RAJALAKSHMI ENGINEERING COLLEGE, THANDALAM, CHENNAI

(An Autonomous institution, approved by AICTE and affiliated to Anna University)

Minutes of the 13th Meeting of the Governing Body held on 06-03-2025

Venue: Conference Hall **Time: 10.30 am**

AGENDA

S.No.	Items
GB.No.13.01	Action taken on the Minutes of the 12th meeting of the Governing Body held on 16.07.2024
GB.No.13.02	Seeking the approval of the Governing Body for Curriculum and syllabus framed for V to VIII Semesters, as per Regulations 2023 for the 19 UG programmes, in the respective meetings of the Boards of studies and recommended by the Academic Council in its 21st meeting held on 20.02.2025.
GB.No.13.03	Seeking the approval of the Governing Body for offering (3+1) twinning Programme with Arizona State University(ASU), USA, for the following UG programmes, from the academic year 2025-26 onwards: 1. B.E. - Aeronautical Engineering -60 seats 2. B.E. - Computer Science and Engineering -- 60 seats 3. B.E. - Electronics and Communications Engineering- 60 seats 4. B.Tech.- Information Technology -60 Seats The Academic Council has recommended the offering of this Twinning Programme in its 21st meeting held on 20.02.2025.
GB.No.13.04	Seeking the approval of the Governing Body for the increase in the students' intake in the following programmes, from the academic year 2025-26 onwards: • B.Tech.-Artificial Intelligence and Data Science 300 to 360 • B.E.-Automobile Engineering from 30 to 60 • B.E.-Computer Science and Engineering from 540 to 720 • B.E.-Computer Science and Engineering (Cyber Security) from 120 to 180 • B.E.- Electronics and Communication Engineering from 360 to 480 • B.E.-Mechatronics from 60 to 120 Totally 510 seats to be increased (2970 to 3480) in UG programmes. The Academic Council has recommended this increase in intake, in its 21st meeting held on 20.02.2025.

GB.No.13.05	Reporting the following recent developments: • Established the TANSAM (Tamil Nadu Smart and Advanced Manufacturing Centre) Innovation Center focusing on emerging fields; AR/VR, IoT, and Data Analytics, providing access to latest resources, advanced laboratories, and expert guidance. It enables students to participate in workshops, training programs and projects centered on product development, digital transformation, and sustainable practices. • Additional / New infrastructure facilities created since the previous Governing Body meeting: • In commensurate with the additional intake of students in the recent years and proposed for the years to come, additional floor in the Central Workshops and a separate hostel facility have been added and a residential complex is being built. • NBA expert team visited the departments of B. E. Chemical Engineering and B.Tech. Food Technology and awarded accreditation for three years (First – time Accreditation) for these two programmes. • Inspection by NBA Expert Team for data verification on compliance report for 9 UG Programmes have been completed on 22 & 23, February 2025. • Subsequently, for the another 3 UG & 1 PG programmes, the team visit is expected in late March / April 2025. • Partial modification in the continuous assessment scheme. • Major events conducted since the previous Governing Body meeting
GB.No.13.06	Any other points with the permission of the Chairman of the Governing Body

The following members attended the meeting:

S.No.	Name of the Member	Title
1	Dr. (Mrs.) Thangam Meganathan, M.A., M.Phil., Ph.D.	Trustee and Chairperson
2	Dr. A. Sivathanu Pillai Distinguished Scientist, Former R&D Head - DRDO, Ministry of Defence, Govt. of India Founder & former CEO, Brahmos Aerospace,	Trust Nominee
3	Dr. Mohan Munasinghe Nobel Laureate and Vice Chair of the UN Intergovernmental Panel on Climate Change	Trust Nominee
4	Mr. Ganesan Former Global HR Head, Tata Consultancy Services	Trust Nominee
5	Prof. Dr. C.R. Muthukrishnan, Advisor, Rajalakshmi Institutions,	Trust nominee - Academician

	Former Deputy Director, IIT-M & Consulting Advisor, Tata Consultancy Services	
6	Dr. Lalitha Balakrishnan Former Principal, M.O.P. Vaishnav College for Women (Autonomous)	Trust nominee - Academician
7	Mr. Dr. V.R. Giridev Professor, Department of Textile Technology, A.C. Tech Campus, Anna University, Chennai	Anna University Nominee **(Attended through online)**
8	Mr. K. Jayaramakrishnan Mitraa Limited	Trust Nominee
9	Mr. R. Vijayakumar Director, Rajalakshmi Automobiles Pvt. Ltd.,	Trust nominee - Industrialist
10	Dr. M. Subbiah Professor Emeritus, Department of Electrical & Electronics Engineering	Faculty Member of the College
11	Dr. T. Thamizhselvan Associate Professor, Department of Electrical & Electronics Engineering	Faculty Member of the College
12	Dr. S.N. Murugesan, M.E., Ph.D. Principal	Member Secretary / Ex- Officio

Invited Members

1.	Mr. I. Philip Praveen Director (Training & Placement) and Dean (Student Affairs), REC
2.	Mr. P. Jeeva Kalyana Sundaram Executive Officer (Administration), REC

The following members requested leave of absence due to prior commitments.

