

### **MUFFAKHAM JAH COLLEGE OF ENGINEERING & TECHNOLOGY**

(Established by Sultan-UI-Uloom Education Society in 1980) (Affiliated to Osmania University, Hyderabad) (Approved By The AICTE & Accreditated By NBA)

Ref: 393/MJ/25/283

May 22, 2025

### **UNDERTAKING**

We hereby undertake that we have complied with various UGC regulations and guidelines, particularly the rules, regulations and guidelines pertaining to:

### 'Guidelines for Establishment of Research and Development Cell in Higher **Education Institutions (HEIs)'**

and the same has been made available on the college website prominently.

College web site: (www.mjcollege.ac.in)

Antosins

Dr. Mahipal Singh Rawat

PRINCIPAL PRINCIPAL Muffakham Jah College Of Engiacering & Technology Banjara Hills, Road No. 3, HYDERABAD-500 034.(T.S.)



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### MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY

### RESEARCH AND DEVELOPMENT CELL

For any education, and technical education, in particular, the basic model of a 'teaching – only' the institution is inadequate to ensure quality education. In all disciplines of technical education, knowledge is dynamic with new technologies being introduced very frequently. In this scenario, it is not possible for the teachers to deliver good quality instructions without being tuned to the current developments in the subjects, for which they must constantly update their knowledge.

A well-recognized way to deal with this paradigm is for the teachers to be active researchers in the areas in which they teach. As researchers, they need to understand the past and recent developments in their subject areas. MJCET recognized the importance of R & D in the vertical growth of the institution and established the R & D cell to focus on the scientific and industrial research in the various disciplines of Engineering. The MJCET R & D cell is a nominated committee consisting of professors from various programs of Engineering and Basic Sciences. The organizational structure consists of a chairman and convener for facilitating the routine functioning of the cell. The R & D budget for the year 2024-2025 is Rs. 60 lakhs.

The R & D also works in collaboration with Institute Innovation council (IIC), Industry Institute Interaction Cell (IIIC) and encourages start-ups in support and guidance for SU Knowledge hub. The R & D cell is also registered with KAPILA and provides support to the institute and faculty in IPR process. The R & D cell with a motive to support its faculty and other institute faculties has registered with STEM

### The R & D cell focuses on the following R & D activities:

- Assists faculty, research scholars and students in filing research proposals for grants from various funding agencies like DST, AICTE, MHRD etc.
- Allocates funds for in-house R & D projects of the faculty, research scholars and students.

- Assists the faculty, research scholars and students in filing of IPRs like patents and copy rights.
- Creating awareness and motivating researchers to work in emerging domains of engineering and technology.

### **VISION AND MISSION of RDC**

#### VISION

To empower the faculty and students in the area of Research & Development by providing seed funds for implementing their innovative research and product development ideas.

#### MISSION

- To motivate faculty and students to undertake Research and Development activities as a means of nourishing innovative thought process
- To encourage interdisciplinary R & D projects leading to solutions to real world problems through synthesis of diverse ideas and skills.
- 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 Government, Professional Chapter or Private Sector 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

### **Guidelines for Proposal Submission**

R & D cell has a committee consisting of a chairperson, convener and 12 members. The convener calls for research proposals from the faculty throughout the year and based on the proposals received the R & D committee meeting will be scheduled for evaluating and approval of submitted proposals. The investigators are required to present their research proposal to the R & D cell members and answer the queries satisfactorily. The proposed projects normally belong to one of the following categories

- Basic research
- Applied research
- Product development (material, device, system or service)
- Retrofitting of existing equipment, machinery or system

A project proposal is approved if it leads to one of the following outcomes:

- Publication in a Journal or conference
- Patent or copyright
- Contribution towards new knowledge base
- Belongs to the thrust areas notified by department/institution/university/state government/central government
- Results in a working model of a new or existing complex product / process / system

On approval of the project, the sanctioned budget is released in the name of the team lead (Faculty) and the team is given a time frame of one academic year to complete the work. After completion, the team lead is required to submit a project completion report and demonstrate the working of the project to the R & D team. Good projects are displayed during the technical expo of the college.

### **Code of Ethics:**

Code of Ethics is to check malpractices and plagiarism in research

#### **Objective:**

To create awareness among faculty and students about conduct of research, promotion of academic integrity, prevention of malpractices and plagiarism in research at higher education institutions. To develop a system to detect and prevent plagiarism in research publications, books and book chapters of faculty and dissertation/thesis of PG students.

#### **Procedure:**

The following procedure is adopted by the college to check plagiarism in the thesis / dissertation / publication of research papers/chapters in books / full-fledged books and any other similar.

The research papers of the faculty/ student before sending to any journal or conference, it is run through anti-plagiarism software for checking the similarity index. A centralized facility for research publication check is established by our Institute.
 Levels of Plagiarism would be quantified into following levels in ascending order of severity:

Level 0:	Similarities up to 10%	- Accept	
Level 1:	Similarities between 10% > 30%	- Permissible	
Level 2:	Similarities between 30% > 60%	- Resubmit	
Level 3:	Similarities >60%		
Reject			

### LIST OF R & D COMMITTEE MEMBERS

S.N o	Name of the Committee Member	Designati on	email.Id	Mobile No.
1	Dr. Mahipal Singh Rawat (Principal, MJCET)	Chairman	principal@mjcolleg <u>e.ac.in</u>	9849382960
2	Dr. Mohd. Hamraj Dean (Academics)	Member	hamraj@mjcollege.a c.in	9290929482
3	Dr. Syed Ferhatullah Hussainy (Professor, MED & Dean (Students Affairs), MJCET)	Member	<u>hussainysf@mjcoll</u> <u>ege.ac.in</u>	9246292204
4	Dr. Syed Shabbeer Ahmad (Professor & Head, CSED)	Member	shabbeer.ahmad@mj college.ac.in	9515302571
5	Dr. Moinuddin Ahmed (Professor & I/c Head, CED)	Member	<u>moinuddinahmed@mj</u> <u>college.ac.in</u>	9247123625
6	Dr. Mrs. Uma N. Dulhare (Professor & Head CS&AI)	Member	<u>Uma.dulhare@mjc</u> <u>ollege.ac.in</u>	9603225511
7	Dr. (Mrs.) Ayesha Naaz (Professor & Head, ECED)	Member	<u>ayeshanaaz@mjcol</u> <u>lege.ac.in</u>	9959129564
8	Dr. Md. Haseeb Khan (Professor & Head, EED)	Member	haseebkhaneed@m jcollege.ac.in	9849316285
9	Dr. (Mrs.) Gouri R Patil (Assoc. Prof. & Head, ITD)	Member	gouripatil@mjcolleg e.ac.in	9550811786
10	Dr. Md. Viquar Mohiuddin (Professor & Head, MED)	Member	mdviquar@mjcolle ge.ac.in	9492039782
11	Dr. Abdul Majeed (Professor, Mathematics & Head, Basic Sciences & Humanities)	Member	Abdulmajeed.math s@mjcollege.ac.in	9297258266

12	Dr.Mrs. Ishrat Meera	Convener	ishratmirzana@mj	9014876704
	Mirzana		college.ac.in	
	(Professor, MED)			

### **Frequency of Meeting**:

The committee shall meet atleast two times a year or as and when required. The convenor in consultation with the chairman prepares and circulates the agenda of the meeting well in advance. The convenor maintains the minutes of the meeting and action taken report.

### Quorum:

Two-third members constitute the quorum. If there is no quorum for the meeting convened up to half an hour, then the meeting shall stand adjourned to the next convenient day.

### **Functions**

1. Prepare the annual R&D action plan along with R&D incentive policy for various R&D activities/programmes.

2. Obtain the budget approval for various activities from finance & planning committee and GB.

Prepare a comprehensive list of funding agencies that allocate funds for R
 D projects.

4. Motivate staff and students to publish papers/articles/manuscripts in conferences/journals of national/ international repute and to file/publish patents.

5. Encourage staff & students to prepare and submit R&D/AQIS/project proposals for funding by ISRO, DRDO, CSIR, DST, AICTE, UGC, MSME, HUBs etc., within the stipulated time.

6. Formulate strategies for mutual benefit of stakeholders by fostering research collaborations in interdisciplinary areas of industry/govt./IITs/TBIs/professional chapters to address societal needs.

7. Monitor R&D project progress of various departments through visits to identify bottlenecks and propose remedial actions.

8. Maintain close liaison with industry and undertake sponsored projects.

9. Organize national / international conferences /workshops /seminars / training programs in thrust areas to enhance the professional and research skills among the staff and students.

10. Insist faculty members to publish their research work in WoS/Scopus indexed journals.

11. Maintain & update data of research, consultancy and extension activities of staff/students

12. Upload progress of R&D activities on the web portals of affiliating/accrediting/ranking agencies.

13. Constitute a review committee to adjudicate the originality & quality of the publications/projects/ consultancies/patents of staff/students and to recommend for incentives/appreciation and suggestions for improvement.

14. Consolidate the progress of R&D activities of all departments and submit report to the Principal.

15. Allocation of funds/seed-capital to various departments and staff members to take up R&D activities to established researchers both individually and also in groups.

16. Monitor the utilization of research funds appropriately as per sanctioned budget without any deviation.

17. Monitor the progress of R&D activities and send report to the Principal.

### **Intellectual Property**

In case of any innovation/invention, the institute will encourage the researcher to file a patent. The institute has collaboration with the third party agency, which will process the patent application. The institute shall bear all the expenditure in filing of patent application. If the patent is commercialized, then the revenue sharing would be as per IP Policy of the Institute.

### **Policy for Research and Consultancy Projects**

The institute follows a unique incentive scheme to reward the faculty for the R&D and consultancy project works carried out in the respective year. This scheme is introduced by the management to impart research culture and to motivate faculty to identify new innovations.

### **Incentives for Publishing Papers**

As a part of the continual quality improvement policy, the institute encourages publication of papers in various conferences and journals by the staff members and can claim incentives. Staff members presenting their research papers in regional/national/international-seminars/conferences/ workshops will be provided by OD leave and reimbursed by the registration fee & travel expenses as per the rules in force and may vary time to time. Faculty research publications in reputed national/ international journals/conferences will be reimbursed, awarded and rewarded as per the faculty incentive scheme.

### Note:

1. The publication charges should be paid in the name of Journal/Publisher and receipt to be generated in the name of Author, who is applying for Reimbursement. 2. All the reimbursements will be the original Fee paid, with a limitation of amount as mentioned in the MJCET policy.

3. Neither Reimbursement, nor Reward will be given to paper published in list of discontinued Journals of Scopus/Cloned Journals list of UGC.

4. Papers published in list of Journals banned are also not eligible for Reimbursement and Reward.

5. For papers publishing in journal through conference, the faculty can apply for reimbursement either in journal category or in Conference category and not in both.

