under National Mission on Education through Information and Communication Technology (NMEICT), MHRD, Government of India.

All the departments are well equipped with ICT enabled class rooms Wi-Fi connectivity, LCD projectors and Interactive smart boards.

This institute practices e-based teaching learning through National Programme on Technology Enhanced Learning (NPTEL), Repositories and Virtual labs from IIT, IISC, Centre for Distance Engineering Education Programme (CDEEP), etc.

There are three Women's hostel and one Men's hostel with 537 rooms accommodating 637 students. Hostels are equipped with all basic amenities.

The Institute has a 16 bedded hospital which serves round the clock and family welfare programmes are regularly conducted and this year 10817 person got treatment from the hospital. The hospital has conducted 17 medical camps and 3 blood donation camps and the beneficiary count is 3358.

### **New Programmes started and proposed**

As proposed last year, the following new programmes were started during 2018-19:

- M.Sc. - Physics
- M.Sc. - Chemistry
- M.A. – English

It is proposed to start the following two new programmes from the academic year 2019 – 2020:

- B.Sc. – Computer Science
- M.Com. – Chemistry

### **Endowment**

50 numbers of endowments worth of Rs. 39.82 lakhs have been instituted up to academic year 2017-18.

### **Management Scholarships**

Our institution generously provides various scholarships to academic and sports achievers every year. This year about 1 crore 23 lakhs was sanctioned, benefitting 775 students.

### **Balance Sheet as on 31.03.2018**

LIABILITIES	SCH	AS ON 31.03.2018	AS ON 31.03.2017
Capital Fund	I	16,83,19,927	19,91,85,856
Endowment Fund		41,82,727	36,82,727
Caution Deposit	J	1,41,86,672	1,44,82,500

Grants	K	1,21,97,705	1,13,39,374
Other Liabilites	L	2,19,31,043	2,36,37,899
Secured Loans	M	3,81,68,155	2,94,46,947
Branch Division	N	4,17,13,612	2,69,000
Tamilnadu Foundation Campus Fund		5,00,000	5,00,000
<b>Total in Rs.</b>		<b>30,11,99,841</b>	<b>28,25,44,303</b>
<b>ASSETS</b>	<b>SCH</b>	<b>AS ON 31.03.2018</b>	<b>AS ON 31.03.2017</b>
Fixed Assets	P	21,47,11,199	23,24,80,709
Deposits	Q	30,03,454	30,03,454
Investments	R	6,30,49,492	1,55,37,386
Loans and Advances	S	11,93,112	9,88,316
Current Assets	T	1,92,42,585	3,05,34,438
<b>Total in Rs.</b>		<b>30,11,99,842</b>	<b>28,25,44,303</b>

<b>Income and Expenditure for the year Ended 31st March , 2018</b>					
<b>Expenditure</b>	<b>Rs. As on 31.03.2018</b>	<b>Rs. As on 31.03.2017</b>	<b>Income</b>	<b>Rs. As on 31.03.2018</b>	<b>Rs. As on 31.03.2017</b>
Educational & Acadamic Expenses	25,26,17,907	28,50,52,284	Sources of Income	21,87,04,500	24,21,78,815
Excess of Expenditure over Income	(3,39,13,407)	(4,28,73,469)			
<b>Total in Rs.</b>	<b>21,87,04,500</b>	<b>24,21,78,815</b>		<b>21,87,04,500</b>	<b>24,21,78,815</b>

### Academic Achievements

- During 2018-2019 academic year, 932 Students were admitted into various programmes.
- The 26th Convocation was held on 06.10.2018 in our campus, 986 graduands received their Diploma / Bachelors / Master and Doctoral degrees and the

Doctor of Letters (Honoris Causa) was awarded to Prof.Dr.Mohamed Rela, Chairman and Managing Director of Dr. Rela Institute and Medical Centre, Chennai.

- PMIST received the prestigious Award for “Best Private University in India (Education Transformation)” from ASSOCHAM (The Associated Chambers of Commerce and Industry of India) in the Annual Conference cum Awards Event 'Entrepreneurs India: Gains & Misses' on the occasion of the “WORLD ENTREPRENEURS’ DAY” held at New Delhi on 21<sup>st</sup> August 2018.
- This event was organized by ASSOCHAM jointly with Skill India (Ministry of Skill Development and Entrepreneurship), MSME (Ministry of Micro, Small and Medium Enterprises, Govt. of India), Technology Development Board, Department of Science & Technology, Govt. of India), and NSDC (National Skill Development Corporation). Around 300 leading Entrepreneurs from India and abroad participated in this Conference. Prof. S. Velusami, Vice-Chancellor, PMIST received the award.
- A Memorandum of Agreement (MoA) has been executed with International Centre for Global Excellence (ICGE) through ESKAY Academic Services, Chennai, for the purpose of conducting sustained model training courses to the students and train them to be globally competitive in all aspects. In this regard a Global Research Centre is established in PMIST.
- A Memorandum of Understanding (MoU) with M/s. Space Kidz India, Chennai was signed with the objectives of providing technical training, internship and Research development based on satellite and space exploration for the students. As a first event from the MoU M/s. Space Kidz India, Chennai, a team of 15 girl students from Aerospace, Mechanical, ECE, EEE and CSE have got the training at Chennai and have launched SKI NSLV9 Maniammaiyyar Sat on 21.04.2019 at our University. This was Asia’s first Satellite launch by Girl Students. Dr. Mylswamy Annadurai, Vice President, Tamil Nadu State Council for Science and Technology and the Former Mission Director, ISRO was chief guest of the function. Several Academicians, students and General public attended the ceremony. This event got recognition from Asia Book of records.
- About 27 Faculty members were recognized as BOS member, CoA Nominee, External Examiner for research scholars, invited as Resource person in conference, Reviewer in Journals, Qualified UGC-NET/SET Lectureship and received awards like Indian Faculty Leader award, Distinguished Alumni Award, Best Faculty Award etc.
- Twenty two Value Added Courses were offered during this academic year