S.No.	Name of the Member	
1	Thiru. S. Meganathan	Chairman of the Trust
2	Mr. M. Abhay Shankar, B.E., M.S.	Trustee and Vice Chairman
3	Dr. M. Haree Shankar	Trust Member
4	Dr. S. Gopi Assistant Director (Planning) Directorate of Technical Education, Tamil Nadu	State Government Nominee

Dr. Mrs. Thangam Meganathan chaired the meeting and welcomed the members.

She also acknowledged the Governing Body's vital role in the institution's progress, thanking them for their valuable suggestions that drive quality and growth.

The principal gave a power point presentation, starting from the actions taken on the minutes of the 12th meeting of the Governing Body. The recommendations given by the members and the actions taken by the college are as follows:

GB.13.01	**Action taken on the Minutes of the 12th meeting of the Governing Body held on 16.07.2024**

1.1 As seen from the NIRF 2023 rankings, efforts may be made to improve the number and quality of faculty contributions in terms of publications, patents, funded-research and consultancy

Action Taken:

Faculty Publications:

To appreciate the good work done by faculty members by publishing technical articles in reputed journals and to encourage the rest, towards taking up research activities, we have the practice of providing incentives for quality publications. The incentive amount is also increased from time to time.

Further, the college has recently started using the services provided by "RESEARGENCE", an online platform which integrates all the data related to the research publications with REC affiliation. It compiles all the publications of researchers of the institution, from online sources and provides information on citations, h-index, SNIP and impact factor. In this portal, the faculty members can manually enter other research credentials such as patents, projects, collaborations, research groups, books, editorials, conferences and awards obtained and they also can extract their respective research profiles and credentials from this portal, whenever needed.

Data on Faculty publications indicates improvement arising from the incentives and support as mentioned above.

Year	*Scopus Publications*	*SCI Publications*
2021	*302*	*103*
2022	*592*	*168*
2023	*676*	*160*
2024	*1073*	*203*

***PATENTS**: The details are as shown below:*

PATENTS	***in2023***	***in2024***
Patents Filed	*145*	*212*
Patent Granted	*5*	*14*
Design registered	*18*	*123*
Copyright filed	*--*	*5*
Copyright granted	*3*	*3*

CONSULTANCY ACTIVITIES : Total amount received for consultancy work for the year

Year	***Consultancy Amount***
2023	***Rs.16,08,370/-***
2024	***Rs.27,17,538/-***

RESEARCH GRANTS (TOTAL AMOUNT RECEIVED RS.166.47 LAKHS IN THE YEAR 2024)

S.No	***Title of the project***	***Investigators***	***Funding Agency***	***Fund (in Lakhs.)***	***Duration (years)***
1	*Integrated Magneto- Acousto-Dielectrophoresis based microfluidics for the sorting of sperm Spermatozoa*	*Dr. L. Sujatha Prof/ECE*	*DBT*	*61.47*	*2*
2	*Simulation, Optimization and Validation of Microheaters for low- power Alkali Vapor Cell Assembly*	*Dr. L. Sujatha Prof/ECE*	*DRDO-CARS*	*47*	*21 Months*
3	*Digitally fusing the traditional knowledge gap to foster the potential use of millets as a nutritious alternative to mitigate the micronutrient deficiencies*	*Dr. S. Nivethitha Dept of Food Technology*	*DST- SHRI*	*58*	*3*

1.2 Faculty and students pursuing research projects may explore opportunities with Pravartak in IITM Research Park.

Action Taken:

A project on Virtual Autopsy on the Human Body has been initiated with IITM Pravartak. This project is carried out by III Year students of Biomedical Engineering, Ms. Niranjana A, Ms. Dharshini P, under the supervision of Dr. R. Premkumar, Professor / BME and Dr. P. Kumar, Professor / CSE

About the Project

Virtual autopsy is a procedure where the pathologist analyzes the cause of death by using non-invasive (without physical incision, for instance, through medical imaging) or minimally invasive procedures (such as a biopsy).

It can accurately reflect fractures, soft tissue injuries, depth of wounds, and organ damages and provides information intuitive and powerful court evidence for forensic identification.

1.3 M/s TVS Motors Ltd. may be approached for framing the curriculum and syllabus for certain relevant PG courses as has been with L&T Mindtree for the M.Tech. - Data Science

Action Taken:

Discussions have been initiated with TVS Motors for offering M.E. Engineering Design programme with regard to :

- *Joint Curriculum Framing*
- *Syllabus Development*
- *Industry-Academia Partnership*
- *Mentorship and Guidance*

It may be noted that the following program offered by TVS Training Institute has been conducted as a 2-credit course for students of Mechanical Engineering.