### Patents

1. The fee for patent filling will be borne by institute; provided "Institute" is, the applicant and Inventors (with institute address) belong to the institute.

2. For the Patents filed & published filed & published individually (wherein institute does not bear any filling charges) and applicant not being Institute, reward of Rs.5000/- will be given to the first Inventor with institute address if the patent is granted or registered.

3. Authors of Books/Book Chapters indexed in Scopus or Published by International Publisher will be rewarded Rs. 2500/- for one or more Book Chapter and Rs. 5000/- for Complete book, provided the affiliation should be institute name. This reward is only for Authors.

4. Once the paper is published, before applying for reimbursement, the faculty has to submit soft copy of publication in the Department/Central Library.

5. All Papers (to Journals or Conferences) are to be submitted after proper plagiarism check and language check through proper channel, HOD/Director (R&D)/Principal.

6. Affiliation of College name should be properly mentioned and even the institute to be acknowledged wherever possible.

### **Code of Ethics for Research**

1. Academic Honesty: The institute holds high respect for honesty in all scientific communications in reporting data, results, methods, procedures, and publication status. The institute does not entertain fabrication, falsification, misrepresentation of data. Deceit of colleagues/funding-agencies or public is considered misconduct on the part of the researcher.

2. Integrity: The institute gives high regard for keep-up promises & agreements and sincerity & consistency of ideas and implementation.

3. Carefulness: One must carefully & critically examine one's own work, associates/team work and keep a record of research activities such as data collection, research design, and correspondence with agencies of journals.

4. Respect for Intellectual Property: Honor patents, copyrights, citations, and other forms of intellectual property. One must not use unpublished data, methods, or results without permission. Authors should give proper acknowledgements/citations and avoid plagiarism.

5. Confidentiality: The author should protect confidential communications such as documents, works, blue-prints, papers, publications, observations, trade secrets and patent records.

6. Social Responsibility: Mitigate social harm through research and public education/advocacy

7. Competence: Improve professional competence and expertise throughout life in education & learning and promote research competence in all aspects of research.

8. Legality: A researcher must know and obey government policies, relevant laws and institutional rules and regulations with regards to IPR issues.

9. Protection of Human Subjects: Minimize harms & risks to human subjects, use special precautions with vulnerable situations and respect human dignity/privacy/autonomy. Equitable distribution of benefits and burdens of R&D.

10. Rules for Plagiaraism: All project/seminar reports, dissertations/thesis, research papers, case studies, and any such documents need to be checked with the standard plagiarism software tool. In case of project/seminar reports, dissertations/thesis, the concerned student needs to submit a plagiarism report generated by a licensed software tool.

### **Relationships with Community**

a. R&D outputs such as data, information, graphs, reports and documents are disseminated to the stakeholders in all possible ways including social media without any loss of confidentiality.

b. Researchers of the institute exercise due diligence and involve judiciously into research activities which are not detrimental to the interests of society/community/environment/stakeholders.

c. Researchers will exercise their rights to academic and scientific research freedom and are accountable to the community.

### **Relationships with Sponsors**

a. The methods, contents, results, reports, documents, designs, publications, etc., of research shall be fully disclosed to the funded agencies on final settlement.

b. Researchers shall be honest with sponsors about their research contribution & involvement along with qualifications, research expertise and skills.

c. Researchers should follow standard code of ethics in disclose of content of research and maintain confidentiality with sponsors.

d. Researchers shall utilize sponsor's funds only for the purpose for which it is meant for.

### **Relationships with Research Participants and Research Objects**

a. Researchers should respect their team members with freedom, dignity, privacy and integrity.

b. Researchers shall treat non-human living beings with care, respect, awareness, vulnerability and defenselessness.

c. No researcher should be harmful to the environment and maintain ecological balance.

d. Researchers should follow standards and norms of global waste management system.

e. In case and if research demands the use of human personal data & observations, the researchers have to obtain a prior consent from the person and their family members.

### Withdrawal of membership from R&D project

Researchers can withdraw from the approved research in writing through proper channel and on the consent of sponsoring agency. Researchers should use the approved funds for that project only as per sanctioned heads of budget. Researchers should return the received money/money's worth to the institute if they didn't attend any professional development activities which are contributory to the R&D project.

### List of Sanctioned R & D projects

### LIST OF SANCTIONED PROJECTS FOR 2024-2025

This year, 23 project proposals were submitted from various departments seeking R & D funding. Out of which, **Fourteen** projects of total amount Rs.12,18,101/- (Phase –I) were approved for funding after review on March 4<sup>th</sup>, 2025.

### The following are the approved faculty research projects:

1. Project : Kisan Mitra: An agriculture friendly Bot

Department: Electronics and Communication Engineering

Investigators : Mrs. Shubhangi Saxena, Asst. Professor, ECED and Dr. Ayesha Naaz, Professor and Head, ECED

2. Project : Astra Rover: A fusion Rover for Earth and Beyond

Department: Electronics and Communication Engineering

Investigators : Mrs. B. Sucharitha, Asst. Professor, ECED, Dr. Hemalatha, Asso. Professor, MED and Dr. Ayesha Naaz, Professor and Head, ECED

3. Project : Neurosense

Department: Electronics and Communication Engineering

Investigators : Mrs. B. Sucharitha, Asst. Professor, ECED and Dr. Ayesha Naaz, Professor and Head, ECED

4. Project : Smart Seminar – Living Lab Project

Department: Electronics and Communication Engineering

Investigators : Dr. Salma Fauzia, Asso. Professor, ECED and Ms. Maliha Naaz, Asst. Professor, ECED

5. Project : Design and fabrication of 3D printer for foundry applications

Department: Mechanical Engineering

Investigators : Dr. Mohammed Viquar Mohiuddin, Professor and Head, MED

6. Project : Design and fabrication of open drainage cleaning equipment

Department: Mechanical Engineering

Investigators : Dr. Mohammed Sadak Ali, Professor, MED and Dr. V. Dharam Singh, Asst. Professor, MED

7. Project : Development of an intelligent real time bus tracking system for city commuters using live GPS, IoT and Mobile

Department: Mechanical Engineering

Investigators : Mr. Bharat Kumar Talluri, Asst. Professor, MED and Mr. Syed Muzammil Shah, Asst. Professor, MED

8. Project : HydroScout: Precision water body and silt depth analysis device

Department: Civil Engineering

Investigators : Dr, Qamar Sultana, Asso. Professor, CED and Dr. Arshad Mohammed, Asst. Professor, EED

9. Project : Application of AI in Structural health monitoring

Department: Civil Engineering

Investigators : Mr. V. D. Raju, Asst. Professor, CED and Dr. S.V. N. Reddy, Asst. Professor, CED

10. Project : AI- driven autonomous drone system for comprehensive solar panel management and optimization

Department: Electrical Engineering

Investigators : Dr. Mohammed Sajid, Asso. Professor, EED and Dr. Arshad Mohammed, Asst. Professor, EED

## The following are the approved research projects under student category:

1. Project : Fabrication of Rear Spoiler for SAE/ Supra Vehicle using Optimized NACA Airfoil Profile Standards

Department : Mechanical Engineering

Investigators: Dr. S. Irfan Sadaq, Asst. Professor, MED and Mrs. S. Shahar Banu, Asst. Professor, MED

2. Project : Design and fabrication of a smart drone for pharmaceutical delivery with integrated temperature management

Department : Mechanical Engineering

Investigators: Dr. G. Sailaja, Asso. Professor, MED and Dr. Arshad Mohammed, Asst. Professor, EED

3. Project : Fabrication and performance of double pipe heat exchanger using various Nano particles for industrial applications

Department : Mechanical Engineering

Investigators: Mrs. Naseema, Asst. Professor, MED and Mrs. S. Shahar Banu, Asst. Professor, EED

4. Project : Automatic Portable welding and cutting carriage machine

Department: Mechanical Engineering

Investigators : 1. Dr. Mohammed Viquar Mohiuddin, Professor and Head, MED

#### R & D Projects (2023-24):

I. Project: Design and Fabrication of an Automobile Disc Brake Rotor Test Rig

Department: Mechanical Engineering

Investigators:

- 1. Mr. Irfan Sadaq, Assistant Professor, MED (PI) Amount: Rs. 68,993/-
- II. Project: Design and Fabrication of Mechanically-driven Cleaning equipment Department: Mechanical Engineering
  - Investigators:
  - 1. Dr. Mohammed Sadak Ali Khan, Professor, MED (PI)
  - 2. Dr. V. Dharam Singh, Assistant Professor, MED (Co- PI) Amount: Rs. 50,000/-
- III. Project: Design and Fabrication of Student Formula Racing Vehicle Department: Mechanical Engineering Investigators:
  - 1. Dr. Mohammed Viquar Mohiuddin, Professor, MED (PI)
  - 2. Dr. Mohammed Hasham Ali, Assistant Professor, MED (Co- PI) Amount: Rs. 4,14,000/-
- IV. Project: Design and Fabrication of a Dual Extruder 3D Printer Department: Mechanical Engineering

Investigators:

1. Dr. Mohammed Viquar Mohiuddin, Professor, MED - (PI) Amount: Rs. 50,000/-

- V. Project: Design and Fabrication of HHO Hybrid Vehicle Department: Mechanical Engineering Investigators:
  - 1. Dr. G. Sailaja, Associate Professor, MED (PI)
  - 2. Dr. G. Prasanna Kumar, Associate Professor, MED (Co-PI) Amount: Rs. 34,000/-

- VI. Project: Development of Friction Welding Setup for Welding of Pipes Department: Mechanical Engineering Investigators:
  - 1. Mr. Ahmed Abdul Muneem, Assistant Professor, MED (PI)
  - 2. Mr. K. MD. Mazharuddin, Assistant Professor, MED- (Co- PI) Amount: Rs. 47,850/-
- VII. Project: Design and Fabrication of Setup of Friction Stir Welding of Pipes
   Department: Mechanical Engineering

Investigators:

- 1. Mr. Ahmed Abdul Muneem, Assistant Professor, MED (PI)
- 2. Dr. Mohammed Viquar Mohiuddin, Professor, MED- (Co- PI) Amount: Rs. 51,300/-
- VIII. Project: Smart Agri Four Legged Bot Department: Mechanical Engineering Investigators:
  - 1. Dr. K. Hemalatha, Associate Professor, MED (PI)
  - 2. Dr. Uma N. Dulhare, Professor, CS & AI- (Co- PI)
  - 3. Mrs. B. Sucharita, Asst. Professor, ECED
  - Amount: Rs. 1,30,151/-
  - IX. Project: Terra Explorer: Earth Rover for Earth Centric Applications Department: Electronics and Communication Engineering Investigators:
    - 1 Mrs. B. Sucharitha, Assistant Professor, ECED (PI)
    - 2. Dr. K. Hemalatha, Associate Professor, MED- (Co- PI) Amount: Rs. 90,000/-
  - X. Project: M.A.R.Q.S Modular Attachments on Robotic Quadrupedal System

