MANJARA CHARITABLE TRUST RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI (Permanently Affiliated to University of Mumbai)

DEPARTMENT OF MECHANICAL ENGINEERING

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

Dated: 13/06/2021

Internship Report For AY 2020-21

1. Name of Internship In-charge: Prof Amol Mangrulkar

2. Name of Internship Coordinator: Prof Prathamesh. Potdar

3. Name of Internship Assistant: Mr Rajesh Sangle

4. Head of The Department: Dr. Rajesh V. Kale

5. Academic Year: 2020-21 (01/06/2020 to 30/06/2021)

6. Total no of students applied for internship (work from home): 118

AS per guidelines provided by the University of Mumbai, Institute and the department of mechanical engineering due to outbreak of the COVID-19 the students are suggested to do the work from home internship which are provided by various AICTE approved institute and companies like INTERSHALLA, SimpliForge Creation, Tridev Urja Pvt Ltd, JSW Steel Ltd etc, and students can utilize their interim summer vacation period. We create support and made available all facilities for our students to complete all formalities of industries as per their requirement. The details list of the students applied for paid and non-paid internship are given in below:

Details of major Internship Industry List

| Sr. No. | Name of Company | Number of students |
|---------|---------------------------|--------------------|
| 1. | INTERSHALLA | 25 |
| 2. | SimpliForge Creation Ltd | 35 |
| 3. | Baesic Fit | 02 |
| 4. | Tridev Urja Pvt Ltd | 02 |
| 5. | ARS Energy Auditor | 01 |
| 6. | Varun Industries | 01 |
| 7. | Raj Fire Protection Ltd | 01 |
| 8. | Festo India Pvt Ltd | 01 |
| 9. | Tdi- the design Institute | 01 |
| 10 | Other industries | 25 |
| | Total | 118 |

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Campus Placements Report: 2020 – 2021

| Sr. No. | Date | Company | Students Selected | Salary Package (Rs) | Designation/Job Profile |
|------------|------------|---|----------------------|---------------------------|--|
| 1 | 28/09/2020 | Infosys | 9 | 3.6 LPA | System Engineer |
| 2 | 15.11.2020 | Tata Consultancy Services Limited | 6 | 3.36 | Trainee Software Engineer |
| 3 | 08.03.2021 | Reliance Retail Limited | 4 | 3.5 LPA | Graduate Engineer Trainee |
| 4 | 02.05.2021 | Saideep | 3 | 3 LPA | Jr.Tech Sales Coordinator, Jr. Purchase Engineer |
| 5 | 18.06.2021 | Newgen Software Technologies Limited | 4 | 3.60 LPA | Application Engineer |
| | | Total | 26 | | |

2.7

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Dr. A.G. Londhekar /Prof. V. B. sawant Placement coordinators

Date: 09/07/2021

Faculty Achievements in Academic Year 2020-2021

Details of NPTEL

| Sr. No. | Faculty members | Name of completed Course | | |
|---------|-----------------------|---|--|--|
| 1 | Prof. Ashwini Gotmare | Introduction to Industry 4.0 and Industrial | | |
| | | Internet of Things | | |

Details of NITTTR

| Sr. No. | Faculty members | Name of completed course |
|------------|----------------------|---|
| 1 | Prof. R. M. Siddiqui | Orientation towards technical education & curriculum aspects, Technology Enabled learning & Life long Self learning |
| 2 | Dr. N. J. Panaskar | Creative Problem solving, Innovation and Meaningful R&D. |
| 3 | Dr. P. R. Potdar | Creative Problem solving, Innovation and Meaningful R&D. |
| 4 | Prof. A. V. Gotmare | Communication Skills, Modes and Knowledge Dissemination. |
| 5 | Prof. P. R. Paul | Communication Skills, Modes and Knowledge Dissemination. |

List of NPTEL Courses Recommended to Students for Academic Year 2020-2021

Odd Semester

| Sem | Name of Subject Name of NPTEL course | | Duration |
|-----|---------------------------------------|-----------------------------------|----------|
| III | Thermodynamics | Concepts of Thermodynamics | 12weeks |
| V | Mechanical Measurement & Control | Mechanical Measurement Systems | 8 Weeks |
| VII | Industrial Engineering and Management | Product Design and Development | 4 Weeks |