- Institution organized professional skill development programmes about 171 teaching & non-teaching staff members participated and benefitted.
- Twenty (20) faculty members attended Faculty Orientation Programs and training programmes during this academic year

### **Important Events Conducted**

- On 2<sup>nd</sup> May 2018 Mr. William Britten and Ms. William Britten (School Teachers from Canada) interacted with B.Ed. students on various teaching techniques.
- Silver Jubilee Alumni Reunion Programme of first batch of students was celebrated on 03.08.2018 & 04.08.2018 and 121 alumni have participated. They created an Endowment in the name of their batch (PMCTECH 1989 – 93 BATCH) with an amount of Rs.3.00 Lakh for economically poor and under privileged First Rank Student in CSE, ECE, and Civil depts. Ms.Sumathy Senthilkumar of Civil dept., announced that she will credit an amount of Rs.25,000/- in alumni account every year on her daughter's birthday to encourage and educate the girl student who come from economically poor rural background.
- The staff and students have voluntarily contributed Rs.1.00 Lakh towards the “Chief Minister's Distress Relief Fund” for the people affected by flood in Kerala. This amount was handed over as cheque to the Esteemed Chancellor on 27.08.2018.
- Open House 2018 was conducted on the theme “Technologies for Green, Clean and Digital India” on 30.08.2018 & 31.08.2018. On these two days, 22 schools and polytechnic colleges have participated and exhibited their 38 projects and models. 165 numbers of projects and models have been displayed by the students of our Periyar Maniammai Institute of Science and Technology. Organizations such as Tamil Nadu Energy Development Agency, Indian Institute of Food Processing Technology Thanjavur, Banana Producer from Kulithalai, Tan Bio from Periyar Technology Business Incubator have also displayed their products. Mr. Nel Jayaraman exhibited traditional paddy varieties and explained various traditional paddy cultivation methods. 708 School students & 100 Polytechnic students participated in 13 events of this Grand Open House Exhibition 2018. Around 10,000 students from 65 Schools and Polytechnics visited the stalls and exhibits and got exposed to various current technologies.
- The staff, students and alumni of PMIST, the Periyar Institutions at Jayankondam and Trichy, has generously donated the relief materials to the people affected by

Gaja cyclone. The worth of materials donated was Rs.6,12,750/-. All these materials were distributed in packets to about 2400 affected families in Nagapattinam, Thiruvarur, Vedarniyam, Orthanadu and Mannargudi in eight rounds.

- Skill development workshop for polytechnic students was organized by Faculty of Engineering and Technology on 5.3.2019 & 6.3.2019.
- A Workshop on Curricular Aspects was organized by Dean Academic Office and IQAC on 7th March, 2019, in which 40 faculty members from our institute participated and benefitted.
- National Mission on Education through ICT, an MHRD, Government of India initiative has chosen PMIST as one of the remote centres. A workshop on "Moodle Learning Management System" was conducted on 15.03.2019 in our institute, in which 28 faculty members from our institute and 9 faculty members from other institutes participated and benefitted through this workshop.
- PMIST conducted the State Level Periyar Memorial Tournament 2018-19 in memory of our mentor Thanthai Periyar's birthday from 9<sup>th</sup> & 10<sup>th</sup> January-2019. Students from 24 institutions in Tamilnadu participated.
- Internal Quality Assurance Cell (IQAC) of PMIST organized Two Day Seminar on "Technology enabled teaching learning strategies towards quality enhancement in higher education" in academic partnership with NAAC on 11th and 12th April 2019. 47 number of faculty from our institute and 4 number of faculty from other institutes participated and benefitted through this workshop.
- Department of Mathematics & Software Engineering jointly organized one week workshop on "Statistical Tools in Research Methodology" held from 07.01.2019 to 12.01.2019. About 47 members including Faculty members and Research Scholars from various Departments participated in the workshop.
- Department of Mathematics organized one-week workshop on "STRATEGY TO CRACK GATE – 2019" from 21.01.2019 – 25.01.2019. 36 final year B.Tech students from various departments participated in the workshop.

#### Activities of Various Faculties

- Faculty of Architecture and Planning

The Department of Architecture organized 1 workshop and 17 guest lectures. The staff members have published 3 papers in journals and presented 4 papers in conferences. They have participated in 13 Seminars / Workshops / Conferences / FDP and delivered 5 Guest lectures.

➤ **Faculty of Engineering and technology**

Various departments in the Faculty of Engineering and technology organized 2 Conferences, 2 Seminars, 8 workshops and 12 guest lectures. The staff members have published 10 papers in journals and presented 30 papers in Conferences. They have participated in 18 Seminars/Workshop/Conference/ FDP.

➤ **Faculty of Computing Science and Engineering**

Various departments in the Faculty of Computing Science and Engineering organized 7 Seminars, 8 workshops and 4 guest lectures. The staff members have published 32 papers in journals and presented 11 papers in Conferences. They have participated in 61 Seminars/Workshop/conference/ FDP and delivered 3 Guest lectures.

➤ **Faculty of Humanities, Sciences and Management**

Various departments in the Faculty of Humanities, Sciences and Management organized 5 Seminars, 7 workshops and 11 guest lectures. The staff members have published papers in various journals and presented papers in Conferences. They have participated in 14 Seminars/Workshop/conference/ FDP and delivered 2 Guest lectures.