Department: Electronics and Communication Engineering Investigators:

- 1. Dr. Ayesha Naaz, Professor, ECED (PI)
- 2. Dr. Ishrat Meera Mirzana, Professor, MED- (Co- PI) Amount: Rs. 94,069/-
- XI. Project: Robo Fetch Department: Electronics and Communication Engineering Investigators:

1. Dr. Salma Fauzia, Assistant Professor, ECED - (PI) Amount: Rs. 51,708/-

### R & D Projects (2022-23):

I. Project: Development of Electrical Energy Monitoring System in SUES Campus

Department: Electrical Engineering Department Investigators:

1. Dr. K. Mohammed Rafi, Assistant Professor, EEED

2. Mr. J. V. R. Vithal, Associate Professor, EEED Amount: Rs. 1,75,000/-

II. Project: DRONE- CENTER of EXCELLENCE (Phase -2) Department: Electrical Engineering Department

Investigators:

1. Dr. Mohammad Haseeb Khan, Professor, EED

2. Mr. Arshad Mohammed, Assistant Professor, EED Amount: Rs. 4,82,517/-

III. Project: Women Safety Identity Card

Department: Electronics and Communication Engineering Department Investigators:

1. Dr. Ayesha Naaz, Professor and I/c Head, ECED 2. Mrs. B. Sucharita, Asst. Professor, ECED Amount: Rs. 76,250/-

### R & D Projects (2021-22):

I. Project: Unmanned Multipurpose Aerial Vehicle (UMAV) Department: Electrical Engineering Department Investigators:

1. Dr. Mohammad Haseeb Khan, Professor, EED

2. Mr. Arshad Mohammed, Assistant Professor, EED Amount : Rs. 5,04,200/-

II. Project: Design and Fabrication of Student Formula Racing Vehicle Department : Mechanical Engineering Department Investigators:

3. Dr. Mohammed Viquar Mohiuddin, Professor, MED

4. Mr. Mohammed Hashim Ali, Assistant Professor, MED Amount: Rs. 2,00,000/- (Alumni fund of Rs.50,000/- received)

III. Project: DRONE- CENTER of EXCELLENCE Department: Electrical Engineering Department Investigators:

1. Dr. Mohammad Haseeb Khan, Professor, EED

2. Mr. Arshad Mohammed, Assistant Professor, EED Amount: Rs.5,43,500/-

IV. Project: Design of IIOT based Assembly line manufacturing process using selectively Compliant Assembly Robotic Arms

Department : Electronics and Communication Engineering

Investigators:

1. Dr. Mohammed Arifuddin Sohel, Professor and Head, ECED

2. Mr. Mohammed Noorullah Khan, Assistant Professor, ECED Amount : Rs. 98,120/- (Alumni fund of Rs.40,000/- received)

V. Project : Applications of AI in Traffic Management Department : Civil Engineering Investigators:

- 1. Dr. Mohd. Hamraj, Professor and Head, CED
- 2. Prof. D. Ram Mohan Rao, Professor, CED
- 3. Mr. Shakeel Ayjaz, Associate Professor, CED
- 4. Mr. V. D. Raju, Assistant Professor, CED
- 5. Mr. MDV Prasad, Assistant Professor, ITD

Amount : Rs. 1,45,000/- (Alumni fund of Rs.50,000/- received)

#### R & D Projects (2020-21):

I. Project: Design and Fabrication of AI Based MR Damper For Gun Mounted Drone.

Department: Mechanical & Electrical Engineering Department Investigators:

1. Dr. G Sailaja, Associate Professor, MED

2. Dr. Mahaboob Shaik, Associate Professor, EED

3. Dr. Mohammed Sajid, Associate Professor, EED Amount : Rs. 60.000/-

II. Project: Smart Oxygen Concentrator (SOC)

Department: Electronics and Communication (ECED)

Investigators: 1. Dr. Mohammed Arifuddin Sohel, Head & Professor, ECED

2. Dr. Mohammed Abdul Raheem, Asst. Professor, ECED

3. Mr. Mohammed Muneeruddin, Asst. Professor, ECED

Amount : Rs. 49,915/-

III. Project: Fabrication of Robosoccer bots Department: Electronics Engineering Department Investigators:

5. Dr. Mohammed Arifuddin Sohel, Professor, ECED

6. Mr. Hakeem Aejaz Aslam, Assistant Professor, ECED

Amount : Rs. 2,00,000/-

IV. Project: Design of All Terrain Vehicle

Department: Mechanical Engineering Department Investigators:

1. Dr. Mohammed Viquar Mohiuddin, Professor, MED

2. Dr. D. Srinivas Rao, Professor, MED

Amount : Rs. 60,000/-

V. Project: Refurbishing of Solar Powered Charkha

Department: Mechanical Engineering Department Investigators:

1. Dr. D. Srinivas Rao, Professor, MED

2. Mr. Irfan Sadaq, Assistant Professor, MED

3.

Amount : Rs. 32,000/-

#### R&D Cell funded projects (2019-2020)

This year, 33 project proposals were submitted from various departments seeking R & D funding. Out of which, **Fifteen** projects of total amount Rs.8,40,915/- (Phase -I) were approved for funding after review on 26<sup>th</sup> October, 2019.

The following is the list of sanctioned projects:

# 1) Title of the project: AI based pest detection and control system using thermal image sensing (EED)

Project team: 1. Mohammed Imroz Khan (1604-16-739-030), 2. Abrar Mohammed (1604-16-739-050), 3. Mohammed Afrozuddin (1604-16-739-036),4. Mohammed Abdul Gafoor (1604-16-737-104),5. Syed Muzammil Hussain (1604-16-737-099)

**Project guide:** Mr. Arshad Mohammed, Assistant Professor, EED Sanctioned amount: Rs.35,500/-

# 2) Title of the project: IoT based high concentrated photovoltaic solar lighting system (EED)

Project team: 1. Zeba Urooj (1604-17-739-001), 2. Maslehuddin Siddiqui (1604-17-739-009), 3.Abdul Muqeet (1604-17-739-021), 4. Minhaj (1604-18-739-005), 5. Imroz (1604-16-739-031)

**Project guides:** (i) Mr. Arshad Mohammed, Assistant Professor, EED and (ii) Md. Jaffer, Assistant Professor, EED Sanctioned amount: Rs.57,700/-

### 3) Title of the project: Low cost solar street lighting system (EED)

Project team: 1. Md. Mahmood (1604-16-739-060), 2. Syed Abdul Anas (1604-17-739-026), 3. Ali Khan (1604-17-739-301), 4. Saad Naseeruddin (1604-16-739-023)

**Project guides:** (i) Md. Jaffer, Assistant Professor, EED, (ii) Mr. Arshad Mohammed, Assistant Professor, EED and (iii) Mr. Md. Umair Quadri, Assistant Professor, EED. Sanctioned amount: Rs.38,500/-

## 4) Title of the project: Forward / Reverse mechanically latched contractor (EED)

Project team: 1. Syed Yousuf Abdullah (1604-16-734-301),2. Syed Mohd Dawar Hussain (1604-16-734-310), 3. Mohammed Noorul Hassan Salman (1604-16-734-051), 4. Mirza Akram Baig (1604-16-734-039)

**Project guide:** (i) Mr. Mohammed Sajid, Assistant Professor, EED Sanctioned amount: Rs.26,500/-

# 5) Title of the project: Object tracking and surveillance using quadcopter (EED)

Project team: 1. B. Chaitanya Roy (1604-18-739-010), 2. Syed Nabeel Ahmed (1604-18-739-017)

**Project guide:** (i) Mrs. P. Bharathi, Assistant Professor, EED Sanctioned amount: Rs.46,400/-

#### 6) Title of the project: Smart plotting mechanism (ITD)

Project team: 1. Zehra Taher Saleem (1604-17-737-035), 2. Aakifah sultana (1604-17-737-017), 3. Nafeesa (1604-16-737-018), 4. Mushraf Ahmed (1604-17-737-096), 5. Mohd. Talha Haseeb (1604-17-737-104)

**Project guide:** (i) Dr. Rafi Uz Zaman, Associate Professor, ITD Sanctioned amount: Rs.39,000/-

#### 7) Title of the project: Swarm intelligence (ITD)

Project team: 1. Ibrahim Ali(1604-16-738-003), 2. Syeda Manal (1604-16-737-007), 3. Mujtaba Khan (1604-16-737-028), 4. Abdul Rahman Malik (1604-16-737-034), 5. Anshul Bhatia (1604-16-737-042), 6. Abdul Rahman (1604-16-737-050)

**Project guides:** (i) Dr. Devasish Pal, Professor, ITD and (ii) Md. Ibrahim Khaleelullah, Assistant Professor, ITD. Sanctioned amount: Rs.81,000/-

#### 8) Title of the project: Holo interactive bloke (ITD)

Project team: 1. Kiran Lakhani (1604-17-737-002), 2. Renish Sundrani (1604-16-737-047), 3. Syeda Hiba Siraj (1604-18-737-070),4. Isra Azizunissa (1604-18-737-016),5.Syed Tauseef Ahmed (1604-18-737-025)

**Project guides:** (i) Dr. Mousmi Ajay Chaurasia, Professor & Head, ITD and (ii) Mohd. Abdul Rasheed, Assistant Professor, ITD. Sanctioned amount: Rs.78,000/-

# 9) Title of the project: Single use plastic to fuel conversion system (MED)

Project team: 1. Shahid Dhamani (1604-16-736-064), 2. Uroosa Fatime (1604-16-736-003), 3. Deeksha Rana (1604-16-736-001), 4. Mohd. Raheemuddin Ahmed (1604-16-736-063)

**Project guides:** (i) Dr. Ishrat Meera Mirzana, Professor, MED and (ii) Dr. M.G.V. Satyanarayana, Assistant Professor, Chemistry Dept. Sanctioned amount: Rs.85,000/-

### 10) Title of the project: Aerial Surveillance Robird (MED)

Project team: 1. Syed Ishaq Shahzad (1604-17-736-028),2. Kausar Zaidi (1604-17-735-005),3. Mohammad Ghouse Mohiuddin (1604-17-735-096), 4. Khaja Asad ullah (1604-17-735-034), 5. Syed Azhar Hussain Quadri (1604-17-733-082)

**Project guides:** (i) Dr. (Mrs.) G. Sailaja, Assistant Professor, MED and (ii) Mrs. B. Sucharita, Assistant Professor, ECED Sanctioned amount: Rs.61,581/-