A programme on Electric Vehicle (EV) was conducted by TVS Training Institute for 37 Mechanical Engineering students from 27 August, 2024, to 2 September, 2024. The training covered key topics, including Battery Technology, Battery Management Systems and Chargers, Motors and Power Converters, High Voltage Vehicle Safety & Thermal Management System, and EV Architecture. The total duration of the training was 60 hours, comprising 30 hours of theory and 30 hours of practical sessions. It is considered as a 2-credit course.

1.4 Faculty members active in Centres of Excellence may take up emerging fields of interest to industries in vicinity such as Generative AI and Robotics; Hyundai Motors and CVRDE may be approached for project/consultancy

Action Taken:

- *Dr P Chandrasekar & Dr. N.M.Sudharsan (member in the Design review committee constituted by DG - Armament & Combat Engg DRDO for 600 hp engine under development by CVRDE) of Mechanical Engineering are working with Shri. Prasad, Scientist F, CVRDE, on submitting a proposal titled "CFD simulation of dual fuel engine for performance enhancement"*

- *Dr.N. Venkateshwaran, Professor, Department of Mechanical Engineering, is nominated as a member in JRF selection committee of CVRDE.*

- *Signing of an MoU with ANVL (AVNL INSTITUTE OF LEARNING), training department of Armoured Vehicles Nigam Ltd., a Government of India Enterprise, Ministry of Defense, for offering training to their employees and seeking internship for our students.*

- *Three Faculty members from the Department of Management Studies underwent sabbatical training at Hyundai Motors.*

1.5 Experienced experts in the field of Avionics who will be retiring shortly may be contacted for appointment as professors of Practice.

Action Taken:

Dr. Nithiyaraj M, Senior R&D Engineer, ESI group, Bangalore has joined as Professor of Practice (POP) in the Department of Aeronautical Engineering on 21 December 2024. His role is to guide the faculty members and students towards research activities for publication and securing project funding from various agencies.

1.6 Dr. Mangala Sundar, former professor of IIT Madras and in-charge of NPTEL, may be approached for encouraging faculty to take up more FDPs in emerging and niche areas.

Action Taken:

Dr. Mangala Sundar, program coordinator/Skills academy from Pravartak, IITM Research park, visited our campus on 20.08.2024 and interacted with faculty and he highlighted the need for upskilling the faculty members and Internship requirements/options in emerging areas such as IOT, AI, cyber security at Pravartak.

1.7 Faculty members may visit universities abroad, especially with whom REC has signed MoUs to develop collaborative joint activities

Action Taken:

- ***Visit to University of Life Sciences (PUL), Poznan, Poland***

  Dr. K. Ramalakshmi, Professor & Head, Department of Food Technology visited ***Poznan University of Life Sciences (PUL), Poznan, Poland*** *during 10 - 21 September 2024, sponsored by the college. The visit focused on discussing academic collaborations in presenting technical papers by faculty members of PUL in the conferences conducted by REC and vice versa and visiting Food Processing Industries.*

  A Memorandum of Understanding (MoU) has been signed between REC and PUL *to foster academic collaborations between the two institutions. The agreement aims to provide students with opportunities for internships and field studies in areas such as Food Technology, Management, Technology Development, and Marketing. Additionally, both institutions will work together to design a curriculum that aligns with industry needs and global societal demands. The MoU also promotes student and faculty exchange programs to enhance the understanding of innovative teaching and learning methods.*

  As a result of this visit, a ***three-week internship program*** *has been planned in 2025 summer break (19th May to 10th June) for six students to visit Poznan University of Life Sciences (PUL) in Polan, accompanied by two faculty members, where they will have the opportunity to gain hands-on experience and deepen their understanding of the food technology and hospitality fields*

- ***Visit to Universitas Pelita Harapan, Tangerang, Indonesia:***

  Mr. R. Anand, Assistant Professor, Department of Food Technology along with eight second year students (2023-2027) visited Indonesia during 9th – 12th October 2024. This team along with Southern India Chamber of Commerce and Industry (SICCI) members visited Universitas Pelita Harapan, Tangerang, Indonesia, International Food Expo (38th), Jakarta, Indonesia and Trisakti College of Hospitality in Jakarta. The expo offered an opportunity for students to experience the recent advancements in Food Technology and gain an understanding of global trends, impacting the food industries.

