

### 3.2.1

MJCET has taken several initiatives for the creation of necessary ecosystem to promote innovation and creativity among the students and faculty. The following set-ups have been established in order to nurture and encourage creativity and innovativeness:

- i. R & D Cell
- ii. Incubation Cell
- iii. Student Professional Chapters / Clubs

#### **Research and Development cell**

The R & D cell was established in the year 2008 with the aim of promoting research activities among the students and faculty. In the beginning, the R & D provided 'seed-fund' for research proposals in order to assist the investigators to undertake preliminary work for the purpose of formulating detailed research proposals for submission to funding agencies.

#### **Objectives of the R & D Cell:**

- i. To motivate faculty and students to undertake Research and Development activities
- ii. To encourage interdisciplinary R & D projects
- iii. To serve as a medium for three way interaction between the Institute, R & D Organizations and Industry.
- iv. To assist the faculty, Ph. D. scholars and students to apply for funding under various schemes.
- v. To encourage publication of technical papers in National / International refereed Journals and Conferences based on the research carried by the faculty and students
- vi. To register under Intellectual Property Rights like Patents & copyright the outcome of R & D work carried out by the faculty and students of the Institution
- vii. To facilitate signing of MOU with industries and R & D Organizations for research and product development

In tune with the stated objectives, the R&D Cell has been guiding and facilitating the faculty, under-graduate students, graduate students and researcher scholars with financial grants and state of the art facilities including laboratory and computational facilities, library resources and access to major databases.

Every year, over 25 to 30 R & D proposals are received and the R & D Committee shortlists the projects based upon the presentation made by the applicants in the R & D Committee meeting. An encouraging aspect of this R & D activity is the increasing number of multi-disciplinary project proposals from the undergraduate students.

**Incubation Cell:**

MJCET has established 'MJ Hub' in November 2018 aimed at shaping the innovation ecosystem in the campus and to encourage 'startup' culture. An 'Ideation contest' and 'critical Design Thinking Workshop' were organized to create awareness about the newly established center. Three startups, namely, Trindec technologies, Infinzi Pvt. Ltd. And Ro-biotics were recently registered by the students.

**Student Professional Chapters / Clubs:**

MJCET actively promotes student profession chapters and clubs under which events like Hackathons, Mini project Competitions and technical events like ADSOPHOS are organised every year which require students to design and fabricate innovative solutions.

**Outcome**

Patent titled 'solar powered Spinning Wheel' has been granted in 2019. Patent titled 'Automotive vehicle wheel with three dimensional printed alloys' was applied in the year 2016 and Patent titled 'Mileage measurement and fuel forecast system with fuel tracking provision and a method thereof' was applied on in 2018