### 11) Title of the project: Upper Exo-skeleton (MED)

Project team: 1. Syed Absar ul Haq(1604-16-736-109),2. Abdullah(1604-16-736-103), 3. Taha Naveed Shibli(1604-16-736-097), 4. Muralidhar Nallapati(1604-16-736-105), 5.Mujtaba Khan(1604-16-737-028), 6. Mohammed Fazal Rahaman Pasha(1604-17-735-113), 7.Syeda Azra Mohi(1604-17-735-068), 8.Mohammed Waseem(1604-17-735-032), 9. Khaja Asad Ullah(1604-17-735-034), 10. Mohammad Ghouse Mohiuddin(1604-17-735-096), 11.Kausar Zaidi(1604-17-735-005), 12.Syed Ishaq Shehzad(1604-17-736-028), 13. Hafsa Taneem(1604-16-736-005)

**Project guides:** (i) Dr. K. Hemalatha, Assistant Professor, MED, (ii) Mrs. B. Sucharitha, Assistant Professor, ECED and (iii) Mr. Shaik Rasool, Assistant Professor, ITD Sanctioned amount: Rs.60,000/-

# 12) Title of the project: Experimental and CFD analysis of various airfoil profiles used in wind turbines (MED)

Project team: 1. R. Venkat (1604-18-736-063), 2. Akshay Kolli (1604-18-736-064), 3. Mirza Rizwan Ali Baig (1604-18-736-065), 4. Mohd. Abdul Mateen (1604-18-736-086)

**Project guide:** (i) Mr. S. Irfan Sadaq, Assistant Professor, MED Sanctioned amount: Rs.43,050/-

#### 13) Title of the project: Smart Mirror (CSED)

Project team: 1. Hafsa Taneem (1604-16-733-066), 2. Uroosa Sania (1604-16-733-080), 3. Syed Shah Nooruddin Hussain (1604-16-733-087), 4. Moiz Ali Bhayani (1604-16-733-119), 5. Syed Abdul Saboor Sohail (1604-16-736-023)

**Project guide:** (i) Mr. Mohammed Abdul Raheem, Assistant Professor, CSED Sanctioned amount: Rs.36,000/-

## 14) Title of the project: Synergitic Articulated Robotic Manipulator (SARM) (ECED)

Project team: 1. Syed Taha(1604-16-735-112), 2.Mohammed Wael(1604-16-735-114), 3.Syed Absar ul Haq(1604-16-736-109), 4.Abdullah(1604-16-736-103), 5.M. Nida Fatima(1604-16-735-008), 6. Sana Kausar(1604-16-735-003), 7. Mohammed Zia Ahmed Khan(1604-17-736-070), 8.Mohammed Abrar(1604-17-736-026), 9. Mohammed Mishab Zarrar(1604-17-733-084), 10.Syed Azhar Hussain Quadri(1604-17-733-082)

**Project guide:** (i) Dr. Kaleem Fatima, Professor, ECED (ii) Ms. Maliha Naaz, Assistant Professor, ECED and (iii) Mrs. Krishna Keerthi Channam, Assistant Professor, ITD Sanctioned amount: Rs. 77,500/-

## 15) Title of the project: LAIRA (GIMMIC 3.0)- Low End Artificial Intelligence Robotics Assistant (ECED)

Project team: 1.Rizwana Tabassum(1604-16-735-066), 2.Bushra Fathima(1604-16-735-072), 3.Mohd. Tanzil Bilal(1604-16-735-090), 4.Mohammed Rehan Hussain Khan(1604-17-735-053), 5.Mohd. Safwan Hussain(1604-17-735-023), 6.Md. Aneeq Ur Rahman(1604-17-735-024), 7.Moin Khan(1604-17-735-111), 8.Mohd Abdul Aziz(1604-17-735-020), 9.Syed Sohaib Ali(1604-17-735-026), 10.Mohammed Shoeb(1604-17-735-019), 11.Mirza Ibrahim Baig(1604-17-738-303), 12.Mohd Shahzaib Ashher(1604-18-735-044), 13.Mohammed Ameer(1604-18-735-019), 14.Mohd. Abdul Khader(1604-18-735-096)

**Project guides:** (i) Dr. Mohammed Arifuddin Sohel, Professor & Head, ECED and (ii) Mrs. B. Sucharita, Assistant Professor, ECED

Sanctioned amount: Rs. 75,184/-

### R&D Cell funded projects (2018-19)

This year, 19 project proposals were submitted from various departments seeking R & D funding. Out of which, **14 (Fourteen)** projects were approved for funding after review.

The following is the list of sanctioned projects:

## 1) Title of the project: Wall Climbing Robot for Surveillance with AI technology (WCRAI) (ITD)

- Project team: 1. Zohra Fatima (1604-16-737-062)
  - 2. Qudsia Tahniyath (1604-16-737-074)
  - 3. Shaik Hafizunnisa (1604-16-737-076)
  - 4. Fouzan Khan (1604-16-737-096)
  - 5. Mohammed Naser Sagri (1604-16-737-103)

**Project guides:** (i) Dr. Mousmi Ajay Chaurasia, Prof, ITD and (ii) Mr. Shaik Rasool, Asst. Prof., ITD Sanctioned amount: Rs.31,050/-

### 2) Title of the project: Trebax Chess Board (ITD)

Project team: 1. Ibrahim Mohammed Sakawath Ali (1604-16-738-003)

- 2. M. Mujtaba Khan (1604-16-737-028)
- 3. Abdul Rahman Malik (1604-16-737-034)
- 4. Anshul Bhatia (1604-16-737-042)

**Project guides:** (i) Dr. Devasish Pal, Prof, ITD and (ii) Mr. M.A. Rasheed, Asst. Prof., ITD

Sanctioned amount: Rs.23,700/-

### 3) Title of the project: The Next Generation Band (ITD)

Project team: 1. Renish Sundrani (1604-16-737-047)

- 2. Shahid Dhamani (1604-16-736-064)
- 3. Kiran Lakhani (1604-17-737-002)
- 4. Syed Absaar Ul Haq (1604-16-736-109)

**Project guides:** (i) Dr. Mousmi Ajay Chaurasia, Prof., ITD (ii) Mr. Shaik Rasool, Asst. Prof., ITD and (iii) Dr. Ishrat Meera Mirzana, Prof., MED Sanctioned amount: Rs. 37,000/-

#### 4) Title of the project: Six Legged ROV (MED)

Project team: 1. P. Mohd. Ikramullah (1604-15-736-076)

- 2. Md. Faseehuddin (1604-15-736-069)
- 3. Amayna Mohammadi Sajida (1604-16-739-003)
- 4. Meraj Saleem (1604-16-739-011)

**Project guide**: (i) Dr. Ishrat Meera Mirzana, Prof., MED Sanctioned amount: Rs.1,19,000/-

#### 5) Title of the project: Wanderway- An improved Segway (MED)

Project team: 1. Syed Muzzamil Uddin Qureshi (1604-16-736-028)

- 2. Md. Idrees Hussain (1604-16-736-036)
  - 3. Md. Wael (1604-16-735-114)
  - 4. Syed Taha (1604-16-735-112)
  - 5. Absar Ul Haq (1604-16-736-109) 6. Abdullah (1604-16-736-103)
  - 7. M. Mujtaba Khan(1604-160737-028)

**Project guides**: (i) Mrs. O. Hemalatha, Asst. Prof., MED and (ii) Mrs. B. Sucharitha, Asst. Prof., ECED

Sanctioned amount: Rs.88,000/-

6) Title of the project: Synthesis and Characterization of Nano Magnetorheological fluids for engineering applications (MED)

Project team: 1. Syed Imaduddin Ahmed (1604-16-736-020)

- 2. Murtuza Khat (1604-16-736-007)
- 3. Syed Murtuza Quadri (1604-16-736-042)

**Project guides**: (i) Mrs. G. Sailaja,Asst. Prof., MED and (ii) Dr. M.G.V. Satyanarayana, Asst. Prof, Chemistry Sanctioned amount: Rs.50,000/-

#### 7) Title of the project: Laser Engraver (MED)

Project team: 1. R. Sai Aakash Reddy (1604-16-738-008)

- 2. Abdul Sohail (1604-16-738-004)
- 3. Altaf Hussain (1604-16-738-030)
- 4. Nihal (1604-16-737-120)
- 5. Hadi Ali Farooqui (1604-16-737-056)

- 6. Mohammed Faisal (1604-16-735-079)
- 7. Varha Khan (1604-16-733-011)
- 8. Md. Rehan Hussain Khan (1604-17-735-053)
- 9. Md. Moin Khan (1604-17-735-111)

**Project guides:** (i) Dr. Mohd. Viquar Mohiuddin (Prof., MED) and Ms. Maliha Naaz (Asst. Prof., ECED) Sanctioned amount: Rs 97,000/-

#### 8) Title of the project: Flexible Manufacturing System (MED)

Project team: 1. Zohaib Khan (1604-15-736-090)

- 2. Mohd Moazzam Mustafa (1604-15-736-093)
- 3. Mir Mohib Ali Quadri (1604-15-736-104)
- 4. Mohd Faiz ur Rahman (1604-15-736-106)
- 5. Mohammed Abdul Khaliq (1604-15-736-109)
- 6. Talha Mohiuddin Rafeeq (1604-15-736-119)

**Project guide:** (i) Mr. Hakeemuddin Ahmed, Asso. Prof., MED Sanctioned amount: Rs. 85,491/-

#### 9) Title of the project: 3D Map Generating Autonomous Bot (MED)

Project team1. Umair Asharaf (1604-15-736-070)

- 2. Safoora Khan (1604-15-737-010)
- 3. Tabassum Sultana (1604-16-733-018)
- 4. Hadi Ali Farooqui (1604-16-737-056)
- 5. Rahila (1604-16-736-002)
- 6. Ayesha Manzoor (1604-16-737-003)
- 7. Syed Muzammil (1604-16-736-028)

**Project guides:** (i) Dr. Ishrat Meera Mirzana, Prof., MED and (ii) Mrs. Munavvara Tahaseen, Asst. Prof., ITD Sanctioned amount: Rs.75,000 /-

#### 10) Title of the project: Humanoid Robot - Phase 3 (ECED)

- Project team: 1. Mogal Abdul Sameer Baig (1604-15-735-112)
  - 2. Mulla Mohd Sufiyan (1604-16-735-307)
  - 3. Ifrahur Rahman (1604-16-735-034)
  - 4. Masarath Fathima (1604-16-735-063)
  - 5. Bushra Fatima (1604-16-735-072)
  - 6. Mohammed Faisal (1604-16-735-079)
  - 7. Ayesha Sultana (1604-16-735-068)
  - 8. Nousheen Begum (1604-16-737-020)
  - 9. Afshan Fathima (1604-16-737-011)
  - 10. Mohd. Fazeel Ahmed (1604-16-736-069)
  - 11. Qutub Ahmed (1604-16-738-014)
  - 12. Mohd. Ghouse Mohiuddin (1604-17-735-096)
  - 13. Syed Wajahat Ali (1604-17-735-104)