- *Dr. Surendra Bogadi, Professor, Department of Aeronautical Engineering, visited Warsaw University, Poland during 16 – 28, July, 2023 Summer School on "Modern Aerospace Engineering with Elements of Robotics" and also for Faculty Interaction.*
- *Dr. Shreenidhi, Asst. Professor (SG), Department of Biotechnology, visited Paris Expo Porte de Versailles, Paris, during 23 – 26, October 2024 for iGEM competition.*
- *Dr. Thiruvengadam, Professor, Department of Biotechnology, visited Indonesian Trade Expo , Institut Pariwisata Trisakt and Universitas Pelita Harapan, during 9 – 14, October 2024.*
- *Dr. Manikandan Thirumalaisamy of CSBS, visited Shinawatra University Thailand-IFERP Academy, during Dec 27-28th 2024, for acting as Session Chair at 47th World*

Conference on Applied Science , Engineering and Technology(WCASET-2024), Bangkok, Thailand.

- *Dr. Ritesh Bhat – visited MAHSA University, Malaysia - from April 18 to April 21, 2024 for organizing jointly a Conference.*

1.8 REC alumni in industry may help in obtaining projects in emerging areas.

Action Taken:

The following are the initiatives and actions with our Alumni support

Industry Collaboration and MoU Signing:

***Mr. Prasanna Subramanian (CSE, 2005-2009)**, currently serving as CTO of FLY91 Airlines in Goa, has facilitated signing of an MoU with this company, which has resulted in:*

- *Securing a consultancy project on **Flight Profiling and Demand Sensing** for real-time data provided for **FLY91**, with a funding of ₹2.5 lakhs. The project has been successfully completed.*
- ***Internship programme for 9 students**, enhancing their exposure to real-world industry problems and applications.*
- *A consultancy project titled **"Fast, Dynamic, and Adaptive Pricing using AI, ML, and DL Models"** is under discussion.*

***Mr. D. Mohan Kumar (CSE, 1999-2003)** had initiated a project titled "An **IoT Smart Boat Monitoring System** for **FoKa Tech, Norway**, and it has been completed with a funding of Rs. 7.0 Lakhs*

- *Director, Alumni Affairs, Dr. S. Poonkuzhali (Professor, AI & ML) is planning to **invite over 25 alumni entrepreneurs** to mentor students, provide consultancy projects, and explore potential funding opportunities for research initiatives.*

1.9 Students may be given opportunities to learn recent Disruptive Technologies to help them get better placement in Tech companies.

Action Taken:

The fifteen Centres of Excellence are conducting workshops with hands-on for students to pursue innovative projects in the emerging areas. Also, the college is regularly conducting the following events to provide them a platform to showcase their talents in the areas of their interest.

- *13 teams of REC students were shortlisted for the finale of Smart India Hackathon 2024, jointly +organized by the Ministry of Education, GOI and AICTE, held at various Technical Institutions across the country of which, 5 teams of REC emerged as Winners among the 2500 teams competed in the Finale, with a cash award of Rs.1 lakh each.*

- *In addition, several teams formed by students from various departments have won awards in other competitions such as Hackathons, Designathon etc., at national and international levels.*
- *Internship on System and organization Controls Verification Using System Verilog is conducted by Tessolve Semiconductor Pvt Ltd for our final year ECE students.*
- *WIPRO conducted courses on (i) 5G core and (ii) Network management system where the syllabi were framed in collaboration with WIPRO and Department of ECE. Based on the preliminary exam process, around 48 students from ECE were selected and given training in the above courses followed by placement in WIPRO.*
- *Guest lectures on Disruptive technologies were on the following topics:*
    - *System on Chip Design Verification*
    - *Design and Debug of Embedded Systems*
    - *Introduction to embedded system design and its application*
    - *Sensors, algorithms and data from health to transport*
    - *Importance of Safeguarding from cyber-attacks*
    - *e- mobility*
- *Value added courses conducted on the following topics:*
    - *Latest Trends in RF system design for IoT applications*
    - *Mastering Data & Programming: Excel to Java*
    - *AI Enhanced Antenna Design and testing techniques for next gen biomedical and 5G/mm-Wave Applications*

Several projects carried out in the Centres of Excellence have been taken to the next stage of patenting.

1.10 Courses on Sustainability to be included in the curriculum for all the disciplines

Action Taken:

- *A course on sustainability has been introduced as an Open Elective in the UG Programmes in R 23 curriculum.*
- *MBA - VAP course offered on Sustainable Development Goals*
- *MCT - Sustainable design is included in the Courses on Product Design and Development and Industrial Robotics,.*

1.11 Students can be trained in Drone technology and emerging areas in Electronics and Engineering, which will equip them additional placement opportunities.

