ROHINI COLLEGE OF ENGINEERING AND TECHNOLOGY, PALKULAM Accredited by NAAC with A+ Grade (AUTONOMOUS)

ANNUAL REPORT – 2023-24

I am very happy to place before you a brief report of the college for the academic year 2023-24.

Rohini college of Engineering & Technology (RCET), is a self-finance Engineering College started in 2012 under the auspices of Saroja Trust, a charitable educational trust of Rohini Group. First, I extend a warm welcome and my sincere gratitude to our Chairman Dr.K.Neela Marthandan. It is his great vision, single-minded devotion, unshakable determination, child-like enthusiasm, hard work, secular outlook and humane approach that have made RCET what it is today. Under the able guidance and adept administration of Dr.N.Neela Vishnu, Pro-Chairman & Dr.V.M.Blessy Geo, the Managing Director of the college has developed excellent facilities and resources such as spacious classrooms, seminar halls, well equipped laboratories, excellent sporting facilities, dedicated high speed internet connectivity (broadband) and well-qualified faculty. Five Academic Blocks house different departments. Our institution is accredited with **A+ Grade** by **the National Assessment and Accreditation Council (NAAC)** in April 2023 and **AUTONOMOUS status** in March 2024. I extend my sincere gratitude to our Pro-Chairman and Managing Director for their dedicated service towards the growth of RCET.

Our current academic year started on 1st July 2023 and will go on till June 30th 2024.

We offer <u>8 UG programmes</u> in engineering namely, Mechanical Engineering, Civil Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering and Computer Science and Engineering, Biomedical Engineering, Agricultural Engineering, AI and Data Science, <u>4</u> <u>PG programmes</u> namely, M.E-Computer Science and engineering, M.E-Communication Systems, M.E-Construction Engineering and Management and M.E-Thermal Engineering and <u>Ph.D in Mechanical Engineering</u>. The Institute is an ISO 9001:2015 certified. The college is affiliated to Anna University Chennai.

- Introduced B.Tech-Artificial Intelligence and Data Science with an intake of 60, MCA with an in take of 60 and increased the intake of MBA to 120 students.
- All the first year seats got filled in 2023-2024 admissions. I am very happy to share that our college stood number one in our district in terms of the number of students admitted for the last eight years.
- The Institute has 2001 BE students, 246 B.Tech students, 98 ME students, 186 MBA students, 55 MCA students and 10 Ph.D students.
- 187 boys and 97 girls students stay in the college Hostels. The college has about 34 buses for daily commuters.

- 83 students are from other states like Kerala, Manipur.
- The quality of the faculty and the student/faculty ratio are the key determinants of the standard of education. RCET is endowed with 137 highly qualified, experienced and devoted faculty members. Of these, 39 are doctoral degree holders. 119 non-teaching staff are working here. As on date, the student/faculty ratio of the college is 1:15 by admitted students.
- The Overall Pass Percentage of the academic year (2023-2024) final year UG and PG programme students is 85.63%.

INFRASTRUCTURE

- By this academic year, the newly erected laboratories are Tractor and Farm Engines Lab, Farm Machinery Lab, CAD for Agriculture Machinery Lab, Post-Harvest Technology Lab, Irrigation Field Lab, Advance Database Technologies, Full Stack Web Development, Sensor and Measurements Lab and Bio Science Lab.
- MoU has been signed with Entudio organization. DEPARTMENTAL ACTIVITIES:
- All the departments of our institution have organized SPECTRA, an intra-departmental event and National Level Technical Symposiums.
- Agricultural Engineering department has organized workshops on Tissue Culture, Bio Fertilizers.
- Civil department has been granted Rs1.2 Lakhs for the consultancy work.
- Biomedical Engineering department has organized Medical camps at the institution and in Panjalingapuram village on 16th and 19th March, 2023
- EEE and Mechanical department have jointly organized ATAL sponsored FDP on 'Artificial Intelligence in Healthcare and Hospitality Management' from 23rd to 28th October, 2023.
- EEE department has organized SERB sponsored seminar on 'Opportunities and Challenges in integrating Electric Vehicles and Renewable Energy to Grid' on 15th & 16th March, 2024.
- ECE department has organized 2 conferences and Agricultural Engineering department has organized 1 conference.
- 15 workshops have been organized by CSE, EEE, Mechanical, Biomedical, MBA and MCA departments.
- MBA department has organized 8 seminars and MCA department has organized 1 seminar.
- 59 faculties of Civil, CSE, EEE, Mechanical and Agricultural Engineering departments have attended FDPs at reputed organizations.
- 56 faculties of Civil, CSE, EEE, ECE, Chemistry and Mathematics departments have presented their research works at the Conferences of reputed organizations.