**Centre for Students and Administrative Services (CSAS)**

The centre has conducted 20 programmes in which 2110 students, 110 parents and 163 staff members participated and benefitted.

- Humanist Club, Childline and Department of Social Work Jointly organized International Women's Day on 8.3.2018. Special address was delivered by Ms.P.Shanthi - Secretary cum Sub Judge DLSA, and Ms.S.Vijayalakshmi - AWPS Inspector, Vallam. 100 students participated from B.Com, MBA, BBA and MSW departments.
- Two Week Staff Development Programme (SDP) on "Smart DTP and Creative Design Works" for Non-Teaching and Supporting Staff Members was conducted from 9.4.2018 to 20.4.2018. 32 staff members participated and benefitted.
- Awareness programme by Tamil Mandram Students was given on Mahatma Gandhi in English and Tamil during the assembly on 14.08.2018. B.Sc.B.Ed students Thaslim, PS.Riyaasri and P.Anusuya spoke about Mahatma Gandhi . 200 students and 20 staff members participated.



- A Debating programme was conducted by Debating Society and Education department on 14.08.2018 on the topic “Whether the principles of Mahatma Gandhi is followed in today’s generation or not?”. 50 students and 10 staff members participated.
- Media Producers club through 10 students of Software Engineering Dept uploaded a play prepared for Nationwide competition on 27.8.2018 in commemoration of 150th birth anniversary of Mahatma Gandhi.
- Citizen consumer club staff advisor Mr. B. Balaji along with 2 student’s office bearers attended the special meeting organized by Thanjavur collectorate on 05.07.2018.
- Students Council Election as per the Lyngdoh Committee recommendations was conducted on 6.8.2018. The following members are elected as office bearers:

Sl. No	Post	Elected Candidate	Year and Branch
1.	Advisor	Mr.R.Arun	IV Year Mechanical
2.	Advisor	Ms.R.Harivardhinie	IV Year Biotechnology
3.	Chairperson	Mr.A.Rajesh	III Year ECE
4.	Deputy Chairperson	Ms.A.Varsha	III Year Commerce
5.	Secretary	Mr.G.Surya	II Year B.Arch.
6.	Deputy Secretary	Ms.P.S.Riyasri	II Year B.Sc., B.Ed.

- Two sessions on Counseling was given for parents at PCHSS, Trichy by Mrs. D.Antony Lilypushpam, Counselor PMIST. The first session was on “Parents role on their children’s school life” on 09.06.2018 where 110 parents participated and benefitted. The second session was given at the same school on topic “Good Touch and Bad Touch” for children of 5th standard and below on 7.08.2018 (140 students). Similarly two Sessions focusing on topic “Academic Achievements” was given for 9th, 10th & 11 students for girls and boys separately at PCHSS, Trichy. Nearly 120 students benefitted from these sessions.
- Students of B.Tech, BCA, B.Com, MSc. (SE) along with CUII staff coordinators attended the meeting for HR training on soft skills and communication skills organized by Gillette and The Hindu Group on 21.9.2018. Mr.T.J. Thamarai Selvan, Isysway and Mr. Gnanaseelan National trainer, the Hindu Group were the guest speakers. At the end of the lecture, an Aptitude test was conducted for screening the Top scorers for further opportunities at state, national and international levels. 350 students 10 staff members participated.

- The bus operators, Drivers and Transport i/c are addressed by Director CSAS on their role and responsibilities during the operations of the bus services on 28.09.2018. 15 Drivers/ Staff benefitted.
- Vigilance Awareness PMIST Citizen Consumer Club organized a special lecture on the theme “Eradicate Corruption- Build a New India” on 1.11.2018. 540 members took the integrity pledge. Hon’ble Vice -Chancellor Dr. S. Velusami, addressed the gathering along with Er.A.Kamal Batsha – Thanjavur District Head, Anti-Corruption movement and Mr.K.Kaliaperumal - Thanjavur District Secretary, Anti-Corruption movement on 01.11.2018. 500 students and 40 staff members participated in the programme.
- Programme on topic “Psycho-social factors on teacher student relationship “ for teachers of Periyar centenary higher secondary school and Periyar matriculation school was conducted on 28.09.2018. Ms. D. Antony Lilypushpam counsellor PMIST, Thanjavur delivered the speech where 95 Teachers participated and benefitted.
- Programme on topic, “Family counselling” was given by Ms. D. Antony Lilypushpam to women employees at Human resource development centre, BHEL Trichy on 14.11.2018. 35 lady employees of BHEL, Trichy participated and benefitted.
- Psychology class for Herbal part time students on topic “Psychology approach to Herbal Treatment” was given on 24.11.2018.08 benefitted.
- Two cases of student grievances were dealt by Students Grievance Redressal Cell (SGDC).
- V. Udhayasuriyan, III year Nanotechnology , S. Saranya, III year Nanotechnology, S. Nijas, II year Aerospace, A. R. Ravitha, IV year B.Sc.Ed., K. Elamathi, III year B.Sc.Ed. and S. Saranya, III Year Nanotechnology were selected as finalists for pattimandram on topic “Vigilance Awareness” organized by anti-corruption movement on 17.12.2018.
- PMIST Citizen Consumer club jointly with Anti-corruption movement of Thanjavur district organised a special social awareness programme on 19.12.2018. Justice K.Chandru, High Court Judge (Rtd.), Chennai was the Guest of Honour for the Programme. The students and faculty members from the following branches (B.Com, BCA, BBA, CSE, Software Engg. and ECE dept.) participated in the programme. 350 students and 10 staff members participated.