Action Taken:

The students have attended Drone related activities. The details are as follows:

S.No	Batch	No. of Students	Nature of event	Company / Organization
1.	2020-2024	6	Competition	All India Council for Robotics & Automation
2.	2021-2024	15	Competition	SEA India
3.	2022-2026	5	Competition	SEA India
4.	2021-2025	26	Workshop	REC IDEA lab
5.	2022-2026	30	Workshop	REC IDEA lab
6.	2020-2024	8	Competition	Naan Mudhalvan - Niral Thiruvizha- Tamil Nadu state government
7.	2022-2024	1(PG)	Placement	in YOTTEC Systems LLP, Bangalore
8.	2020-2024	1	Placement	Fabheads Automation via MOU
9.	2021-2025	2	Intern	Fabheads Automation via MOU
10.	2021-2025	2	Intern	Vaayusastra Aerospace via MOU
11.	2021-2025	52	Workshop	Squadrone – UAV club of REC
12.	2022-2026	50	Workshop	Squadrone – UAV club of REC

- *4 students from 2020-24 batch won Rs.10,000 cash prize for their final year Project in Naan Mudhalvan - Niral Thiruvizha for the title "Practical Experimentation behavior on Racing Drone design" mentored by Dr. Nithiyanantham K K Organized By Tamil Nadu State Government on July 2024.*
- *4 students from 2020-24 batch won Rs.10,000 cash prize, for their final year Project in Naan Mudhalvan - Niral Thiruvizha for the title "Design and Development of Human Detection Drone using Ai in Natural Disaster" mentored by Mr. Prem Anand T P Organized By Tamil Nadu state government on July 2024.*
- *A team of 10 students from I, II and III year participated in National Level event "Autonomous Drone Development Challenge (ADDC) 2024 "organized by SAE India during 19th and 20th July 2024.*
- *A team of 10 students from II and III year participated in National Level event "9th SAE India Southern session Drone Development Challenge (ADDC) 2024 "organized by SAE India during 29th and 31th August 2024.*

- *An MOU has been signed between Fabheads Automation Pvt. Ltd and the Department of Aeronautical Engineering, Rajalakshmi Engineering College on 14th July 2023 to carry out collaborative additive manufacturing and 3D Printing workshop and for student internships.*
- *2022-2024 Batch M.E Student got placed in YOTTEC Systems LLP, (Drone Company) Bangalore as Junior Engineer from May 2024.*
- *1 student from 2020-2024 batch got placed in Fabheads*
- *2 students from 2021-25 batch are undergoing internship in Fabheads*
- *Squadrone – UAV club of REC conducts regular activities each week on Friday in UAV lab from 3 pm to 5 pm.*

1.12 In the curriculum, a greater number of laboratory-integrated courses may be included as they will give an opportunity for the students to grasp better the concepts learnt in lectures, which will strengthen their knowledge and confidence in these subjects.

Action Taken:

In the present R2023, the No. of Lab Integrated Theory courses have been increased in 16 out of 19 programmes, including in H&S.

Number of Lab Integrated Theory (LIT) courses offered in R 2019 Revised and R 2023								
S. No.	UG Dept.	As per Regulations 2019 Revised (I-VIII Semesters)			As per Regulations 2023 (I-VIII Semesters)			Difference
		No. of Theory Cours	No. of Lab Courses	No. of LIT Courses	No. of Theory Courses	No. of Lab Courses	No. of LIT Courses	
1	Aero	30	17	12	27	15	15	3
2	AIDS	21	5	26	11	7	29	3
3	AIML	22	9	22	22	10	21	-1
4	AUTO	26	15	16	24	16	17	1
5	BME	27	19	11	28	16	16	5
6	BT	36	21	4	34	21	7	3
7	Chem	32	14	6	34	16	7	1
8	Civil	39	21	5	33	17	10	5
9	CSBS	17	6	27	16	6	28	1
10	CSD	15	7	25	16	11	23	-2
11	CSE	21	5	19	20	7	21	2
12	CSE-CS	0	0	0	15	8	23	23
13	ECE	31	16	9	25	13	18	9

14	EEE	30	16	11	32	17	11	0
15	FT	38	18	6	31	20	5	-1
16	IT	21	8	18	18	10	21	3
17	MCT	35	19	8	25	17	17	9
18	MECH	32	18	7	28	16	14	7
19	R&A	31	20	6	28	18	10	4
20	H&S	32	2	13	20	5	19	6
	TOTAL	536	256	251	487	266	332	81

1.13 Faculty may be provided flexibility for effective time-management for teaching and carrying out research.

Action Taken:

REC working hours has been from 8 am to 3 pm and from the current semester, it is from 8am to 7 pm providing faculty with flexibility of availing one of two slots (8 am – 3 pm or 12pm to 7 pm).

1.14 REC faculty members may post in their Linked-in profile their academic accomplishments for greater reach and networking.