**Project guides:** (i) Dr. Mohammed Arifuddin Sohel (Prof., ECED) and (ii) Mr. J.K. Nag (Asso. Prof., ECED) Sanctioned amount: Rs.1,00,000 /-

### 11) Title of the project: GIMMIC- A Semi-Humanoid Face Recognition Robot (ECED)

Project team: 1. Mogal Abdul Sameer Baig (1604-15-735-112)

- 2. Sameena Begum (1604-15-735-065)
- 3. Nazia Fatima(1604-15-735-070)
- 4. Mohammed Abdul Nayeem (1604-15-736-115)
- 5. Mohammed Sohail Khan (1604-15-736-110)
- 6. Mohammed Saad Khan (1604-15-733-105)
- 7. Syed Imad Ul Hasan (1604-15-733-035)
- 8. Suhaib Nizar Ahmed (1604-16-736-037)
- 9. Abdul Sohail (1604-16-738-004)
- 10. Abdul Haseeb (1604-16-738-016)
- 11. Tabassum Sultana (1604-16-733-018)
- 12. Juveria Khatoon (1604-16-733-062)
- 13. Hadi Ali Farooqui (1604-16-737-056)
- 14. Aneequr Rahman (1604-17735-024)
- 15. Mohd Mudassir Ahmed (1604-16-737-049)
- 16. Mohd Safwan Hussain (1604-17-735-023)
- 17. Mohammed Azeemuddin (1604-16-737-032)

**Project guides:** (i) Dr. Mohammed Arifuddin Sohel (Prof., ECED), (ii) Mrs. B. Sucharitha (Asst. Prof., ECED) and Mr. Shaik Irfan Sadaq (Asst. Prof., MED) Sanctioned amount: Rs.1,00,000 /-

## 12) Title of the project: IoT based vehicle parking system with cloud computing (EEED)

Project team: 1. Altaf Hussain Qadar (1604-15-739-050)

- 2. Affan Kareem (1604-15-739-048)
- 3. Wasi Uddin (1604-15-739-041)

**Project guide:** (i) Mrs. Narjis Begum, Asst. Prof., EEED Sanctioned amount: Rs.20,000 /-

13) Title of the project: I. Experimental Study of Effect of Fiber Density on Shear strength of RC Beams with externally bonded FRP Wraps (CED)

II. Experimental Study on effect of Fiber density on Flexural Performance of RC Beams with externally bonded FRP Wraps (CED)

Project team: I. 1. Mohammed Rehan Ali (1604-17-741-002) II. 1. Mohammed Nadeem Uddin (1604-17-741-013)

**Project guide:** : I. (i) Mr. Toufeeq Anwar., Asso. Prof., CED and II. (i) Mr. Syed Jawwad Ahmed, Asst. Prof, CED. Sanctioned amount: Rs.1,00,000 /-

#### 14) Title of the project: Biodiesel Extraction- Phase 5- Automation of Biodiesl Pilot Plant using Continuous flow process (Chemistry Dept.)

Project team: 1. Tauseef Unnisa (1604-17-738-001) 2. Md. Rizwan Ahmed (1604-17-738-032)

**Project guide:** (i) Dr. M. G.V.Satyanarayana, Asst. Prof., Chemistry (ii) Mr. K. Mohammed Rafi, Asst. Prof., EEED and (iii) Dr. Ishrat Meera Mirzana, Prof., MED Sanctioned amount: Rs.45,000 /-

### R&D Cell funded projects (2017-18)

This year, 26 project proposals were submitted from various departments seeking R & D funding. Out of which, **11 (Eleven)** projects were approved for funding after review.

The following is the list of sanctioned projects:

### 1) Title of the project: Pneumatic Quadruped Robot (MED)

Project team: 1

1.M. A. Muqeeth (1604-14-736-102)

- 2. Syed Ausaf Qureshi (1604-14-736-069)
- 3. M. A. Mugeeth Jibran (1604-14-736-061)
- 4. M. Abdul Aziz Siddiqui (1604-14-735-077)
- 5. Mohd Faisal (1604-14-735-080)

**Project guides:** (i) Dr. Ishrat Meera Mirzana, Asso. Prof., MED and (ii) Dr. Kaleem Fatima, Prof., ECED Sanctioned amount: Rs.79,966/-

#### 2) Title of the project: IoT based Smart 3D Printer (ECED, EED & MED)

Project team: 1. Arshad Ahmed (1604-14-735-085)

- 2. Mohd Farhan Ahmed Khaled (1604-14-735-089)
- 3. Zia ur Rahman (1604-14-735-087)
- 4. Samiya Iftekar (1604-14-734-002)
- 5. Mohammad Abrar Ahmed (1604-14-734-003)
- 6. Mohammad Ghouse Moinuddin (1604-14-734-305)
- 7. P Mohammad Ikramullah (1604-14-736-076)
- 8. Mohammad Abdul Nayeem (1604-14-736-115)

**Project guides:** (i) Dr. Arifuddin Sohel, Head & Prof., ECED, (ii) Mrs. Aijaz Fatima, Asso. Prof., EED and

(iii) Dr. Viquar Mohiuddin, Asso. Prof., MED. Sanctioned amount: Rs.32,380/-

#### 3) Title of the project: Humanoid Robot- Phase 2 (ECED & MED)

Project team: 1. Shwana (1604-14-735-014)

- 2. Mohd Saber (1604-14-735-018)
- 3. Qudsia Masood (1604-14-735-040)
- 4. Naheed Fatima (1604-14-735-062)
- 5. Zeshan Adbul Majeed Azmi (1604-14-735-082)
- 6. Syed Abrar (1604-14-735-117)
- 7. Atif Furqan (1604-14-736-080)
- 8. Mohd. Abdul Khaliq (1604-14-736-078)

**Project guides**: (i) Dr. Arifuddin Sohel, Head & Prof., ECED, (ii) Mr. J. K. Nag, Asso. Prof., ECED and (iii) Mr. Hakeemuddin Ahmed, Asso. Prof., MED

Sanctioned amount: Rs.75,828/-

### 4) Title of the project: Security Patrolling Autonomous Robot (ECED)

Project team: 1. Mohammed Nabeel Idrees (1604-15-735-013)

- 2. Sarim Mohammed Fawaz (1604-15-735-055)
- 3. Sk. Najmah (1604-15-735-001)

**Project guides**: (i) Mrs. Salma Fauzia, Asst. Prof., ECED and (ii) Ms. Maliha Naaz, Asst. Prof., ECED Sanctioned amount: Rs.54,205//-

# 5) Title of the project: Automated Navigation System with Indoor Assistance for the Blind (ANISAB) (ITD)

Project team: 1. Saba Ahmed Jalal (1604-15-737-001)

- 2. Mogal Hidayathulla Baig (1604-15-737-043)
- 3. Abdul Aziz (1604-15-737-117)
- 4. Mohd Mudabbir Ahmed (1604-15-737-109)
- 5. Sameera Begum (1604-15-737-002)

**Project guides:** (i) Dr. Mousmi Ajay Chaurasia, Head & Prof., ITD and (ii) Mr. Shaik Rasool, ITD

Sanctioned amount: Rs. 45,350/-

## 6) Title of the project: ISMART- Automated Classroom using IoT an initiative towards Thing Speak (CSED)

Project team: 1. Mohasin Ahamed Chinnapattan (1604-14-733-094) 2. Mohd Abdul Mubeen (1604-17-742-010)

- 3. Ayesha Nazneen Ahmed (1604-15-733-007)
- 4. Mohd Hussam Ali (1604-17-742-018)

**Project guide**: (i) Dr. Uma Dulhare. Prof., CSED Sanctioned amount: Rs.45,880/-

# 7) Title of the project: Analysis of Air Pollution using a Quadcopter (EIED)

Project team: 1. Syed Mansoor (1604-15-739-017)

2. Mohammad Naqui (1604-15-739-053)

3. Shaik Wasim Akram (1604-15-739-045)

**Project guides:** (i) Mrs. P. Bharathi, Asst. Prof., EIED and (ii) Dr. Satyanarayana M. G.V, Asst. Prof., Chemistry Dept. Sanctioned amount: Rs 48,800/-

# 8) Title of the project: Fabrication of oxide nanoparticles for gas sensor applications (ECED & Physics Dept.)

Project team: 1. Abdul Majeid (1604-14-735-017)

- 2. Syed Arif (1604-14-735-301)
- 3. Syed Imaduddin Ahmed (1604-16-736-020)

**Project guides:** (i) Dr. Shaik Kareem Ahmmad, Physics Dept., and (ii) Mr. Mohd. Abdul Raheem, Asst. Prof., ECED Sanctioned amount: Rs.30, 500 /-

### 9) Title of the project: Effect of Nano particles in thermal and mechanical properties of ordinary Portland cement (CED & Physics Dept.)

Project team: 1. Syed Taqiuddin Ahmed (1604-15-732-081) 2. Md Hashim (1604-15-732-082) 3. Shaik Mohd Salman (1604-15-732-061)

**Project guides:** (i) Dr. Shaik Kareem Ahmmad, Physics Dept., and (ii) Dr. Mohd. Hamraj, Head & Prof., CED Sanctioned amount: Rs.22,000 /-

10) Title of the project: Fabrication of electronic kit using spectrophotometric method to detect contaminants in Oils such as olive oil and vegetable oil (Physics Dept.)

Project team: 1. Nameera Jabeen (1604-16-733-012) 2. Syed Imaduddin Ahmed (1604-16-733-020)

**Project guide:** (i) Dr. Shaik Kareem Ahmmad, Physics Dept. Sanctioned amount: Rs. 13,000/-

#### 11) Title of the project: Smart Energy Auditing and validation of in-use state and stand-by state power consumption in EED, MJCET to optimize power consumption and suggest cost-effective and safety measures (EED)

Project team: 1. Tauseef (1604-15-739-014)

- 2. Nauman (1604-15-739-015)
- 3. Shaik Md Mansoor (1604-15-734-037)
- 4. Sathira ummul khair (1604-15-734-005)
- 5. Md. Nazim Sharief (1604-15-734-036)

**Project guides:** (i) Dr. J. Namratha Manohar, Prof., EED, (ii) Dr. Mahaboob Shaik, Asst. Prof., EED, (iii) Mr. Arshad

Mohammed, Asst. Prof., EED and (iv) Mr. Vittal, Asso. Prof., EED

Sanctioned amount: Rs.38,970 /-

#### R&D Cell funded projects (2016-17)

This year, 22 project proposals were submitted from various departments seeking R & D funding. Out of which, **15 (Fifteen)** projects were approved for funding after review.