List of NPTEL Courses Recommended to Students for Academic Year 2021-2022

Odd Semester

| Sem | Name of Subject | Name of NPTEL course | Duration |
|-----|-------------------------|--|----------|
| III | Production Process | Theory of Production Processes | 12weeks |
| V | Finite Element Analysis | Basics Of Finite Element Analysis - I | 08 Weeks |
| VII | Machine Design II | Functional and Conceptual Design | 12 Weeks |

STTP

| Sr. | STTP | Coordinator | Co-Coordinator | Duration |
|-----|----------------|---------------|-----------------------|--|
| No | | | | |
| 1 | RM (Phase I) | | Prof. R.Y. Kurne | 2nd to 7th November |
| | | | | 2020 |
| 2 | RM (Phase II) | | Prof. N. K. deshmukh | 23rd to 28th November |
| | | Dr. Rajesh V. | | 2020 |
| 3 | RM (Phase III) | Kale | Prof. S. D. Gaikwad | 7th to 12th December |
| | | | | 2020 |
| 4 | RM (Phase IV) | | Prof. A. G. Londhekar | 14th to 19th December |
| | | | | 2020 |
| 5 | RES | Dr. Kiran M. | Prof. Mukund Valse | 5 th July to 10 th July 2021 |
| | | Chaudhari | | |

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Research and Development Committee Report Year (2019-2020)

Minor Research Proposal: Grant 2019-20 sanctioned by University of Mumbai

| Sr.No. | Name of Principal | Title of the Proposal | Grant Sanction |
|--------|--|---|-------------------|
| | Investigator | | Rs. |
| 1 | Dr. Rajesh Kale, Rajesh Bisne | Design and development of auxiliary flap turbo charger(AFT) | 45000/- |
| 2 | Prof. Ravindra Y. Kurane | Design and Manufacturing of Automatic bar feeding and clamping mechanism | 42000/- |
| 3 | Prof. AmolMangrulkar, Prof. Nilesh Shahapure | Investigation of Design of Plastic Injection Mold for Additive Manufacturing for quality and productivity Improvement | 23,000/- |
| 4 | Dr. Prathmesh Potdar | IoT Enable Smart Window for Controlling Brightness: A perspective of Heat Transfer Rate | 30,000/- |

Research Proposal submitted to different funding agencies

| Name of Funding Agency | Name of Principal Investigator | Type of proposal | Title of Proposal | Date of Submission | Amount(Rs) |
|-----------------------------------|---|---|--|-----------------------|---------------------------|
| AICTE AQIS | Dr. Sanjay Bokade Dr. Prathmesh Potdar(Co- investigator) | Grant for organizing the International conference | International conference on Embracing Industry 4.0 technologies for sustainable growth | 30/10/2020 | 3,90,000.00 |
| AICTE AQIS SPICES scheme | Dr. Rajesh V. Kale | Scheme for promoting Interests, creativity, and ethics among students | Up gradation of Society of Automobile Engineering, students chapter | 29/10/2020 | 1,00,000.00 |
| AICTE AQIS | Dr. Rajesh V. Kale | STTP | Recent Trends in Energy Management and Audit | 10/08/2020 | 3,89,333.00 (Received) |

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| SERB, DST | Dr. Kiran | Research in | Investigation on | 29/12/2020 | 29,00,656.00 |
|---------------|-----------|-------------|------------------------|------------|--------------|
| | Chaudhari | Women | Material | | |
| | | Empowerment | Characterization of | | |
| | | | 3D Printed Bone | | |
| | | | Scaffold for Static | | |
| | | | and Dynamic | | |
| | | | Conditions | | |
| | | | | | |
| AQIS | Dr. Kiran | RPS | IOT Based Solar | 02/01/2020 | 9,07,625.00 |
| scheme of | Chaudhari | | Operated Water | | |
| AICTE | | | Pump system Project | | |
| | | | for Ratnagiri District | | |
| | | | | | |
| University of | Dr. Kiran | MRP | Enhancement in | 27/09/2019 | 74,000.00 |
| Mumbai | Chaudhari | | Thermal Performance | | |
| | | | of Helical Coiled | | |
| | | | Heat Exchanger | | |