Action Taken:

A number of *faculty members have already posted their patents and publications on LinkedIn, and it is helping them to establish networking connections with other researchers in their fields. Efforts are taken to encourage all faculty members to keep their Linked-in profile up-to-date.*

***1.15* College can encourage students to pursue projects in the industries, as industry experts will provide guidance to students doing industry-oriented projects.**

Action Taken:

The following are the industry-oriented projects carried out by the final year students of the department of aeronautical engineering during the AY 2024-25:

S. No	*Academic Year*	*Roll Number*	*Name of the Students*	*Project Title*	*Industry and Place*
1	*2024-2025*	*210101040 and 210101043*	*K. S. Srinaath and Sathya Moorthy D*	*Reduction of Leading-edge erosion Caused Due to the Aerodynamic Loads in the 25KW Wind Turbine Rotor*	*National Institute of Wind Energy (NIWE), Pallikaranai, Chennai - 600100*
2.	*2024-2025*	*210101034*	*Sai Karthik MS*	*Design of Flat-Fan Atomizer for use in Gas*	*Combustion Laboratory.*

S. D. Murugan

				Turbine Combustors	*National Aerospace Laboratory, Bangalore - 560017*
3.	*2024-2025*	*210101028*	*Ragul R*	*Calculation of Losses in turbine cascade using analytical model.*	*Transonic Cascade Tunnel Lab (TCT), National Aerospace Laboratory, Bangalore - 560017*

For industry-oriented projects, there is a guide from the industry, where the projects are carried out by the students, apart from a guide in the concerned department of the institution.

Presently, there are 11 Industry experts offering courses relevant to their field of specialization.

1.16 Project teams comprising students across programmes/departments will encourage inter-disciplinary learning.

Action Taken:

Multi-disciplinary student teams are mentored to participate in technical events like Smart India Hackathon, EBAJA and events conducted by Tata Technologies and Microsoft. These events have several teams from many institutions competing for prizes. Our teams are also winning prizes in various competitions. The winning teams' projects are developed further with the guidance of IPR cell for applying for Patent or for research publications. The following lists some of our recent achievements our student teams

- *Our college team EFORZA comprising of 28 students from the departments of Auto, Mech, EEE, ECE & R&A participated in the finals of SAE EBAJA 2024 in Hyderabad, Telengana*
- *A team of 6 students from ECE, CSE and Mech created a Gen AI project "GENCAD" for creating automatic design. They got selected as one of the 10 teams from 2000 teams and got offer from Tata Technologies*

1.17 Details of the Faculty studied in Universities abroad

Regarding current faculty members who have acquired PDF/ Ph.D./M.E. degree from universities abroad.

S NO	***Name of the Faculty***	***Dept.***	***Degree***	***university***
1	*Dr. Vincent Joseph KL*	*Chemical Engg.*	*PDF*	*Pohang University of Science and Technology-POSTECH, South Korea - South Korea*
2	*Dr. Natteri M Sudharsan*	*Mechanical Engg*	*PhD*	*Nanyang Technological University Singapore*

3	*Dr. Vigneshwaran Narayanamurthy*	*BME*	*PhD*	*University of Malaysia Pahang*
4	*Mr. Harikrishnan Ravichandran*	*Aero*	*ME*	*University of Cincinnati , Ohio State*
5	*Dr. P. Saravanan*	*Biotech*	*PDF*	*National Inst.of Self*
6	*Dr. P. Rajasekar*	*Biotech*	*PDF*	*Nanyang Technological University Singapore*
7	*Dr. D. Haripriya*	*Biotech*	*PDF*	*Harvard Institute of Medicine, Boston*
8	*Dr. R. Muneeswari*	*CSE*	*PDF*	*Federal University of Santa Maria-Brazil-South America*
9	*Dr. K. Ananthajothi*	*CSE*	*PDF*	*Singapore Institute of Technology*

While presenting these action taken details, Mr. Jayaramakrishnan mentioned that Zuppa Geo Navigation Technologies Private Ltd. provides DGCA - approved indigenous drones and autopilot systems for defence and commercial applications, promoting self-reliance. REC can interact with this organization for training and development of Drones for many applications including agriculture. Dr. Sivathanu Pillai also added that such training will also help in initiating start-up ventures by faculty members and student teams.

Regarding LinkedIn, it was suggested that Principal should give periodical updates, highlighting events and developments, so that the visibility of the Institution can be improved.

Members appreciated that the two-slot working will help the faculty to optimize teaching and research, while also enabling them to maximize use of existing facilities and develop new ones for departmental/college growth

Regarding Smart India Hackathon2024, the members were informed that the competition was conducted all over the country jointly organized by the Ministry of Education, GOI and AICTE. Among the 88,251 teams registered, 2500 teams were shortlisted for the finale, of which, 13 teams are from REC. Out of 315 teams awarded as National level winners with a cash prize of Rs.1 lakh each, 5 teams are from REC.

Mr. Ganesan said that for the engineering students, apart from understanding the concepts through class room lectures, gaining hands-on experience and demonstrate their skills in participating such competitions (Gamification) is essential for their professional expertise.