The following is the list of sanctioned projects:

# 1) Title of the project: Quadcopter for navigation, imaging and survillence (ECED)

Project team: 11. Mohammad Kashif Moiz (1604-13-735-019)

- 2. Syed Abdul Hannan (1604-13-735-038)
- 3. G. Vineeth (1604-13-735-047)
- 4. Mohammed Arshad Uddin (1604-13-735-079)

**Project guide:** (i) Dr. Kaleem Fatima, Prof., ECED

Sanctioned amount: Rs.37,709/-

### 2) Title of the project: Smart Mattress (ECED)

Project team : 1. Mahrukh Hasan (1604-13-735-012) 2. Syeda Nemath Unnisa (1604-13-735-014) 3. Sumaiyya Rahman (1604-13-735-062) **Project guide :** Dr. Arifuddin Sohel, Professor, ECED Sanctioned amount: Rs.24,502/-

# 3) Title of the project: Voice controlled Prosthetic Arm for Physically disabled (ECED)

Project team: 1. Md. Khaja Ilias Pasha (1604-14-735-119)

- 2. Arhsad Ahmed (1604-14-735-085)
- 3. Ahmed Abdul Hafeez (1604-14-735-086)
- 4. Arifa Sultana (1604-14-735-061)
- 5. Naheed Fatima (1604-14-735-062)
- 6. Tayyaba Farha (1604-14-735-068)

**Project guide**: (i) Mrs. Salma Fauzia, Asst. Prof., ECED and (ii) Ms. Maliha Naaz, Asst. Prof., ECED

Sanctioned amount: Rs.31,500/-

# 4) Title of the project: Design, fabrication and testing of aeration systems (CED)

Project team: 1. Mohammed Irfan (1604-13-732-007)

- 2. S. Md. Imaad Khadri (1604-13-732-009)
- 3. Mohd. Moinuddin (1604-13-732-013)
- 4. Mohammed Sujathullah (1604-13-732-034)
- 5. Shahid Malik (1604-13-732-036)
- 6. Shaik Imran Pasha (1604-13-732-040)

**Project guide**: (i) Mr. D. Ram Mohan Rao, Asso. Prof., CED Sanctioned amount: Rs.58,000//-

# 5) Title of the project: Minimizing Power consumption in Image recognition by deep learning (CSED)

Project team: 1. Tabassum Sultana (1604-18-742-015) **Project guide:** (i) Dr. N. Uma Dulhare, Prof., CSED Sanctioned amount: Rs. 18,319/-

6) Title of the project: Collision detection and prevention (CSED)

Project team: 1. Syed Zafer Ali (1604-13-733-034)

2. Panayala Chetan (1604-13-733-035)

3. Akhter Rasool (1604-13-733-051)

**Project guide**: (i) Mrs. Fahmina Taranum, Asso. Prof., CSED Sanctioned amount: Rs.13,000/-

## 7) Title of the project: Design and Implementation of Humanoid with 20 degrees of freedom (ECED & MED)

Project team: 1. Amena Najeeb (1604-13-735-005)

- 2. Syed Kashif (1604-13-735-028)
  - 3. Md. Yousuf Ahmed (1604-13-735-039)
  - 4. Syed Jawwad Mohiuddin (1604-13-735-113)
- 5. Shaik Mohammed Simraan (1604-13-735-115)
- 6. Syed Qurram Zeeshan (1604-13-736-072)

7. Mohammed Abdul Mubeen (1604-13-736-111)

**Project guide:** (i) Mr.J. K. Nag, Asso. Prof., ECED and (ii) Mr. Dhanraj Pamar, Asst. Prof., MED Sanctioned amount: Rs 49,450/-

# 8) Title of the project: IOT based Sustainable Plant Habitat and Smart Farming (ECED & ITD)

Project team: 1. Mohd Asif (1604-13-737-034)

- 2. Mohammed Haseebullah Qureshi (1604-13-737-045)
- 3. Abdul Azeem (1604-13-737-046)
- 4. Mohammed Azeeth (1604-14-735-023)
- 5. Mohd. Farooq (1604-14-735-027)
- 6. Rafi Imran (1604-14-735-018)

**Project guide:** (i) Dr. Arifuddin Sohel, Prof., ECED and (ii) Dr. Uma Dulhare. Prof., CSED

Sanctioned amount: Rs.49,790 /-

### 9) Title of the project: SEGWAY: A self balancing vehicle (ECED & ITD)

Project team: 1. Md. Abdul Aziz Siqqiqui (1604-14-735-077)

- 2. Md. Ammar Iqbal Khan (1604-14-736-003)
  - 3. Md. Abdul Moyeed (1604-14-735-088)
    - 4. Md Shujauddin Faaras (1604-14-736-047)
  - 5. Syed Abdul Mannan (1604-14-736-002)

**Project guide:** (i) Mrs. B. Sucharitra, Asst. Prof., ECED and (ii) Mrs. O. Hemalatha, Asst. Prof., MED

Sanctioned amount: Rs.47,000 /-

**10) Title of the project:** Smart Power saving kit for class and staffrooms (EED)

Project team: 1. Amreen Begum (1604-13-734-005)

- 2. Asfia Aleem (1604-13-734-001)
- 3. Mohammed Abrar Ahmed (1604-13-734-303)
- 4. Samiya Iftekar (1604-14-734-002)

**Project guide:** (i) Dr. Shaik A. Qadeer, Prof., EED Sanctioned amount: Rs. 11,300/-

### 11) Title of the project: Low cost data acquisition system for lab view (EED)

Project team: 1. Shayeesta Sultana (1604-13-739-007)

- 2. Uzma Alam (1604-13-739-004)
- 3. Humera Naaz (1604-13-739-007)

**Project guide:** (i) Dr. Shaik A. Qadeer, Prof., EED

Sanctioned amount: Rs.6,000 /-

### 12) Title of the project: Multipurpose E-CART (MED)

Project team: 1. Shaik Rauhon Ahmed (1604-13-736-065)

- 2. Syed Shahbaz Peeran Qadri (1604-15-736-001)
- Mohammed Rehan Uddin (1604-15-736-002)
  Syed Muzammil shah (1604-15-736-005)
- 5. Mohammed Ahmed Khan (1604-15-736-012)
- 6. Mohammed Salman Khan (1604-15-736-018)
- 7. Mohammed Salman (1604-15-736-303)

**Project guide:** (i) Dr. A. S. Reddy, Prof., MED Sanctioned amount: Rs.42,000 /-

# 13) Title of the project: Design and fabrication of a robotic arm controlled by Hand Gesture Movements (MED)

Project team: 1. Mohammed Adil Mohiuddin (1604-13-736-007)

- 2. Mohammed Zain Mohiuddin (1604-13-736-010)
  - 3. Mohd Abdul Taleb (1604-13-736-021)

**Project guide:** (i) Mrs. Ishrat Meera Mirzana, Asso. Prof., MED Sanctioned amount: Rs.26,500 /-

# 14) Title of the project: Smart attendance monitoring system for college using wireless sensor network (ECED)

Project team: 1. B. Shafat Mohammed (1604-13-735-045)

- 2. Mohd. Ehteshamuddin (1604-13-735-046)
  - 3. Syed Abdul Wahab (1604-13-735-055)

**Project guide**: (i) Mrs. Salma Fauzia, Asst. Prof., ECED and (ii) Ms. Maliha Naaz, Asst. Prof., ECED

Sanctioned amount: Rs.27,500/-

# 15) Title of the project: Effectiveness of the Turbo Air Ventilator (MED)

Project team: 1. Furghan Abdul Khader (1604-15-736-035)

- 2. Shaik Ahmed Arfaz Ali (1604-15-736-026)
  - 3. Salman Ahmed (1604-15-736-112)
  - 4. Mohammed Sulaiman (1604-15-736-006)

**Project guide:** (i) Mrs. N. B. V. Lakshmi Kumari, Asst. Prof., MED and (ii) Dr. A. S. Reddy, Prof., MED

Sanctioned amount: Rs.33,000 /-

### List of Sponsored projects and consultancy projects

### **Sponsored External Research Projects:**

- Received a funding of Rs. 15 Lakhs from MSME, Govt. of India for the project titled "**3D Mapping using LiDAR Drone**"
- Received a funding approval of Rs. 5 Lakhs from MIC AICTE, Govt. of India for the project titled "Fabrication of Electronic Kit using to Detect Contaminants in Oils"
- Received a funding approval of Rs. 4 Lakhs from MIC AICTE, Govt. of India for the project titled "Upper Exo-Skeleton"
- Experimental Investigation on Ground Effect Aerodynamics of Cambered Wings: AR&DB sanctioned and granted Rs. 6.985 Lakhs.
- Modifications in I.C. Engines to use Hydrogen as a fuel: AICTE sanctioned and granted Rs. 6.0 Lakhs for this project.
- Design, Development & Testing of Smart Fluid Vibration Damper: AICTE sanctioned and granted Rs. 6 Lakhs

### **Consultancy Projects:**

HBL, Hyderabad had an MoA with Mechanical Engineering
 Department for the design and development of "Take out Robot for

**Injection Molding Machine**". The cost of the complete project is Rs.10Lakhs.

• IEEE Bangalore office sanctioned and granted Rs. 3 Lakhs for the fabrication of "**J.C Bose Millimeter wave experiment replica**"

## List of patents published/granted so far

**Utility Patents by MJCET** 

S.No ·	Application Number	Title	Inventor/s Details	Applicatio n Date	Yea r	Status
1.	5250/CHE/2014	SOLAR POWERED SPINNING WHEEL	Dr. A. SatyaNarayan a Reddy	10/21/2014	2019	Grante d
2.	201941054795	Process and System for Efficient Biodiesel Production	Dr. Satyanarayana M.G.V., Dr. Ishrat Meera Mirzana and Syed Shahbaz Peeran Qadri	12/31/2019	2021	Grante d
3.	201941054798	A Pneumatic Quadruped Robot and a Method of Preventing Accidents Thereof	Dr. Ishrat Meera Mirzana, Dr. Kaleem Fatima and Mohammed Abdul Muqeeth	12/31/2019	2021	Grante d
4.	202241011486	Structural Vibration Mitigation Damper and its	Dr. G. Sailaja	03/03/2022	2022	Grante d

		Working				
5.	202141008948	Personal Safety System to Protect Individuals from Attackers	Mr. Arshad Mohammed	03/03/2021	2021	Grante d
6.	IN20214105978 4	Magneto Rheological Fluid Clutch System and Method of Synthesis Thereof	Dr. Hemalatha and Dr. D. Srinivas Rao	21/12/2021	2021	Grante d
7.	201941054824	MethodForDetectingOptimalLocationAndCoordinatedControlOfDstatcomIn ARadialDistributionNetwork	Mr. J. V. R. Vittal and Mr. Rafi	12/31/2019	2020	Grante d