• 26 faculties of CSE, EEE, Mechanical, MBA and Chemistry departments have attended seminars and workshops at reputed organizations.

• 10 foreign experts and experts from Central Government organizations have visited Mechanical and Agricultural Engineering departments as resource person.

STUDENT DETAILS:

- Over the years, sustained efforts have improved the results of our students.
- Average UG graduation rate is 85.7 and PG graduation rate is 84.4.
- Civil department students, Ms.Abisheka and Ms.Akshiya of BE Civil and Ms.Atchaya and Ms.Bala Sowbarnika of ME-Construction Engineering and Management have got 12th, 21st, 3rd and 6th Rank in their graduation from Anna University, Chennai.
- EEE final year student, Mr.Johny Babish has initiated with a start-up as an Entrepreneur.
- EEE second year student, Ms.Naba Keerthika has received a cash prize of Rs.10,000 on Engineer's day for the test conducted by CAD DESK.
- Also, she has undergone a free course (Revit MEP) worth Rs.25,000 at CAD DESK.
- Two EEE final year students, Mr.Murugan and Mr.Abdul Rahman has undergone internship at Entudio for a period of one month during October 2023.
- MBA student, Snekar Siva Kumar has received Best Manager Award and cash prize of Rs.5000.
- Internship: All the second and third year students have undergone internships at reputed organizations like Finura Ltd, Nexgen Technology, SP Scans, Vivek Laboratories, SEMZY Automotive, Dalmia Windfarm, NSIC, TINO Engineering, KELTRON, Kaashiv Info Tech.
- Placement: <u>23 companies</u> namely SALS Education, Space Craft, Logskim, Gestamp, My Captian, Zencorp, Edvedha, New Tech Industries, Rinex, Claidas, Thinksynq Solutions, Infac, TP Solar, UST Global, Renault Nizan, Mitsuba, VI Microsystem, India Japan Lighting, Foxconn, Technologies Global Ltd, Live Connection, ZF Vehicles, Tech Mahindra, etc have conducted Recruitment in the campus and <u>456 offer letters</u> have been received so for.
- Students publications: Number of Students Publications: 14
- Agricultural Engineering students have developed their own plot and have cultivated tomato, cucumber, bottle guard, sweet corn, bitter guard with natural fertilizers and pest repellents.
- ECE students Naasif, Krishna and Mohammed Siddiq have received Rs.3000 as cash award for winning in Technical Competition in Networking System.
- Two ECE students have received B-Certificate in NCC on 15th March, 2024.
- **TARCET:** Totally **389 students** have participated in events conducted by various reputed organizations and **109 prizes** have been won in technical/non-technical events.

FACULTY DETAILS:

- All of our faculty members have membership in various chapters like IEEE, ISTE, IACSIT, IAENG, etc from their respective disciplines.
- Dr.J.Sahaya Ruben, HoD/Civil and Mr.B.Easvara ThayaBalan, AP/Civil have received fund of Rs.10,000 respectively for their project work from Naan Mudhalvan.
- Mrs.R.Sahila Devi, HoD/CSE has received Rs.20000 as fund for her project from Niral Thiruvizha and Kumari Hackathon.
- Dr.Jasmine Sheeja, HoD/ECE has received Rs.10,000 as fund for her project from Niral Thiruvizha.
- Research Supervisorship: Dr.C.Sowthily, AP/EEE, Dr.Benisha, HoD/Biomedical, Dr.Sahaya Ruben, HoD/Civil, Dr.Kailainathan, ASP/Mechanical and Dr.Anusha Devi, ASP/Mathematics have received Supervisorship from Anna University, Chennai.
- 24 faculties have been the resource persons for various events in various organizations.
- **Paper publications:** 31 papers were published by our faculties, among them 25 are indexed in Scopus and 5 are in SCI indexed with high impact factor journals.
- **Book/Book Chapter publications:** 6 books and 2 book chapters were published by our Civil, ECE, EEE and Agricultural Engineering faculty members.
- **Patents:** 8 faculties from EEE, ECE, BME, Agricultural Engineering and CSE departments have been granted with patents.
- NPTEL: Dr.Sumi, ASP/ECE, Dr.N.Amutha Priya, Dr.C.Sowthily and Mr.S.Gopakumar has successfully completed their NPTEL courses with ELITE certification.
- Two faculties have got Ph.D degree during this year.
- Various resource persons from reputed organizations NIT-Trichy, ISRO, IPRC, KKNPP, TECHIE, Shri Shai NDT, KSST, Cooper Elevators and countries like Indonesia have visited our institution for addressing conferences, workshops, seminars, etc.

