

K.L.N. COLLEGE OF ENGINEERING

Pottapalayam, Sivagangai District- 630 612



Title of the Practice: Quality Circle – Advanced Research and Development

Objectives of the Practice: (50 - 60 words)

QC-ARD of KLNCE aims to create and develop innovative research among community of academicians which in turn to give frontline practice to student's community in the arena of research. KLNCE believes that acquiring research practices and bringing out new cutting edge technologies among academicians improves the student betterment towards research. QC-ARD as a best practice emphasizes and set goals for faculty members by enabling them to discover new ideas which ultimately brand them as a knowledge contributor.

Context: (100 – 120 words)

KLNCE is situated in a remote area from town and thus it is indeed necessary to provide research infrastructure for both faculty members and students within the college environment. It is need of the day to compete with competitive research world and thus QC-ARD motivates faculty members to develop innovative projects with the help of seed funding sponsored by management of KLNCE. Proactive faculty members of the institution get involved and acquire knowledge on research from quality research programs organized by QC-ARD. QC-ARD act as a stepping stone for young researchers to face outside world with state-of-the-art knowledge.

The practice: (activities carried out) (250 – 300 words)

The convener of QC-ARD convenes frequent meetings among members to convey research oriented activities such as project proposals, quality publications and workshops. QC-ARD as a research forum motivates domain experts within the college to deliver their area of focus among faculty members which may be an initiative for multidisciplinary projects. To make faculty members to get familiar with research funding, Project scrutiny meeting will be conducted to provide seed fund from management. The practice of submitting proposals in a prescribed format and completion report is cultivated among faculty members. Patent filing of innovative ideas are also educated to all.

The best practices of QC-QRD are,

- 1. Seed funding for internal faculty members.
- 2. Motivating faculty members for preparing proposals for sponsored research from industries/Govt. /Research Agencies.
- 3. Conducting Seminars/Workshops/Faculty Development Programs in advanced research topics.



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- 4. Enabling faculty members towards quality publications in international journals and patent filing of innovative ideas.
- 5. Providing incentives to faculty members who published papers in reputed journals.
- 6. Motivating faculty members to act as reviewers in reputed journals.

No of students/Faculty participated:

It is an open research forum for both faculty members and students. Conveners and members are nominated for conducting various practices within this forum. Proposal submission and participation in various activities is open to all and in turn students can enthusiastically participate in activities and projects regardless of their engineering discipline.

Evidence of Success: (outcome) (100 – 120 words)

This forum has conspicuous outcome in developing research culture in education environment. Research proposal writing and its number have been increased among faculty members from inception. Seed funding helps faculty members to come out with innovative ideas and place as stepping stone to develop prototype. The developed prototype is shown as proof of concept for submitting project proposals to external funding agencies. Faculty members use the proof of concept for filing patents. Many of the faculty members improved their quality publications in various international journals. Research supervisors of KLNCE Research Centre motivate their research scholars for quality publication in reputed journals.

Problem encountered: (150 – 200 words)

There is no problem encountered. However it would be better if more faculty members get involved in this hard core research activity. We are continuously motivating them towards this direction

Proof: Projects funded by QC-ARD for the Academic Year 2019-20

S. No.	Name of the Project/ Endowments, Chairs	Name of the Principal Investigator	Department of Principal Investigator	Funds provided	Duration of the project
1	Design and Development of a Novel Personal Assistive System(PAS) using harmless Light Fidelity(LiFi) Technology for Elderly people suffering from Dementia Syndrome	Dr.M.R.Thansekhar, Prof/MECH Dr. B.Buvaneswari, ASP/ECE	MECH ECE	Rs.1,04,980/-	2 Years



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2	IOT Embedded Drone for Harvesting of Honey to Empower the Tribal People for their sustained livelihood	Dr. A.Umarani, Prof/EIE Dr. S.Balamurugan, AP(SG) /EIE	EIE	Rs. 1,06,960/-	1 Year
3	A Fully Portable IoT Controller Based Innovative Cleaning Technique for PV Modules	Dr. S.Venkateshan, Prof/EEE	EEE	22,000	9 months
4	Intelligent Based Health Monitoring System and Disease Prediction Using Internet of Things	Dr.R.Mohankumar, ASP/ECE	ECE	45,000	1 Year
5	Digital Voice Broadcasting Using Hack RF	Dr.V.Kejalakshmi, HOD/ECE, Mrs.K.R.Shanthy, ASP/ECE	ECE	48,000	1 Year