- Hon'ble Prime Minister interaction program with students during Pariksha Pe Charcha 2.0, was Telecasted through PMIST media club on 29.1.2019. 120 students and 8 staff members participated in the programme.
- Tamilnadu Police Department, Department of Transport- Govt of Tamilnadu along with Tamil Mandram, Debating society and Painters club of PMIST celebrated the ROAD SAFETY WEEK on 7.2.2019. The first year students of Architecture, Engineering and Education participated in the programme on 7.2.2019. Oratorical competition, Poster/ drawing competition and Best slogan competitions were conducted on 6.2.2019 and prizes were awarded to winners in the function. 320 students and 12 staff members participated.
- Student representative's review meeting along with Hon'ble VC was organised on 4.2.2019. Elected class representatives, Registrar, Dean academic, Director CSAS participated along with 75 students.
- PMIST Humanist Club along with Art of Living foundation, Bengaluru organized Webcast Live programme on Drug-Free India Campaign. Students council representatives participated on 19.2.2019 along with 70 students.
- Counsellor Ms. Lilly Pushpam gave a training session at Police Training Center, Thanjavur on the topic "Gender issues" on 14.02.2019. 28 persons from cadre of police constable to S.I rank participated.
- A special lecture was arranged for Junior faculty members on "Teaching, Learning and Class room management" on 26.02.2019. Guest speaker: Mr.B.Vijayakumar, Former General Manager, Air India & Director Vels Group of Schools delivered Lecture and interacted. 30 staff members participated.

### **Staff Achievements**

- Dr. S. Senthamilkumar, Prof. / Civil and Ms. K. Manonmani, Asso. Prof./Arch. both are holding the position of independent Directors of Thanjavur Smart City Limited, Thanjavur.
- Dr. K.Mohanasundaram, Prof. / Education and Mr. M.G. Thamilvanan, AP / Education both have received National level - Best Faculty Award from the Indian Academic Researchers Association, Tiruchirappalli on 21.04.2019.
- Dr.Nitin Kumar, Asst. Prof. / Biotech. received TONY B. AWARD during an International Conference held at Washington, DC, USA for outstanding achievement in Life Sciences and Technology.

- Dr. C. V. Subramanian, Asso. Prof. /Arch. Was nominated by CoA for Staff Selection Committee for recruiting faculty members at St.Peters College of Engineering and Technology, Chennai
- Tamil Nadu Public Service Commission has empanelled Ar.K.Manonmani, Asso. Prof./Arch., Ar.Kavitha.V.S., Asso. Prof./Arch. and Ar.N.Ramesh Babu, Asso. Prof./Arch. as Examiners in Question Paper Setting, updating question bank for diploma level.
- Dr. L. Jayanthi, AP/ECE delivered a lecture on SCIENTOONS and Info graphics for Effective Science Communication in Regional Workshop on Science writing, Journalism, organized by M.T.S Academy of Mylai at Thiruvalluvar Tamil Sangam on 12.02.2019 and 13.02.2019.
- Dr.L.Jayanthi, AP/ECE received "Shakthi Award – 2019" from n-Root Associates, Thanjavur.
- Dr. P. Aruna, Assistant Professor / Software Engineering qualified in NET examinations during 2018.

### **Student Achievements**

Students from various departments have participated in different events conducted by other universities and institutions and won prizes and secured first places. Few notable achievements are given below,

- Mr. A.A. Elamparithi, IV year Aerospace student secured all India rank of 300 in the GATE 2019 examination.
- Mr. G.Nishanth, Final year ECE student received Best ISTE Student award in 18th ISTE Tamilnadu Engineering student convention 2018-2019.
- Ministry of Human Resource Development in association with the Ministry of Drinking Water and Sanitation has launched the 'Swachh Bharat Summer Internship – 100 Hours of Swachhata' for each individual. 10 Students from final year (Ahamed Jasim A, Amal Nagdev O R, Balasubramani M, Binny Sabin B, Dhinesh S, Manoj Pari M, Mohamed Faich H, Robin A, Elamparithi A A, Shyam Shankar S) and 6 students from our II Year (Nagulan S, Pradeepkannan A, Prasanth M, Rudhra Sekar S, Tharun Pranav G R, Vignesh S) participated. Final year students got cash award (I prize-Rs.30, 000, II Prize-20,000 and III prize-10,000) and certificates for their best performance.

- Final year IT student's (Amudhini.V.P ,Santhini.T ,PavitraKailash, Nivetha.D ) project titled "Prediction of cardiovascular disease using machine learning algorithm" received proposal grants amount Rs.7500 from TNSCST, Chennai.
- A. Anserdeen, III year EEE Student participated in cultural programme of "Festember-18" held at National Institute of Technology, Trichy on 16.09.2018 and secured 1st Place in Live Photography.
- The Bar Association of Supreme Court, New Delhi, has given a certificate of appreciation to Mr.Navaneethakumar, BBA III Year student for his exemplary service, as a volunteer in Gaja Cyclone relief work – 2018.
- S.Ramanathan III M.Sc-SE won 1st Place in AMYGDALA event, BOOTFEST 2k18 symposium held at Bishop Heber College, Trichy on 09.10.2018.
- P.Dinaa, A.Pavusia , V.Sivachandra, B.Madhu Mamtha, S.Laxmi Narayanan, R.Nishanth III yr B.Sc (AM) Won I prize in Short Film for Commemoration Day in Thanjavur district and nominated for state level competition by Superintendent of police Office, Thanjavur 17.10.2018
- K.Mangeshkaran and K. Liwin Balaji, IV Civil participated in National Level Technical Symposium held at Dhanalakshmi Srinivasan Engineering College, Perambalur 7th Sep 2018 and won first prize in Poster Presentation and paper presentation.
- Mr. K. Mangeshkaran and Mr. T. Yogesh, Civil, IV year A- Sec participated in Two Day International Conference on ENVIRONMENT & NATURAL SCIENCE organized by PMIST and won the best Project award in March 2019.