Dr. Sivathanu Pillai pointed out that in IIT Madras, Pravartak conducts different varieties of Skilling Programme,

i) Students working in a specific modern topic such as AI, Data Science etc. can be offered training in batches of 50. For all these programmes, familiarity in 'C' language is insisted upon for the participants.
ii) for ST/SC women engineering graduates, with free accommodation for enhancing their employment opportunities.
iii) There are also programmes on 6G

Further, Pravartak is also taking steps for promoting 100 start-ups for teams from various colleges, with one faculty advisor from each team. He also mentioned that in MSME, start-up promotion is enabled by funding ranging from 2 Lakhs to 5 Crores. The members also informed that REC has submitted a project proposal on Chip to Start-Up and applied for EDA tool Support at ChipIN Centre under C2S Programme.

In a detailed discussion on students' internship, the members suggested that internship spread over 6 months with an in-depth training in a specific area would be more helpful than a short period training of 2 / 4 weeks.

Dr. Sivathanu Pillai suggested:

i. More no. of Professors of Practice / Visiting Professors can be inducted in the field of Avionics for offering,

ii. Steps to be taken for signing an MoU by the Department of Food Technology with Telaviv -- Israel) and

iii. Every coordinators of the 15 Centers of Excellence should have a link with Universities abroad with whom MoU have been signed for taking technical inputs for the further growth of the Centres.

In this context, Mr. Jayaramakrishnan said that he will arrange for a meeting with an Israel based company, Checkpoint, a Tech company specializing in Cyber Security for the faculty members working in this area. Mr.I.Philip Praveen mentioned about the proposal of REC to sign an MoU. with Ming Chi University of Technology, Taipe, Taiwan and the Trinity College of Ireland, holding high rank in the international ranking, would also offer help if approached.

Chairperson pointed out that in REC, in the present regulation total no. credits is 160, additional 18 credits for those opting for Honors degree, whereas, for the same programme, Universities abroad total credits are only around 120, for the same curricula / syllabi. In this regard, Dr. Mohan Munasinghe suggested that the total credits can be 160, but it is only essential to frame curricula / syllabi as per the present-day requirements. For engineering graduates training in multi-disciplinary areas is more important than conventional class room learning.

Dr. Sivathanu Pillai also suggested that a Minor degree on Space Technology would be appropriate for the programmes on Aeronautical Engineering and Mechatronics Engineering with 6 months internship in ISRO, Bangalore. Similarly, a Two years M.Tech degree in Defence Technology with a multi-disciplinary curricular content and the programme can be scheduled with First year of study in the college and the second year in DRDO. He said he would give the syllabus content and also suggest the faculty to handle these courses.

2. Updating the Vision and Mission for REC

The Vision and Mission statements were framed many years ago. It is proposed to revise these statements considering recent developments in higher education both in India and globally and the substantial growth of our institution in size and in the range of programs over about two decades. A draft revised Vision and Mission is given below.

S.D. Thompson

Existing version	*Proposed Draft version*
Vision : ***To be an institution of excellence in Engineering, Technology and Management Education & Research. To provide competent and ethical professionals with a concern for society.***	***Vision :*** ***To be a Global Leader in engineering & management education, research and innovation, empowering individuals to drive transformative change for a sustainable future.***
Mission: • ***To impart quality technical education imbibed with proficiency and humane values*** • ***To provide right ambience and opportunities for the students to develop into creative, talented and globally competent professionals.*** • ***To promote research and development in technology and management for the benefit of the society.***	***Mission :*** • ***To provide a transformative learning experience nurturing innovation, design thinking, lifelong learning for global competence.*** • ***To forge cutting-edge research through inter-disciplinary academia and industry collaborations to address sustainability, energy and environmental challenges.*** • ***To promote diversity, inclusivity and leadership upholding humane values and ethics***

The sustainability, energy and environment are significant in engineering and technology both in development and education have been incorporated in the revised version of the Vision and Mission statements of REC.

This draft, prepared by a three-member team of IQAC-Coordinator and two HoDs, was circulated among the members of the IQAC and also placed in the Academic Council for suggestions. In this context, Dr. Mohan Munasinghe suggested that the word "inter-disciplinary" in the 2nd Mission statement can be replaced by "Trans-disciplinary" and Chairperson suggested that the word Excellence in the Vision statement can be suitably changed.

It was suggested that further input can be obtained from various other stakeholders also and the final draft will be placed in the next Governing Body meeting for consideration and approval.

GB.No.13.02	**Seeking the approval of the Governing Body for Curriculum and syllabus framed for V to VIII Semesters, as per Regulations 2023 for the 19 UG programmes, in the respective meetings of the Boards of studies and recommended by the Academic Council in its 21st meeting held on 20.02.2025.**

The Governing Body RESOLVED to approve the agenda GB. No.13.02

GB.No.13.03	**Seeking the approval of the Governing Body for offering (3+1) twinning Programme with Arizona State University(ASU), USA, for the following UG programmes, from the academic year 2025-26 onwards:** **1. B.E. - Aeronautical Engineering -60 seats** **2. B.E. - Computer Science and Engineering – 60 seats** **3. B.E. - Electronics and Communications Engineering- 60 seats** **4. B.Tech.- Information Technology -60 Seats** **The Academic Council has recommended the offering of this Twinning Programme in its 21st meeting held on 20.02.2025.**

Advisor mentioned that in such Twinning programmes apart from securing the degree, it gives international exposure is an added advantage.