Ongoing Research project in the department

| Sr. | Research | Guide | Topic | Research |
|-----|-----------------------------|-------------------------|---|---|
| No. | Scholar | | | Achievements |
| 1 | Mr. Mukund R. Valse | Dr. Sanjay U. Bokade | Investigation of Heat Transfer and Fluid Flow Characteristics of Extended Surface | |
| 2 | Mr. Rajesh L. Bisane | Dr. Rajesh V. Kale | Performance Investigation on Single Cylinder Four Stroke Tri- Charged Diesel Engine. | 2(International SCOPUS indexed Journal) 1 patent filed |
| 3 | Mr. Vinod G. Surange | Dr. Sanjay U. Bokade | Investigation of Critical Risk Factors in Manufacturing Sector | |
| 4 | Mr. Ranjeet Kekan | Dr. Rajesh V. Kale | Performance Improvement of Water Chiller with Low GWP Refrigerants, LSHX and internal subcooler | |
| 5 | Ms. Nimisha R. Shirbhate | Dr. Sanjay Bokade | Investigation on Material Characterization of 3D Printed Bone scaffold for Static and Dynamic Conditions | |

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| 6 | Mr. Prathamesh Patil | Dr. Rajesh V. Kale | Numerical & Experimental Investigation of Perforated Fins for Enhancement of Heat Transfer | |
|----|----------------------------|-------------------------|--|---|
| 7 | Ms. Ashwini V. Gotmare | Dr. Sanjay U. Bokade | Investigating the Impact of the Adoption of Industry 4.0 Enabling Technologies on Business Performance of Indian Manufacturing Organizations | |
| 8 | Prasad B. Kawade | Dr. Sanjay U. Bokade | Investigations of Cold gas assisted micro lubrication influence on machinability of die tool steel | |
| 9 | Deepa S. Pandey | Dr. Sanjay U. Bokade | A Holistic framework of Smart Supply Chain in Healthcare Unit with the Paradigm of Sustainability | |
| 10 | Swapnil R. Mane | Dr. Rajesh V. Kale | Experimental Investigations and optimization of Performance Parameters of domestic solar Water Heater | 1(SCOPUS indexed international Journal) |

Research project completed in the department in year 2019-20

| Sr. No. | Name of Student | Year of Admission | Title of Project | Project Guide | Date of Completion | Research Achievements |
|------------|------------------------------|----------------------|---|-------------------------|-----------------------|---|
| 1 | Ms. Priyanka Kuralkar | 2015 | Investigation for performance improvement of organic rankine cycle using R245a for exhaust heat recovery from IC Engine | Dr. Sanjay U. Bokade | 01/08/2020 | 01 International Journal |
| 2 | Ms. Divya Bihari | 2017 | Experimental and numerical investigation of thermal hydraulic performance in ribbed channel for combustor liner | Dr. Sanjay U. Bokade | 01/08/2020 | 01 International Journal, 01 ASME Proceedings |
| 3 | Mr. Shubha m Namdeo | 2016 | Experimental and numerical investigation of combustion characteristics of diesel engine by bio- diesel diesel blend | Dr. A. G. Londhekar | 12/08/2020 | 02 International Journal |

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| | | | Evaluating and validating | | | 01 |
|---|---------|------|---------------------------|-------------|------------|---------------|
| | Mr. | | the effect of temperature | _ | | International |
| 1 | Manish | 2016 | and thermal contact | Prof. N. K. | 14/08/2020 | Conference |
| 4 | Gaikwad | 2010 | resistance in RF MEMS | Deshmukh | 14/00/2020 | 02 |
| | Gaikwau | | switch | | | International |
| | | | | | | Journal |