#### **Centre for University Industry Interaction (CUII)**

- Out of 423 students opted for placement during 2018-2019, 323 were placed achieving 76 percentage as on 24-04-2019 is 76% with a highest package of Rs. 4 Lakhs per annum. 42 companies offered opportunities for placement, out of that 7 were IT companies, 7 ITES, 6 marketing and 22 were core companies. Number of offers received as on 24-04-2019 is 599.

#### **Periyar Pura Centre for Rural Development (CRD)**

The Centre has undertaken several activities related to Periyar PURA. Notable activities are:

- a. Rural Medical camps were organized at Ayyasamipatti, Thirukanurpatty, Jeyamkondam, Manganoor, Cooloor, kutralam, Kottarapatty, Puthagaram. Kuruvadipatty, Thanjavur and Thiruverambur. Total 2373 benefitted

- b. Centre for Rural Development and NSS jointly organized Clean India programme (swachh bharat) programmes at Palayapatti, Gomapuram and Kuruvardipatty.
- c. Centre for Rural Development along with Education department conducted Awareness programme at the Vallam Govt. Boys higher secondary school. Staff member from Education Department explained the doubts on various subjects raised by the students.
- d. Centre for Rural Development and NSS Jointly organized Socio Economic Survey at Achampatti village.

### **VEERAMANI MOHANA CENTRE FOR QUALITY LIFE ENGINEERING RESEARCH**

Veeramani Mohana Centre for Quality Life Engineering Research (VMCQLER) established in the year 2009, aims to enrich Quality of life for the growing community of Engineers, Scientists, Practitioners, Consumers, Elders and Rural community through participation.

- VMCQLER, CRD and Biotechnology department jointly organized Nilavembu Thee-neer preparation and distributed on 29<sup>th</sup> October 2018 to all PMIST students and staff members as a preventive measure in the wake of the outbreak of contagious diseases due to climatic change. More than 1000 students and staff members were benefited.
- On behalf of Esteemed Chancellor's birthday VMCQLER organized a special medical camp on Diabetes in PMIST Campus jointly with Dr.Mohan's Diabetes Specialties Centre Thanjavur on 29-11-2018. Around 260 PMIST staff members were benefited.
- VMCQLER conducted guest lecture and Training on Kerala Ayurvedic traditional therapy for Herbal therapy students and PMIST staff members on 23/2/2019
- VMCQLER and Department of Social Work jointly organized a seminar cum counseling on "Stress management and Balancing social life system" and "Youth health is nation wealth" on 04-04-2019, as part of world health day.

### **Centre of Excellence for Training and Research in Automation Technology (CETAT)**

The Centre of Excellence for Training and Research in Automation Technologies was set up by M/s Bosch Rexroth India Ltd at PMIST based on the MOU. Four laboratories viz. Hydraulics, Pneumatics, Programmable Logic Controllers and Sensorics have been set up at the Centre.

- The CETAT combined with the Department of Mechanical Engineering submitted a proposal on 14<sup>th</sup> November 2018 to AICTE-ISTE sponsored program through online in the topic “Emerging Trends in Automation” for conducting STTP (Short Term Training Program) to faculties of PMIST and other colleges.
- POEMS project team faculties patent has been published in the name of “An Electro Pneumatic Projectile Launching Training System “ on 24 Jan 2019 and International Publication number is WO 2019/016671 A1
- Mr.I. Karthic Subramaniyan and Mr. R.Rakesh delivered guest lecture in the topic of Industrial Automation in Kings College of Engineering, Thanjavur

### **Periyar Technology Business Incubator – Entrepreneurial Activity**

Periyar Technology Business Incubator (PTBI) is an organizational setup that nurtures technology based and knowledge driven companies by helping them survive during the startup period, which lasts around the initial two to three years. Started in 2006, Periyar TBI has supported 39 incubatees several of them have become successful entrepreneurs.

During the Academic year 2018 -2019, Periyar TBI has made several strides in terms of projects, enrollment of incubatees, conducting workshop/seminars in collaboration with PMIST etc.

- As on date Periyar TBI has 27 incubatees in its rolls out of which 15 incubatees have occupied office space in Periyar TBI to carry out their start up activities.
- Periyar TBI received an expression of interest (EOI) from Air headquarters for supply of 11 nos. of POEMS. POEMS stands for The Pneumatically Operated Electronic Multipurpose Simulator. It is developed by PMIST as part of contract between PMIST and Indian Air Force (IAF) is a training simulator specially developed to train operators of shoulder fired missile system.
- The filing of patent of POEMS has been completed after remitting the fees. The patent has been filed in the name of “Electro Pneumatic Projectile Launching Training System”.
- Periyar Technology Business Incubator submitted a proposal to NITI Ayog for scaling up support for the existing incubator that is Periyar TBI under Atal Incubation Mission of NITI Ayog. The proposal has been cleared for consideration in phase-II in its notification dated 4th May 2018. The grant in aid will be subject to comply with all mandatory compliance requirements including an onsite due diligence of readiness of the applicant’s facilities.