Events at the College:

- The fresher orientation program was held in the second and third week of November. This
 orientation includes: Motivational Lectures, Bridge courses, field trip, demonstration session
 etc. Cultural programs were also arranged to entertain the students.
- 2. Value added programme was organized by all departments.
- 3. ONAM was celebrated with competitions on traditional POOKKALAM.
- 4. Saraswathi Pooja was celebrated with Traditional GOLU.
- 5. Christmas and Pongal were celebrated in a traditional way.
- 6. Independence Day and Republic Day was celebrated.

ISTE Chapter:

- An awareness programme on OBE Implementation was addressed by Dr.N.Amutha Priya and Mrs.R.Meenakshiammal to the newly joined faculty members on 05.08.2023.
- Teacher's day celebration was engaged on 5th September, 2023.
- Engineer's day celebration was engaged on 15th September, 2023.
- Five-day Hands-on Training Program on 'IoT Concepts and Applications' was conducted from 19th February, 2024 to 23rd February, 2024.

IEEE Student Branch:

- IEEE Student Branch of Rohini College of Engineering and Technology [Student Branch Code: STB60217767] has been inaugurated on 23rd January 2024.
- The inaugural address was given by Dr. A. Darwin Jose Raju, Senior IEEE Member from the Madras Section.
- Regular weekly meetings are conducted from 2nd February, 2024 and **9 meetings** were held till now.
- Events like
 - Paper Presentation
 - Concept Catalyst on Electric Batteries
 - Group Discussion
 - Seminar
 - ✤ Technical Quiz
 - ✤ Logo Finding
 - Technical Connections
 - ✤ Brain Blitz

has been organized during the meet by IEEE students to the EEE department students.

• Special meet was conducted on 7th March, 2024 regarding the **Women's day celebration**

NSS activities:

- Tree plantation at Panjalingapuram on 18.03.2024.
- Vattakottai Beach cleaning under Swacch Bharath Scheme on 19.03.2024.
- Medical camp with BME department of RCET and Dr.Agarwal Eye Hospital on 20.03.2024. Around 500 people got benefited.
- 1001 Palm tree seeds were planted at Panjalingapuram with Agricultural Department on 21.03.2024.
- Mathavaram School Campus cleaning was done on 22.03.2024.
- Electrical Safety and Save Energy Awareness rally was organized on 23.03.2024.

- Village Temple cleaning and Plastic Free India Awareness rally was organized on 24.03.2024.
- Voter's awareness rally was organized in association with Kanyakumari District authorities on 28.03.2024.
- Blood donation was made by our NSS Team.

NCC activities:

- Annual Training camp was organized from 22nd August to 31st August, 2023.
- International Yoga Day, World Environmental Day and Mega Cyclothan programs were organized.
- Our NCC Cadet, Priathickshan, III BE ECE has attended Army Attachment Camp at Secunderabad from 10th Januray to 21st January, 2024.
- 11 Cadets have passed C Certificate Examination.
- 15 Cadets have passed B Certificate Examination.

NPTEL:

- 1. Odd Semester (July-Dec 2023)
 - a. No. of faculties and students enrolled: 552
 - b. No. of exam registration: 260
 - c. No. of Faculty/Student passed: 80
- 2. Even Semester (Jan-Apr 2024)
 - a. No. of faculties and students enrolled: 234
 - b. No. of exam registration: 34
 - c. No. of Faculty/Student passed: 3 (Result yet to get published)

Institution Innovation Council:

- Rohini Hackathon was conducted on 12th, 13th and 14th October, 2023.
- SHG Bazaar and Drone Pattrai event was conducted on 2nd November, 2023.
- World Cancer Day was engaged on 4th February, 2024.
- Science Day was organized at the institution in association with IIC on 28th February, 2024.
- To honour the National Immunization Day, a medical camp was engaged on 16th March, 2024.