| Sr. No. | Name of Student | Year of Admission | Title of Project | Project Guide | Date of Completion | Research Achievements |
|------------|------------------------------|----------------------|---|-------------------------|-----------------------|--------------------------------|
| 5 | Mr. Akshay Kini | 2017 | Analytical design and analysis of HVAC system for the sports complex | Dr. R. V. Kale | 18/08/2020 | 01 International Journal |
| 6 | Mr. Sameer Adhikari | 2016 | Effect of compression ratio and eco-friendly additive on performance and emission characteristics of biodiesel blended in IC Engine | Dr. R. V. Kale | 26/08/2020 | 01 International Journal |
| 7 | Mr. Siddharth Saindane | 2016 | Investigation on effect of ethyl hexyl nitrate as an additive of fish oil biodiesel blends in diesel engine for improvement of performance and emission | Dr. R. V. Kale | 26/08/2020 | 01 International Journal |
| 8 | Ms. Pradnya Bhondiwale | 2017 | Thermal and structural analysis of gas turbine blade using radial cooling holes | Prof. N. K. Deshmukh | 05/09/2020 | 01 International Journal |

Submitted by, Prof. N. K. Deshmukh

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Prof. V. B. Sawant Prof. A. G. Londhekar Prof. N. B. Shahapure Prof. N. N. Bhostekar.

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This reports details the brief summary of the events held during the academic year 2020-21, each seminar focused on one of the following topics: Management, Resume Building, Abroad study guidance, training session of designing and editing software.

Number of events:-11

Topics of events:-

| Matlab And Simulink workshop | Teacher's Day celebration | Mental Health Workshop with IIT |
|------------------------------|---------------------------|------------------------------------|
| Alumnus talk And Website | Importance of | CV Building and its |
| Launch | Aptitude test | interviews tips |
| Abroad Study Destination | Yocket Abroad Studies | CNC Programming |
| Lean Six Sigma Yellow belt | Management Exam | Graphic Designing |
| training | and selection process | workshop |

Attendees for the above events: - 2400+ participants across world.

Prof.Rehan Siddiqui MESA CONVENOR Prof. Narendra Bhostekar MESA CONVENOR

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INDIAN INSTITUTION OF INDUSTRIAL ENGINEERING, RGIT



IIIE - student Chapter at Rajiv Gandhi Institute of technology, Andheri (West)-Mumbai aims to spread awareness among the students of the institute about the current trends of the industries and to develop the required skills and qualities among the students so as to make them efficient and industry ready.

Founded in 1957, the **Indian Institution of Industrial Engineering** is a non-profit organization for the profession of Industrial Engineering in India consisting of members specialized in the areas of Work Study, 0 & M., Production Planning & Control, Materials Management, Value Engineering, PERT/CPM, Operations Research, Computer Sciences, Financial Management, Statistical Quality Control etc. and other emerging disciplines. It has been espousing and contributing to Productivity, Quality movement and Cost Competitiveness and other emerging needs of Undertakings in the country during the last five decades.

Faculty Advisers are: Prof. Ashwini Gotmare and Prof. Nitin Panaskar.

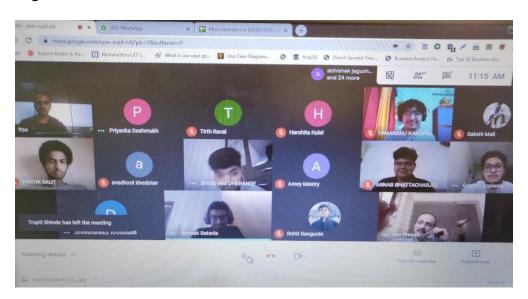
(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

'SEMINAR ON MENTAL HEALTH COUNSELLING & POST COVID-19 RECOVERY'

DATE: 10th October 2020

TIMING: 10:00 AM - 11:00 AM

Dr. B.S.V. Prasad began the seminar by explaining the most common worries/stress people are facing in the current scenario and gave some tips to the students on how to cope up with stress. The objective of the event was to help students cope up with the mental stress in the current COVID scenario and to enhance awareness towards **mental health**. The session was interactive as at the end he answered all the questions asked by the students beforehand in an anonymous form and helped them in resolving their worries.