- Based on subsequent meetings and discussions with Atal Team, the budget initially submitted was revised in line with AIM guidelines. Accordingly, the budget envisages a total grant in aid of Rs. 8.99 crores and the applicant's contribution of Rs. 1.00 cr totaling Rs. 9.99 cr.
- Periyar TBI has submitted training proposals with the Government agencies for conducting skill development training programs which are in various stages of consideration.
  - 1) Tamil Nadu Skill Development Corporation (TNSDC)
  - 2) DeenDayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)
  - 3) iii) Pradhan Mantri Kaushal Vikas Yojana (PMKVY)
- In association with the Department of Commerce, a symposium on Entrepreneurship was conducted on February 26, 2019. Mr. B. Vijayakumar, Former General Manager, Air India spoke on the occasion.
- Periyar TBI and Department of Nanotechnology organized two day National Level Workshop on Nanomaterials Fabrication and Characterization Techniques on 28th & 29th December 2018.
- The Institution Innovation Council (IIC) of PMIST and Periyar TBI organized a workshop on "Cognitive Skills, Design Thinking and Critical Thinking" on 30th December 2018.
- Periyar TBI has been approved as Training Provider under Tamil Nadu Skill Development Council for imparting skill training in 2 modules: CNC operator and Field Technician - Other Home appliances.
- Periyar TBI has facilitated the incubatees for conducting training programmes for the benefit of students.
  - i. M/S DRONERA THE INDIGENES conducted workshops on "Drone Development at Crescent College of Engineering, Chennai on 26th & 27th October 2018, Vasavi College of Engineering, Hyderabad on 30th & 31st October 2018, NRI college, Vijayawada, on 19<sup>th</sup> & 20<sup>th</sup> December 2018 and Sandip University, Nashik on 26<sup>th</sup> & 28<sup>th</sup> February 2018.
  - ii. M/S SCIGEN RESEARCH & INNOVATION conducted a workshop on "Animal cell culture Techniques" on 4th November 2018 and on 28th & 29th January 2019.
  - iii. M/S TANBIO R & D SOLUTION conducted a two day workshop on "Advanced Chromatographic Techniques" on 22nd & 23rd February 2019.



## **Research and Consultancy Activities**

### **i. Research and Development**

- 448 Scopus indexed publications, 205 web of science indexed publications, 1205 Google Scholar indexed publications are added during this academic year
- 5197 Google scholar citations of the various research works are added this academic year
- Google scholar h-index of the university has increased to 32 and Scopus h-index at 21.
- URKUND Anti plagiarism software was purchased and effectively used by the students and staff
- Copyright received from the Ministry of Commerce & Industry for the development of indigenous software BRAIN V2.13 by the staff of PMIST.

### **ii. Progress of Research Scholars**

- At present 174 research scholars pursue their Ph.D.
- Ph.D degrees were awarded for 18 Researchers this year.
- Four scholars got evaluation Reports and waiting for public *Viva voce* examination and six researchers have submitted their theses. Five of scholars submitted their Synopses.

### **iii. Institution's Innovation Council (IIC)**

- In continuation with the communication received from MHRD, the university has registered our IIC on 16.10.2018. The council has so far organized two workshops, one on cognitive Skills, Design Thinking and Critical thinking using local resource persons on 30th November 2018 and another on Intellectual property rights on 14 December 2018.
- Our students actively participated in the Smart India Hackathon and two teams now entered into the stage 2 level.

### **iv. Workshop for Research Promotion**

- A special lecture by Prof. S. Lalitha Nagesvari, Program Manager, USIEF was arranged for our faculty members and research scholars on 09.05.2018.
- Research coordination meeting has been conducted on 03.09.2018.
- A workshop on "Basic concept of research, Scientific writing & scientific communication" was conducted on 1st December 2018 for research scholars and faculty members. Prof. P. Balakumar, Professor of Pharmacology, JKK Nattaraja College of Pharmacy, Erode was the resource person.

- Three members team from University of Iowa, USA, Prof. Eric Hoffman, Dr. Alejandro Pierre Commellas Freymond, Dr.Emma Stapleton, Dr.Kizhakke Puliyakote, Abhilash Srikumar from University California delivered a lecture and interacted with students and faculty on 28th & 29th January 2019. The above team had a preliminary research survey from 28th January 2019 to 1st February 2019.
- Dr.K.Kesavan, AP/Physics, Dr.A.Sirajunisa, Associate Professor/Chemistry, Dr.J.Jeyachidra, Associate Professor & Dean (FCSE), Dr.Anand Jerard, Associate Professor/Social Work and Dr. S.Kumaran, Dean (Research) working with the above team for Hut Lung Project, funded NIH, USA.
- Internal Research Scholars meeting was conducted on 27.03.2019. The internal research candidates explained their research progress to Hon'ble Vice Chancellor, Registrar and Deans.

#### **v. Submission of Project proposals**

- Thirty two students projects have been applied to TNSCST in September 2018
- Thirty five students projects have been applied to Smart India Hackathon in January - February 2019
- Forty seven Project Proposals with the project cost of Rs. 439.04 Lakhs have been submitted to various funding agencies by the faculty between March 2018 and March 2019.

#### **vi. Grants Details**

- About 9 lakhs research grant received from various agencies this year. Students of B.Tech. CSE (Guide: R.Poonguzhali, Assistant Professor / CSE) and M.Tech. Nanotechnology (Guide: Dr.K.Geetha, Assistant Professor / Nano) have received 3 awards each Rs. 7500/- from the Tamil Nadu State Council for Science and Technology for their research works.

#### **vii. Ongoing projects**

- At present three funded Research projects of Rs. 8.5 lakhs worth are in progress.

#### **viii. Patent Details**

- This year, two provisional patents have been filed, three Provisional Patents have been published and two provisional Patens and 16 Design patents have been filed.

#### **ix. Consultancy**

- Under smart city mission, Department of Civil Engineering and Department of Architecture jointly with Thanjavur City Municipal Corporation has undertaken

the project “Development of Thiruvalluvar Theatre to Commercial complex,” worth of Rs. 48 crores. The consultancy charges to PMIST is Rs. 24 lakhs. The project has undergone administrative by the high power project sanctioning committee, secretariat, Tamil Nadu Government and Technical sanction is ongoing by the commissionate, Chennai.