The Governing Body RESOLVED to approve the agenda GB. No.13.03 and recommended that necessary final approval is to be accorded by competent authority of University for offering twinning programmes.

GB.No.13.04	**Seeking the approval of the Governing Body for the increase in the intake in the following programmes, from the academic year 2025-26 onwards:** • **B.Tech.-Artificial Intelligence and Data Science 300 to 360** • **B.E.-Automobile Engineering from 30 to 60** • **B.E.-Computer Science and Engineering from 540 to 720** • **B.E.-Computer Science and Engineering (Cyber Security) from~ 120 to 180** • **B.E.- Electronics and Communication Engineering from 360 to 480** • **B.E.-Mechatronics from 60 to 120** **Totally 510 seats to be increased (2970 to 3480) in UG programmes.** **The Academic Council has accorded approval for this increase in intake, in its 21st meeting held on 20.02.2025.**

The Governing Body RESOLVED to approve the agenda GB. No.13.04

GB.No.13.05	**Reporting the following recent developments:** • **Established the TANSAM (Tamil Nadu Smart and Advanced Manufacturing Centre) Innovation Center focusing on emerging fields; AR/VR, IoT, and Data Analytics, providing access to latest resources, advanced laboratories, and expert guidance. It enables students to participate in workshops, training programs and projects centered on product development, digital transformation, and sustainable practices.** • **Additional / New infrastructure facilities created since the previous Governing Body meeting:** • **In commensurate with the additional intake of recent years and proposed for the years to come, additional floor in the Central Workshops, a separate hostel facility and a residential complex have been built.** • **NBA expert team visited the departments of B. E. Chemical Engineering and B.Tech. Food Technology and awarded accreditation for three years (First – time Accreditation) for these two programmes.** • **Inspection by NBA Expert Team for data verification on compliance report for 9 UG Programmes have been completed on 22 & 23, February 2025** • **Subsequently, for the another 3 UG & 1 PG programmes, the team visit is expected in late March/ April 2025.** • **Major events conducted since the previous Governing Body meeting**

The members of the Governing Body appreciated the achievements and progress made by the institution.

GB.No.13.06	**Any other points with the permission of the Chairman of the Governing Body**

Transforming the REC Campus area into a Smart Sustainable Low-carbon community:

Dr. Mohan Munasinghe suggested that an initiative Transforming the REC Campus area into a Smart Sustainable Low-carbon community, since the REC Campus is an ideal location to consider a pilot project to apply this concept. It could raise the profile of REC as a world leader in this area, joining a global network of other key urban communities. The REC Campus would also become an excellent example for other areas of Chennai. Most of the intellectual resources are available among the REC staff, researchers, students and associated business partners. Smart sustainable systems (S3) built on innovative digital platforms would be the backbone of this approach.

The work could be designed for minimum initial cost, starting perhaps with S3 to improve management, governance, and long-range planning. S3 would be developed for basic infrastructure areas like energy, transport and communications. Productivity gains and energy savings would ensure quick paybacks. Involvement in the project would help researchers and students develop new concepts and apply them in practice, while attracting business enterprises as potential investors and partners. In this context, a bottom-up approach would be an advantage.

Chairperson mentioned that the Saint Gobain company nearby REC has got a lake to neutralize the carbon generated inside the factory production processes. Principal also informed that various measures taken to create a Green Environment inside the REC campus such as Rain Water Harvesting in all the blocks, Waste Disposal Management Plant. a 60-kW solar plant installed in the Main Block terrace, which supplies about 10% of the energy requirement of the campus and a 5-kW solar plant set in the 'B' Block, primarily for research purposes for effective utilization of solar energy.

In this regard, the following further steps would be taken to start with:

a. AS-IS information on the Sustainabiiity initiatives taken up in REC Campus and the curriculum now. Including Sustainability aspects in every Process to be studied and presented.
b. Dr. Mohan Munasinghe will be requested for additional inputs on sustainability, especially measures and how to calculate/estimate.
c. Aspects of Carbon Neutral / Net Zero , Reduced use of paper, Energy and transport infrastructure, Waste management (including plastic), Reuse and recycling, in REC to be measured and assessed.

Dr. A. Sivathanu Pillai | Dr. Mohan Munasinghe | Dr. V.R. Giridev

Dr.C.R.Muthukrishnan | Mr. K. Ganesan | Dr. Lalitha Balakrishnan

Mr. K. Jayaramakrishnan | Mr. R. Vijayakumar 17/04/25 | Dr. M. Subbiah 6.3.25

Dr.T.Thamizhselvan 6/3/25 | Dr. S.N. Murugesan 6/3/25 | Dr. (Mrs.) Thangam Meganathan