(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

'IIIE 62nd National Convention'

DATE: 29th January 2021 – 30th January 2021

TIMING: 09:30 AM - 05:00 PM

The 62-national convention of Indian Institution of Industrial Engineering was organized to bring researches and experts from academia and industry on a common platform to discuss the latest technological and managerial tools being adopted in the field of science, Technology and Management. It will help to provide an Opportunity for all branches of industries, to disseminate the information on most recent and relevant research, Theories and practice in the area of Industrial Engineering. This event was attended by our Conveners and committee members.



(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

'KNOW YOUR DEPARTMENT FOR SE STUDENTS'

Date: 1st February 2021

Time: 10:00 AM to 10:15 AM

The Direct Second year undergraduates were guided about the committee by the Chairperson Mr. Ganesh Topiwala and by the General Secretary Mr. Arnab Bhattacharjee. They were told about the past activities conducted by IIIE.

The S.E. students were also told about the membership procedures and about the future endeavors of the committee and IIIE got an enormous response from this event.

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

'KNOW YOUR DEPARTMENT FOR FE STUDENTS'

Date: 6th February 2021

Time: 02:00 PM to 04:00 PM

The First-year undergraduates were guided about the committee by the Chairperson Mr. Ganesh Topiwala and by the Vice Chairperson Mr. Himanshu Kandpal. They were told about the past activities conducted by IIIE.

The F.E. students were also told about the membership procedures and about the future endeavors of the committee and IIIE got an enormous response from this event.

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IHE STUDENT COMMITTEE 2020-2021

| S.N. | POST | NAME | YEAR | CONTACT |
|------|----------------------|---------------------|------|------------|
| 1 | CHAIRPERSON | GANESH TOPIWALA | BE | 9769864021 |
| 2 | VICE CHAIRPERSON | HIMANSHU KANDPAL | BE | 7400276852 |
| 3 | GENERAL SECRETARY | ARNAB BHATTACHARJEE | BE | 8879958476 |
| 4 | JOINT SECRETARY | TIRTH RAVAL | BE | 9820850940 |
| 5 | TREASURER | DHANUSHREE KHAIRNAR | BE | 9421789061 |

HIE EVENT LIST 2020-21

| S.N. | EVENT NAME | DATE | SPEAKER |
|------|---|---|---|
| 1 | Mental Health Seminar | 10 th October 2020 | Dr. B.S.V. Prasad |
| 2 | IIIE 62 nd National Convention | 29 ^{th -} 30 th January 2021 | Various Speakers |
| 3 | Know Your Department for SE Students | 1 st February 2021 | Mr. Ganesh Topiwala Mr. Arnab Bhattacharjee |
| 4 | Know Your Department for FE Students | 6 th February 2021 | Mr. Ganesh Topiwala Mr. Himanshu Kandpal |

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DEPARTMENT OF MECHANICAL ENGINEERING

(UG Program – NBA Accredited; PG in <u>Heat</u> Power and PhD Technology)



LIST OF EVENTS HELD FROM JUNE 2020 TO APRIL 2021

| Sr. No. | Name of Event | Speaker | Date |
|------------|---|---|--------------------------------|
| 1 | Webinar on Career in HVAC amidst Covid19 and its effects on the Environment | Mr. Parth Thakkar | 4 th September 2020 |
| 2 | Teachers Day celebration in collaboration with all Mechanical student bodies | - | 5 th September 2020 |
| 3 | First Year Orientation | Mr. Akshay Deshmukh Mr.Prathamesh Adwade | 6 th February 2021 |
| 4 | Ishrae Job Junction Aptitude test (Online) | - | 25 th March 2021 |
| 5 | Guest Lecture on Air Handling Units | Mr. Ashutosh Rudraksha | 24 th April 2021 |

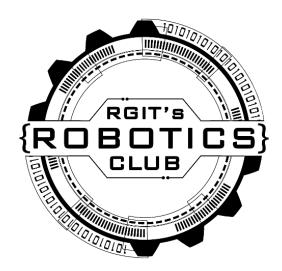
Convener Co-Convener

Dr. R.V. Kale Prof. P.R. Paul

Manjara Charitable Trust Rajiv Gandhi Institute Of Technology, Mumbai

RGIT's ROBOTICS CLUB

REPORT OF ACADEMIC YEAR 2020-21



Established in July 2018, RGIT's Robotics Club is the very first official Robotics committee of the institute. We abide by the mission to acquaint students of our institute with the current trends of Robotics and Automation in the Industries by providing sufficient practical exposure and opportunities, which will enhance their knowledge along with developing technical as well as soft skills thus in creating skilled individuals for the betterment of the society and country.