- The Department of Civil Engineering has generated about Rs. 23 lakhs through lab testing services.

#### **x. Summer Research internship by abroad scholars**

- Mr. Raj Kumar Dahal, pursuing Master degree and Mr. Jesse Cameron, doing Undergraduate degree in the University of Prince Edward Island, Canada are presently carrying out their 12 weeks summer research internship (since 24th April 2018) on Biomass gasification in this institution, under the guidance of Dr.P.K.Srividhya, Professor/Mechanical Engineering & Dean / Academic.
- Their home supervisor Prof.Dr.Bishnu Acharya visited this institution during 20th to 23rd May 2018 and monitored the research progress of his students. He also had an interactive session with a selected team of faculty on 21st May and the areas of possible future collaborations have been discussed.

#### **xi. Summer Research internship by abroad scholars**

- In pursuance of the collaborative activities among Cape-Breton University, Canada, Dr. Mahalingam College of Engineering and Technology, Pollachi, Karunya Institute of Technology and Sciences, Coimbatore, PMIST and Loyala Institutions, Chennai, organized an "INDIA-CANADA Summit - Energy and Environment" on 25<sup>th</sup> May 2018 at Karunya University, Coimbatore and 26<sup>th</sup> –27<sup>th</sup> May, 2018 at Dr. Mahalingam College of Engineering and Technology, Pollachi.

#### **Centre for Energy and Environment**

- Samples from bore well and waste water were collected periodically and analyzed for characteristics and compared with the standards.
- Noise level were measured periodically from various blocks of the Institution and compared with the permissible levels
- Students and faculty from Karthikeya Polytechnic College Manaparai visited the premises and gathered the information related to energy and environment on 10.8.18

- Trainee Engineers from Agriculture Engineering Training Institute, Trichy visited the premises on 21.8.18.
- Mr. J. Santhosh, Director i/c delivered a special lecture on “Solid Waste Management”, on 1.12.2018 The lecture was given in Combined Annual Training Camp (CATC) of NCC at PMIST. 500 NCC trainees were benefited and visited the renewable energy gadgets in the premises.
- The Centre for Energy and Environment conducted a two day workshop on Waste to Energy during 19-20, September, 2018. Special lectures were given by the experts based on the following themes: anaerobic co digestion process, recyclable materials, Waste management, Solar Energy and Biomass Gasification.
- Mr. J. Santhosh, Director i/c delivered a special lecture”, on “Biomethantation and biofuel” at All India Radio Trichy 10.12.2018.
- Green Audit and Energy audit was conducted by the External member Er. M. Vivekandan, BEE Certified Energy Auditor, Trichy during 11.3.2019 -15.3.2019.
- The Centre organized International conference on Environment and Natural Science with the Departments of Civil Engineering, Biotechnology and Chemistry and the International conference on Energy with the Departments of Mechanical Engineering and Electrical Engineering during 12th and 13th March, 2019.

### **Arjun Singh Library**

- In this academic year 1349 books and 1600 E-books were added to our library. 126 National/international Journals and 202 Online Journals and two databases (J-Gate Engineering & Technology 4000+ journals and Pro Quest 3500+ Journals) were renewed.
- 03 Research scholars pursuing Ph.D. in Library and information science have submitted their thesis.
- This library has Institutional Membership with National Digital Library (NDL), British Council Library, Chennai, DELNET New Delhi, Current Science Association, Bangalore, Sister Institutions and Tamil University, Thanjavur for the benefit of students and staff.
- Conducted one day workshop on open source software KOHA on 12.10.2018 jointly with Indian Institute of Technology Bombay under the scheme National Virtual Library of India funded by the Ministry of Culture, Government of India. 34 librarians in and around Thanjavur attended.

- Dr. T. Narmadha, Assistant Librarian, Dr. K. Raju, Assistant Librarian participated in a National workshop on “ Research Intelligence and Scholarly Publishing” organized by Department of Library and Information Science, Bharathidasan University, Tiruchirapalli on 24th August 2018.
- “World Book Day & copyright Day” was celebrated on 23.04.2018. Staff and Students participated in this programme.

### **Physical Education**

- Athletes Students won 24 MEDALS (12 Gold Medals, 6 Silver Medals & 6 Bronze Medals) at the District Level Junior Athletic Meet Organized by Thanjavur District Athletic Association held at Annai Sathya stadium, Thanjavur on 17 & 18.07.18.
- J Kavya of II B.Sc won silver medal in 100 mts at District level 50th Golden Jubilee Athletic meet – 2018 Organized by SDAT- Thanjavur District Unit- at Annai Sathya stadium, Thanjavur on 19.07.18.
- D.S.Balakowshi (I- BCA) – won III PLACE at International FIDE Rating Chess Tournament – 2018 organized by Nethaji Subhas Chandrabose Pasumpon Muthuramalingam Thevar Trust held at Jawaharlal Nehru stadium, Chennai on 24.08.18 & 26.08.18.
- Athletes Students won 12 medals (9 Gold Medals, 1 Silver Medals & 2 Bronze Medals) at the District Level monthly Athletic Meet Organized by Sports Development Authority of Thanjavur held at Annai Sathya stadium, Thanjavur on 30.08.18.
- Volleyball team won Runners-Up at the District Level monthly Volleyball Tournament Organized by Sports Development Authority of Thanjavur held at Annai Sathya stadium, Thanjavur on 30.08.18.
- Students won the TKV Sporta Festival 2018 Organized by Thanjavur District Athletic Association held at Annai Sathya stadium, Thanjavur on 31.08.18 & 01.9.18.
- M.Aucash (I-Mech) won First Place the State level 11<sup>th</sup> Tamilnadu state Archery Meet Organized by Archery Association of Tamilnadu, held at MGR Janaki Womens College, Chennai on 6<sup>th</sup> & 7<sup>th</sup> October- 2018.
- Football and Kabadi team won “Winner” at the RVS Agri College Tournament 2018 organized by RVS Agri College held at Sengipatti, Thanjavur on 12.10.18 & 13.10.18.