Rotaract Club

- Rotaract Club and Rotary Club, Nagercoil jointly organized Rotaract Club installation on 27th October, 2023.
- ◆ Cancer Day Awareness programme was organized on 13th February 2024.
- Two-day Residential programme 'RYLA' was organized on 29th February and 1st March, 2024.

Women Empowerment Cell:

- Women Empowerment Cell in association with Kanyakumari Police Station organized an awareness programme on Women Safety and Kavalan app installation on 5th January, 2024.
- Kanyakumari district Police department conducted a Cyber Crime Awareness programme on 1st March, 2024.
- International Women's day was celebrated with Mrs.Bharathy Bhaskar and Pattimandram Raja as Resource person and Chief Guest.
- Nehru Yuva Kendra, Kanykumari and Ministry of Youth Affairs & Sports, Government of India conducted 'A Nari Shakti Fitness Run' on 15th March, 2024.

ICTACT:

- Programs like Student Empowerment program, Skillathon, Drive are organized by companies like Honeywell, UIPath and Renault Nissan Tech. 187 students got benefitted and Rs.25000 fund was sanctioned by Honeywell. Also, two CSE students got placement.
- FDPs on Salesforce Development, Structural Design and Analysis using STAAD Proconnect, Emerging Technology Trends were organized by AICTE.
- Our institution was recognized as the Centre of Excellence for Youth Empowerment.

Naan Mudhalvan:

- 18 Naan mudhalvan courses have been offered by 14 industries like NSE Academy, Infosys, TANSAM, Red Hat Academy, Vaayusastra Aerospace, L&T, Faceprep, IBM, Microsoft, EduNet, IEEE, Innate Solutions and Cambridge.
- Courses like Digital Marketing, Machine Learning, Block Chain, Linux Fundamentals, 3D Printing, Drone Design and Testing, Building Information Modelling, Employability skills, Experiential based project learning, Microsoft Essentials, AI, Energy Efficient building, 4G/5G, Product Design Engineering and Modelling, Emplyability skilss, etc were conducted with 37 faculty members and 22 trainers.

Literary Club:

• Our literary club motivated the students to participate in various competitions and trained them to participate in various programs at other institutions.

Sports:

- Our College Sports Day 'YUDDHAMAE'24' was organized on 18th aril, m2024.
- Our college students actively participated in various games at the Anna University Intercollegiate Tournament in Zone 19.
 - o Volleyball (Women): First place
 - o Cricket (Men): Runners-up

- o Kabaddi (Men): Second place
- o Table Tennis (Men's Team): Third place
- o Ball Badminton (Men): Third place
- o Mr.Hariharan, IV BE EEE secured third place in Anna University Inter Zone Boxing Tournament.
- o Vijaya Ram, I BE CSE bagged the third place Anna University Inter Zone Swimming Tournament.
- o Mr.Aju, I BE Civil has been selected under 19 for Kanyakumari district cricket team.
- o We achieved Overall runner in Anna University zone athletic meet
- o Our institution places third position in Anna University Zone 19-point table which consist of nearly 32 colleges.

Entrepreneurship Development and Innovation Cell (EDIC)

- EDI cell in association with EDII TN, Nagercoil Region has organized a seminar on Entrepreneurship for outgoing Engineering students with a funding of Rs.10000.
- World's Creativity and Innovation Day was celebrated on 21st May, 2023.
- World Entrepreneur's Day was celebrated on 21st August, 2023.
- Our students got 4th place in Kumari Hackathon organized by Start-up TN and got Rs.10000 as cash award.

All this has become possible by the great support from the Management. I thank our Chairman Shri.K.Neela Marthandan for developing this wonderful college in Kanyakumari District. The will to win, the desire to succeed, the urge to reach your full potential these are the keys that will unlock the door to personal excellence. I extend my devoted thanks to our honorable Pro chairman, Dr.N.Neela Vishnu, and our respected Managing Director, Dr.V.M.Blessy Geo who are the people of determination for the priceless toil done for the college and for its upliftment. Coming together is a beginning, staying together is progress and working together is success. I would really thank you all the Governing council members, our faculty and staff members and very cooperative and well-disciplined student friends for their excellent cooperation and involvement in all the college level activities. We wish to see the Institute to be one among top 50 Engineering Colleges in the county in the very near future. I seek all your continued support in realizing this goal I thank everyone connected with this Institute for all their support.

Thank you all.