# Australian Patent byMJCET

S.No.	Application Number	Title	Inventor/s Details	Applicatio n Date	Yea r	Status
1.	2021104728	A method to enhance optical Properties of a Zinc Arsenic Tellurite Glass	Ahmmad Shaik Kareem, Magudapathy P, EdukondaluAvula , Ahmed Shaik Amer and Rahman Syed	4/13/2022	2022	Grante d

## Design Patents by MJCET

S.No ·	Application Number	Title	Inventor/s Details	Applicatio n Date	Yea r	Status
1.	337524-001	Case for Thermal Camera	Arshad Mohammed	12/10/2021	2021	Granted
2.	339601-001	Test Kit	Arshad Mohammed	11/5/2021	2021	Granted

3		342386-001	MR Damper	Dr. G. Sailaja	4/14/2021	2021	Granted
4	•	345887-001	Mechanical Contactor	Dr. Mohammed Sajid	7/8/2021	2021	AWAITIN G

### Faculty IPR details Department-wise

Department	Granted	Published
Mechanical Engineering	16	15
Electronics and	-	03
Communication		
Engineering		
Information Technology	03	13
Civil Engineering	-	01
Computer Science and	03	01
Artificial Intelligence		
Computer Science	-	03
Engineering		
Electrical Engineering	28	09
Basic Sciences and	-	02
Humanities		
Total	50	47

## Total publications by faculty are 97 as on 09/10/2024

S.No	Application Number	Title	Inventor/s Details	Year	Status	Granted/ Published on
		Mechanical Engi	neering Departme	nt		
1	201641015552	Automotive Vehicle Wheel With Three Dimensional Printed Alloys	Dr. Ishrat M.M	2022 -23	Granted	09-01-2023
2	202241056593	FGM Heat Sinks	Dr. Ishrat M.M	2022 -23	Publishe d	14-10-2022
3	202241050436	A Deep Learning And Iot Based	Dr. Ishrat M.M	2022	Publishe	09-09-2022

11	412985-001	DEVICE FOR	Dr. Ishrat M.M	2023	Granted	08-04-2024
10	360011-001	FUNCTIONALLY GRADED MATERIAL HEAT SINK	Mrs N B V Lakshmi Kumari and Dr. Ishrat M.M	2021 -22	Granted	07-03-2022
9	2021101556	HYDEL POWER GENERATION FROM MULTI STOREY BUILDING SEWERAGE	Dr. Ishrat M.M	2020 -21	Granted	03-06-2021
8	202141003191	An Iot Based Smart Power Sprayer For Agricultural Applications		2020 -21	Publishe d	29/01/2021
7	202141006010	Bioefficacy Of Plant Derived Essential Oil From Piper Betle (L.) For Diesel Engine	Dr. Ishrat M.M	2020 -21	Publishe d	19/02/2021
6	202141050866	Smart Student Data Management Device Method Thereof	Dr. Ishrat M.M	2021 -22	Publishe d	19/11/2021
5	202141056650	SoilFertilityPredictionDeviceAndMethodThereofImage: Second Secon	Dr. Ishrat M.M	2021 -22	Publishe d	31/12/2021
4	202241050367	An AI & ML BasedWindTurbineControlSystemAndMethodThereof	Dr. Ishrat M.M	2022 -23	Publishe d	16-09-2022
		Wind Turbine Condition Monitoring & Classification		-23	d	

		NANO COATING		-24		
12	202041040702	Machine Learning Based Ball Throwing Machine	Dr. G. Sailaja	2020 -21	Publishe d	02-10-2020
13	202010	Machine Learning Based Fish Monitoring Machine and Method Thereof	Dr. G. Sailaja	2020 -21	Granted	21-10-2020
14	202141042312	DeepLearningBasedAdaptiveWindMillVibrationCompensationSystem and MethodThereof	Dr. G. Sailaja	2021 -22	Publishe d	01-10-2021
15	353696-001	Nacelle of Wind Mill	Dr. G. Sailaja	2021 -22	Granted	26-11-2021
16	2021102771	Charging Estimation Device Using Machine Learning	Dr. G. Sailaja	2021 -22	Publishe d	20-04-2022
17	329372-001	Multi Purpose Smart Holder	Dr. G. Sailaja	2019 -20	Granted	18-05-2020
18	329373-001	Stress Detection Cap	Dr. G. Sailaja	2019 -20	Granted	18-05-2020
19	360004-001	Electric Bike	Dr. Syed Khader Basha	2022 -23	Granted	03-05-2023
20	202241026557 A	OPTIMIZATION OF EXHAUST NOZZLES IN HIGH-SPEED VEHICLES	Dr. Mohammad Sadak Ali Khan	2022 -23	Publishe d	03-06-2022
21	202241003576	Development of Advanced Artificial	Dr. Abdul	2021	Publishe	04-02-2022

S.No	Application	Title	Inventor/s	Year	Status	Granted/
31	382157-001	AIR AND WATER QUALITY IDENTIFYING PEN	Dr.K.Hema Latha	22- 23	Granted	23/03/2023
30	381139-001	HYDROGEN FUEL BIKE	Dr.K.Hema Latha	22- 23	Granted	09-03-2023
29	343708-001	Fuel Briquetting Press	Mrs. N B V Lakshmi Kumari	2020 -21	Granted	21-05-2021
28	202241037428 A	HANDICAPPED SOLAR CAR WASH UNIT (HSCWU)	Dr. H. K Dora	2022 -23	Publishe d	08-07-2022
27	6372307	Automatic Car Driving Mechanism using AI		2024	Granted	24-06-2024
26	348899-001	Double Ended Air House Unit	Dr. Abdul Raheem Junaidi	2022 -23	Granted	22-12-2022
25	348928-001	Supporter for Portable Terminal	Dr. Abdul Raheem Junaidi	2022 -23	Granted	15-12-2022
24	334185-001	Design on Laparoscopic Surgical Device	Dr. Abdul Raheem Junaidi	2022 -23	Granted	02-11-2022
23	202011034072	Laparoscopic Surgical Device	Dr. Abdul Raheem Junaidi	2019 -20	Publishe d	11-02-2022
22	202141016244	Development of Brown Gas Based Therma 1 Jet Type Engine		2020 -21	Publishe d	23-04-2021
		Intelligence Model and its Impact on Cryptocurrency Markey	Raheem Junaidi	-22	d	

•	Number		Details			Published on		
	Electronics and Communication Engineering Department							
1	AN207136	0	Zakir Hussain Assistant Professor, ECE Department & Hakeem Aejaz Aslam Assistant Professor, ECE Department	2022 -23	Publishe d	10.01.2023		
2	AN20234101049 0	Detection and	Aslam Asst Prof ECED, Dr Sabir Hussain Asso Prof ECED, Dr. M A	-23	Publishe d	17.03.2023		
3	AN380823001	Multi Antenna Supporter	Dr. M A Raheem Asst Prof ECED	2022 -23	Publishe d	24.11.2023		
S.No	Application Number	Title	Inventor/s Details	Year	Status	Granted/ Published on		
		Information Tecl	hnology Departme	nt				
		IOT BASED REAL TIME HEALTH CARE SYSTEM ENABLED BY WEARABLE SENSOR	Dr. Mohammad	2020 -21	Publishe d			
1	202111002807	NETWORK	Pasha		<b>D</b> 444 -	29/01/2021		
2	2021102765	Power Sharing &	MOHAMMED	2021	Publishe	22 May		

		Eco-friendly Smart Connected Vehicle System Driven by Hybrid Renewable		-22	d	
		Energy and IoT for Highways.	AFROZ			2021
3	202141043272 A	A SYSTEM AND METHOD FOR CONTROLLING DEPLOYMENT OF IOT DEVICES OVER WIRELESS NETWORKS WITH AN ADAPTIVE GATEWAY	S. Fouzia Sayeedunnisa	2021 -22	Publishe d	05/11/2021
4	202341017402 A	DESIGN OF SIX SIGMA METHODOLOGIE S IN DATA MINING TO ANALYZE THE SUPPLY CHAIN QUALITY OF ORGANIZATION	S. Fouzia Sayeedunnisa	2022 -23	Publishe d	07/04/2023
5	356677-001	SMART PATIENT REGISTRATION SYSTEM	S. Fouzia Sayeedunnisa	2022 -23	Granted	17/02/2023
6	202341017126	Crime rate analysis and prediction using Data Mining and Machine Learning	Gouri R Patil	2022 -23	Publishe d	17/03/2023
7	202341009147 A	Assessing AI Contribution to Anti-Corruption Operations	SYED AZAR ALI		Publishe d	17/02/2023
8	202341009147 A	DESIGN OF SIX	SYED AZAR ALI	2022	Publishe	17/02/2023

		SIGMA METHODOLOGIE S IN DATA MINING TO ANALYZE THE SUPPLY CHAIN QUALITY OF				
		ORGANIZATION		-23	d	
	No.20234108925	A SYSTEMATIC METHOD FOR DIGITAL AND SOCIAL MEDIA METRICS ON		2023	Publishe	
9	9 A	MENTAL		-24	d	12/01/2024
10	202021049599	HEALTH APPROACHES FOR YOUTH	Gouri R Patil	2020 -21	Publishe d	27/11/2020
11	Design no: 392582-001	ROBOTIC DEVICE FOR HUMAN RESOURCE DEPARTMENT	Dr. A. S. Gousia Banu	2023 -24	Granted	11/08/2023
12	Design no: 6389973	AI BASED DEVICE FOR SPLICING OPTICAL FIBRES	Dr. A. S. Gousia Banu	2024 -25	Granted	10 September 2024
13	202241020912	Authenticity & Security for Critical & Important Data Storage Using Blockchain	Dr. A. S. Gousia Banu	2022 -23	Publishe d	07.04.2022
		Diagnostics & Treatment help patients at Remote Locations using				
14	202217011008 A		Dr. A. S. Gousia Banu	2021 -22	Publishe d	01/03/2022

15	202131056232 A	Generating a Map of Potential Customers & Segregating IT for Product Marketing Using Classification & Regression Methods	Dr. A. S. Gousia Banu	2022 -23	Publishe d	2022-06-17
16	20184010055 A	Intelligent display board & a system to display data received over a network	Dr. A. S. Gousia Banu	2017 -18	Publishe d	19/3/2018
S.No	Application Number	Title	Inventor/s Details	Year	Status	Granted/ Published on
		Civil Enginee	ring Department			
1	202241030585 A	Structured Transmission Towers Vibrations of latticed steel Conductive Cable	Dr.Qamar Sultana	2022	Publishe d	17/06/2022
S.No	Application Number	Title	Inventor/s Details	Year	Status	Granted/ Published on
S.No	Number	Title ter Science and Arti	Details			Granted/ Published
<b>S.No</b> 1	Number		<b>Details</b> i <mark>ficial Intelligence I</mark> Dr Uma N			Granted/ Published