- Roller skating students won 10 Gold Medals and one silver medals at the District level Roller skating tournament organized by Thanjavur District Roller skating Association, held at Parisutham college of Engineering and Technology, Thanjavur on 15.09.2017 & 16.09.17.
- Volleyball team participated in All India Inter University South Zone Volleyball Tournament- 2018 Organized by Association of Indian University conducted by the SRM Deemed to be University, Chennai, TN on 9<sup>th</sup> to 14<sup>th</sup> November 2018
- Roller skating students won 3 gold medals at the State level Roller skating tournament organized by Thanjavur District Roller skating Association, held at Parisutham college of Engineering and Technology, Thanjavur on 23<sup>rd</sup> to 25<sup>th</sup> November 2018.
- Table Tennis student H.Robert Jones (I-Arch) won Gold Medal at the District level Table Tennis tournament organized by Thanjavur District Table Tennis Association, held at St. Antonys Hr. Sec. School, Thanjavur on 13.01.19.
- Athletes Students won 6 MEDALS (2 Gold Medals, 6 Silver Medals & 1 Bronze Medals) at the District Level CM Trophy Athletic Meet Organized by District sports Authority held at Annai Sathya stadium, Thanjavur on 2.2.19 & 3.02.19.
- Table Tennis student H.Robert Jones (I-Arch) won Gold Medal at the District Level CM Trophy Table Tennis tournament Organized by District sports Authority held at Annai Sathya stadium, Thanjavur on 2.2.19 & 3.02.19.
- Chess team won III place at the International Sports Cultural Carnival – Riviera 2019 to be held at Vellore Institute of Science and Technology, Vellore on 14.02.19 to 17.02.19.

### **Youth Red Cross (YRC) Activities**

A total of 300 units of blood was donated by students of PMIST during the following occasions

- Celebration of 140<sup>th</sup> Periyar Birth day
- Celebration of Esteemed Chancellor's Birthday
- Celebration of Annai Maniammiyar Birth day and Women's Day
- YRC volunteers participated in "Rally of Youth Red Cross" on World Youth Red Cross Day starting from Thanjavur Junction to Besant Lodge, Thanjavur which was organized by IRCS, Thanjavur Branch.

### **National Cadet Corps (NCC)**

- Flight cadet B. Kavimuhil of II CSE participated in Republic Day Contingent Camp 2019 at New Delhi.
- 70 cadets from various department attended various levels of camps.
- 42 cadets attended “B” certificate examination and 21 cadets attended “C” certificate examination which was conducted by NCC Directorate, Delhi.
- Flight cadets K. Ragunath of II Aero, V. Rahul of III Mechanical & M. Praveen of II Aero received a cash award of rupees 1000 per cadet in flying event. This cash prize was given because, this is the first time AIR, Trichy Group cadets participated in the flying event Inter Group Competition (state level) Camp in Vayu Sainik Camp (VSC).
- 03 NCC CATC camps and 01 All India National Integration camp was organised in our PMIST campus. Nearly 2000 NCC cadets from various state attended these camps.

### **National Service Scheme (NSS)**

- Swachh Bharath activities are regularly conducted in our campus. A summer internship programme was organised on 15-05-2018 in PMIST. Nearly 50 participants have taken part in this drive.
- Mission rabies awareness programme was organised on 05-09-2018. Dr. Murugan Appupillai, Director Education, Mission Rabies, Worldwide Veterinary Service India & UK (Former ITEC Expert, High Commission of India) gave awareness speech about mission rabies.
- Blood donation camp was organised on 19-09-2018 with the celebration of Thanthai Periyar’s 140<sup>th</sup> birthday. Around 200 people have donated blood.
- Medical camp was organised in association with Periyar Pura CRD on 25-11-2018 in Nagapattinam where 500 peoples participated and benefited.
- Swachh Bharath activities have been organised on 25-11-2018 at Thiruvarur, Vedaranyam, Nagapattinam and Thiruthiraipoondi where relief materials were distributed in 20 villages affected by Gaja cyclone. Nearly 3000 persons got benefitted.
- Swachhta Hi Seva Campaign was organised jointly with INTACT on 22-09-2018 where rally on Swachhta Hi Seva Campaign arranged. 100 participated..

- Tree saplings programme was organised on 20-09-2018, about 50 first year NSS students participated.

**Conclusion:**

With the indomitable support and encouragement from the management, the committed team of faculty members and a dedicated group of students, Periyar Maniammai Institute of Science & Technology is making strides in all aspects to translate its motto – Think, Innovate, Transform – into reality. We take pleasure to record our sincere thanks to our management, Esteemed Chancellor, Hon'ble Pro Chancellor, the Registrar, Staff, Students, parents and all the well wishers of our institution for extending their unflinching support to maintain the standard of education and to enhance the prestige of the institute. We extend our sincere thanks to all the staff for their efforts in maintaining cleanliness and hygiene of the campus. We convey our earnest thanks to all those who contribute to the development of this institute. We are extremely thankful to those who have generously contributed the endowments towards the growth and development of the institute. Once again, I thank one and all.