



## TKR COLLEGE OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

(Sponsored by TKR Educational Society, Approved by AICTE, Affiliated by JNTUH,  
Accredited by NBA & NAAC with 'A' Grade)



### TKR Centre for Research and Innovation AY-2022-23

JNTUH recently accorded Research Centre for CSE Department, which was established in the new TKR Center for Research and Innovation. The following are the photographs of the facilities available (computers, high speed server) and additive manufacturing lab and also research labs for Electrical and Electronics Engineering and Electronics and Communication Engineering departments.





### **Additional Facilities available for R&D center**

1. Center for VLSI design
2. Center for Machine Learning & Data Science
3. Additive Manufacturing Lab for Design thinking
4. PCB designing

The additional equipment's which are available in the existing laboratory will be deployed in the new TKR Center for Research and Innovation for the smooth conduction of R&D experiments. The lab is intended to create willingness to the students to make an effort and take a chance instead of assuming that their efforts won't pay off. The hands-on work culture will train them to learn from their mistakes and will make them resilient. Scientific discovery in the past clearly indicate that constant efforts trigger serendipity.

TKR Research center is a platform for the students to think and act relentlessly. Interactions in these labs not only get them the PhD degree but also orient the young students and make them entrepreneurs to tap on indigenously available raw material and create products that are cost effective, superior in quality and consumer friendly.

A Total of nine projects proposals were applied from various departments for DST CRG and SRG project grants

Recently MSME projects for a total worth of Rs. One crore were approved by the competent authority

### **TKR College of Engineering and Technology R&D sanctioned and on-going research projects from various Funding Agencies**

| <b>Name of the Dept.</b> | <b>Sl. No.</b> | <b>Name of the Principal Investigator</b>       | <b>Funding Agency</b>   | <b>Title of the Project</b>   | <b>Tenure</b> | <b>Amount</b> | <b>Status</b> |
|--------------------------|----------------|---|---|---|---------------|---------------|---------------|
| S&H                      | 1              | Dr. B. Rajini Kanth                             | DST SERB<br>NEW DELHI<br>File No.<br>SR/FTP/PS-<br>108/2009                       | Determination of<br>MFIS on CoNiAl<br>FSMAs for<br>Sensors and<br>Actuators         | 3 years       | <b>17.04L</b> | Completed     |
| MEC<br>H                 | 2              | Dr. Suresh<br>Akella/Dr.<br>D.V.<br>Ravishankar | TEQIP-III,<br>JNTUH<br>Procs. No.<br>JNTUH/TEQ<br>IP-<br>III/CRS/2019<br>/MECH/08 | Development of<br>mobile Air<br>conditioner with<br>ecofriendly<br>refrigerant 134a | 1 year        | <b>3L</b>     | Completed     |

|          |   |  |  |   |         |                |           |
|----------|---|--|--|---|---------|----------------|-----------|
| EEE      | 3 | Dr. K. B. Raju,<br>Coordinator,<br>EEE<br>Department           | AICTE Ref<br>No.<br>8024/RIFD/<br>MOD-<br>304/2010-11                            | EEE MODROBS   | 1 year  | <b>12.8 L</b>  | Completed |
| ECE      | 4 | Dr. M. Girish<br>Kumar   | DST SERB<br>NEW DELHI<br>File No.<br>SRG/2021/00<br>1392                         | Quality of Signal<br>Improvement in<br>Prominent<br>GNRFET based<br>ternary logic<br>system for<br>futuristic<br>dielectric inserted<br>MLGNRs for<br>Integrated Circuit<br>Designs | 2 years | <b>13.464L</b> | On going  |
| CSE      | 5 | Dr. A. Suresh<br>rao/Dr. B.<br>Vishnu<br>Vardhan               | TEQIP-III,<br>JNTUH<br>Procs. No.<br>JNTUH/TEQ<br>IP-<br>III/CRS/2019<br>/CSE/11 | Minimallistic<br>Approach to<br>Predict<br>Cardiovascular<br>Diseases using<br>various risk<br>factors that go<br>undiagnosed till<br>advanced stages                               | 1 year  | <b>2.6L</b>    | Completed |
|          | 6 | Dr. G.<br>Madhu/Dr. B.<br>Sunil Srinivas                       | TEQIP-III,<br>JNTUH<br>Procs. No.<br>JNTUH/TEQ<br>IP-<br>III/CRS/2019<br>/CSE/13 | Automatic<br>Diagnostic Model<br>for Detection of<br>Malaria parasites<br>from Microscopic<br>images  | 1 year  | <b>2.98 L</b>  | Completed |
| MEC<br>H | 7 | Dr.G.Gopala<br>Krishna<br>Professor<br>and B. Karthik<br>Kumar | MSME   | Smart wearables<br>for rescuers<br>and victims  |         | <b>8L</b>      | On going  |
| MECH     | 8 | Dr.D.V.Ravi<br>Shankar and<br>Perike Enosh                     | MSME   | Unmanned<br>surface<br>vehicle for<br>defense and<br>civilian<br>application  |         | <b>20L</b>     | On going  |