		HEALTHY LIFE				
3	20211011322	AWS-CLOUD DATA (EC2) (AMAZON WEB SERVICES) PERFORMANCE IMPROVEMENT USING MACHINE AND DEEPLEARNING PROGRAMMING	Dr.M.Upendra Kumar	2021	Granted	14.03.2021
4	202141016524	A SECURITY FRAMEWORK FOR INTERNET OF THINGS (IOT) INTEGRATED SERVICE ORIENTED ARCHITECTURE AND APPLICATIONS	Dr.M.Upendra Kumar Dr .SYED SHABBEER AHMAD	2021	Publishe d	06/08/2021
S.No	Application Number	Title	Inventor/s Details	Year	Status	Granted/ Published on
	C	omputer Science and	Engineering Depa	rtmer	it	
1	20244106138	IOT Based agreature ROBOT for framing	A.VENUGOPAL RAO	2023	Publishe d	
2	202441013740	AI -POWERD DEVICE PRCISE AMNIOTIC MONOTOR AND PREGNACY MANAGEMENT	DR.SYED SHABBER AHMAD	2024	Publishe d	
3	202141013272	A system and	Dr.Fahmina	2021	Publishe	

		method for contrlong deployment of devices over wireless netwoks with an adaptive gateway	Taranum		d	Constall
S.No	Application Number	Title	Inventor/s Details	Year	Status	Granted/ Published on
•					Status	<b>UI</b>
		Basic Sciences and H	Iumanities Depart	ment		
1	-	A system for producing a SEIVR (Susceptible Exposed Infected Vaccinated Recovery) model for Covid dynamics	Ahmmad, Shaik	2023	Granted	06.11.2023
2	Utility model no. 20 2023 104 447	nitrogen impanation of zinc-	Ahmmad, Shaik Kareem, Mohd Abdul, Haleem Rizwan and Siddiqui, Nazima	2023	Granted	25.09.2023
S.No	Application Number	Title	Inventor/s Details	Year	Status	Applicatio n date
		<b>Electrical Engin</b>	eering Departmen	t		
1	202041026386 P.No 401492	Smart Face Shield	Mr. Arshad Mohammed	2020	Granted 2022	6/23/2020

	202041029571		Mohammed Umair Quadri, , Mr. Arshad		Granted	
2	P.NO :506779	Machine	Mohammed	2020	2024	11/07/2020
3	202041030623 P.No.506779	Smart Farm Fence	Arshad Mohammed	2020	Granted 2024	17/07/2020
4	202031033598 P.No: 483002	IOT Based Medicine Container Management System	. Mahaboob Shaik, Mr. Arshad Mohammed		Granted 2023	06/08/2020
5	202041034076 P.NO: 527700	Low-costPublicTransportImage: Construction of the second secon	Mr. Arshad Mohammed	2020	Granted 2024	08/08/2020
6	202141042314	DeepLearningBasedAdaptiveWindmillVibrationCompensationSystem and MethodThereof	Arshad Mohammed	2021	Publishe d	18/09/2021
7	202041010766	Low cost Reconfigurable Smart Switch for Home Automation and Security	Arshad Mohammed	2020	Publishe d	3/12/2020
8	202041016774	Artificial Intelligence Based Autonomous Car Jack	Mrs. Bibi Mariyam and Arshad Mohammed	2020	Publishe d	4/19/2020
9	202041017781	An energy Efficient Building Engergy Management System (BEMS)			Publishe d	4/25/2020
10	202041010766	Low cost Reconfigurable Smart Switch for	Mr. Arshad Mohammed	2020	Publishe d	12/03/2020

		Home Automation and Security				
11	202041016774	Artificial Intelligence Based Autonomous Car Jack	, Mrs. Bibi Mariyam, Arshad Mohammed		Publishe d	19/04/2020
12	202041017781	An energy Efficient Building Engergy Management System (BEMS)			Publishe d	25/04/2020
13	202041040702	Machine Learning Based Ball Throwing Machine	Mohammed, Dr.	2020	Publishe d	21/09/2020
14	202041057564		Dr. Mohammad Haseeb Khan, Mr. Arshad Mohammed	2020	Publishe d	31/12/2020
15	2021102771	Electric vehicle charging estimation device using machine learning			Granted	4/20/2022
16	2021101556	Hydelpowergenerationfrommultistoreybuilding sewerage			Granted	5/19/2021
17	2021100895	Machine learning based solar tracking system and method thereof		2021	Granted	4/14/2021
18	2020104355	Iot and machine learning based power quality improvement system for micro- grid	Arshad Mohammed, Sajid Mohammed		Granted	3/10/2021

19	2020102473	Ŭ	Dr; Mohammed, Arshad Mr Dr; Shaik, Mahaboob DR	2020	Granted	28/09/2020
20	2021101212	transport	Shaik, Mahaboob and Mohammed,Arsha d	2021	Granted	08/03/2021
21	<u>2020103212</u>	Iot and machine learning-based power distribution management system	Shaik, Mahaboob and Mohammed, Arshad		Granted	04/11/2020
22	2020102433	Machine learning based fish monitoring machine and method thereof	Arshad Mohammed, Mahaboob Shaik	2020	Granted	25/09/2020
23	<u>2020103563</u>	Machine learning based plant growth moderator	Mohammed, Arshad and Shaik, Mahaboob		Granted	19/11/2020
24	2020103211	Machine learning based rodent detection and control device	Shaik, Mahaboob and Mohammed, Arshad	2020	Granted	04/11/2020
25	2020102642	Machine learning- based smart workout mirror and method thereof	Shaik, Mahaboob and Mohammed, Arshad	2020	Granted	08/10/2020
26	2020103765	Iot and machine learning-based student management system	Shaik, Mahaboob and Mohammed, Arshad	2020	Granted	29/11/2020
27	377795-001	HELMET	Dr. Mohammad Haseeb Khan	2023	Granted 2024	22/01/2023

28	372443-001	Sanitizer Dispenser cum Blower	Mohammed Arshad, Dr	2023	Granted 2024	22/01/2023
29	380823-001	Multi Antenna Holder	Mohammed Arshad, Dr, G Ravi Kiran	2023	Granted 2024	05/03/2023
30	353696-001	Nichelle of Wind Turbine	Dr. Mohammad Haseeb Khan, Mohammed Arshad, Dr	2021	Granted	11/26/2021
31	328307-001	Smart Assistant Holder	Arshad Mohammed	2021	Granted	10/8/2021
32	332368-001	Automatic Sanitizer Dispenser	Dr. Shaik Mahaboob and Arshad Mahammed	2021	Granted	3/12/2021
33	329372-001	Multi-Purpose Smart Holder	Arshad Mohammed, Dr. Mahaboob Shaik, , Dr. Mohd. Abdul Muqeet	2020	Granted	11/27/2020
34	332185-001	Medicine Container	Dr. Shaik Mahaboob, Mr. Arshad Mohammed	2020	Granted	8/21/2020
35	330781-001	Automatic Hand Sanitizer	Arshad Mohammed,	2020	Granted	7/6/2020
36	330167-001	SmartSelfDisinfectingFaceShieldShield		2020	Granted	6/18/2020
37	329373-001	Stress Detection Cap	Arshad Mohammed, Dr. Mahaboob Shaik, Bibi Mariyam and Dr. Mohd. Abdul Muqeet	2020	Granted	7/10/2020

# R & D Application form for Seed funding

MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY, HYDERABAD-500034, TELANGANA, INDIA.

RESEARCH AND DEVELOPMENT CELL

APPLICATION FOR SEED FUNDS FOR RESEARCH PROJECTS

20\_\_-20\_\_\_

(The application may be forwarded to R&D Cell, MJCET for placing before the R&D committee for approval)

1. Name of the Applicant with Designation, Department, Mobile No. & E-Mail:

2. Title of the Project:

3. Aim of the Project:

4. Objectives of the Project:

**5. Methodology to be used:** (State what do you propose to do and how? Nature of the work, Theoretical / experimental, Procedure to be adopted and

anticipated results/ benefits may be clearly given. Use additional sheets, if necessary)

**6. What are the anticipated expenses with details of funds required:** (Use additional sheets, if necessary) – (clearly specify the recurring and non-recurring expenses details)

**7. List of Supporting documents:** (Attach reports of previous related projects, technical papers etc. to support your proposal)

8. Time Plan:

Signature of the Applicants with date:

Signature of the Head of the Department with date:

#### Other committees associated with R & D cell

#### Institution Innovation Council (IIC MJCET)

1. Dr. Mahipal Singh Rawat Principal	-	President
2. Dr. Md. Viquar Mohiuddin Professor & Head, MED	-	Vice President
3. Dr. Md. Asrar Ahmed Associate Head, CS&AI	-	Convener, IIC
4. Dr. Ishrat Meera Mirzana Professor & Associate Head, MED	-	IPR Activity Coordinator
5. Dr. Gouri R Patil Associate Professor & Head, ITD	-	Internship Activity Coordinator
6. Dr. Shaik Kareem Ahmmad Associate Professor & Coordinator	-	NISP Coordinator
7. Dr. K. Hema Latha Associate Professor, MED	-	Start-up Activity Coordinator
8. Dr. Tasneem Bano Rahman Associate Professor, CSED	-	Innovation Activity Coordinator
9. Dr. S. Irfan Sadaq Assistant Professor, MED	-	Social Media Coordinator
10. Mr. Md. Imran Assistant Professor, EED	-	NIRF Coordinator

The Committee will meet once in a month to promote Innovation, Research & Entrepreneurship programs at our Institution and submit a report to the undersigned. However, incase of emergency it could meet as and when required.

### Industry Institute Interaction Cell (IIIC)

1.	Mr. P.S.R. Koundinya Managing Director, NKV Gypsum Plaster	-	Chairman
2.	Mr. Vishnu Vardhan Managing Director Rolon Seals	-	Member
3.	Mr. N. Venkatesh Sr. Director Engineering Silicon Labs	-	Member
4.	Dr. Amit Kumar Founder and MD Bio Aix DNA Research Center	-	Member
5.	Mr. Bhimsetty Director Binford Research Lab Pvt. Ltd.	-	Member
6.	Dr. Syed Ferhathullah Hussainy Dean (Students Affairs) MJCET	-	Member
7.	Dr. Mohammed Hamraj Professor & Head, CED MJCET	-	Member
8.	Dr. Mohammed Haseeb Khan Professor & Head, EED MJCET	-	Member
9.	Dr. (Mrs.) Ishrat Meera Mirzana Professor & Director, R&D Cell	-	Member