Today, Robotics is a rapidly growing field, as we continue to research, design and build new robots that serve various practical purposes including domestic, commercial and military. The RGIT Robotics Club strives to stimulate interest in robotics among the students of the institute. Besides making a serious endeavour to spread knowledge on Robotics and its diverse applications, it also stands by the subtle acronym of TEAM - 'Together Everyone Accomplishes More'. Well defined goals, an organized and disciplined work structure and motivated members are the features of the club.

Website: www.rgitsroboticsclub.com

Email ID: rgitsroboticsclub@gmail.com

Conveners: Prof. Chetan Rane and Prof. Ashwini V. Gotmare

| Sr. No. | Activity Name | Type of Activity | Date | Remarks |
|------------|--|------------------|--------------------------------------|--------------------------|
| 1. | Talk on Deep Learning by Mr. Rahul Agrawal | Webinar | September 12, 2020 | Completed |
| 2. | Introduction to Computer Vision | e-Workshop | October 2, 2020 – October 4, 2020 | Completed |
| 3. | A Talk delivered on Higher Education by IMS | Webinar | October 7, 2020 | Completed |
| 4. | Cozmo-clench (Techfest 2021 IITB) | Competition | November, 2020 - December, 2020 | Completed |
| 5. | e-Yantra 2020-21 (IITB) | Competition | August, 2020 - March, 2021 | Completed |
| 6. | DD RoboCon 2021 | Competition | December, 2020 - June, 2021 | Completed (Stage One) |
| 7. | GATE and Employability Enhancement Program session by QACA Academy | Webinar | April 16, 2021 | Completed |

EVENTS THROUGHOUT THE YEAR (2020-2021)

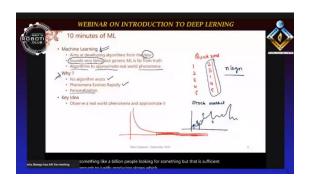
1. TALK ON DEEP LEARNING

RGIT's Robotics Club in collaboration with IETE, RGIT conducted a webinar on Introduction to Deep Learning on 12th September 2020 at 5pm with duration of 2 hrs. The webinar was inaugurated by Vice-principal Dr. S. D. Deshmukh.

Hosts: 1) Abhishek Jagushte (Coding Team Head of RRC)

2) Nidhi Pawar (Member of IETE RGIT)

Speaker: Mr. Rahul Agrawal, Principal Machine Learning Manager at Microsoft.





There were 85 participants who attended this webinar most of them being from within the institute and rest from St. Johns college (Palghar), Thadomal Sahani Engineering College, DJ Sanghvi College of Engineering (Vile-Parle), SPIT (Andheri) and many more across Mumbai.

The participants were taught about Types of Neural Networks, Basics of Natural Language Processing followed by the QnA session.

The entire session was also streamed on our official YouTube channel named RGIT's Robotics Club. Participants successfully learned the topic and gained the insights of Deep Learning. At the end, all the participants provided positive feedback.

YouTube Livestream: https://youtu.be/IJx7l6N-Yfg

2. E-WORKSHOP ON INTRODUCTION TO COMPUTER VISION

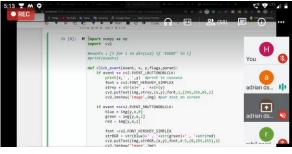
RGIT's Robotics Club conducted a three days online E-workshop on Introduction to Computer Vision from 2nd to 4th October 2020 from 3pm-5pm. The instructors for the workshop were the coding team members of our club.

Timeline of the workshop:

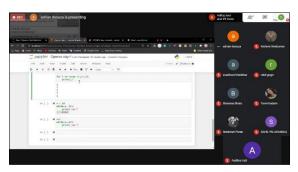
| Day | Topic | Instructors |
|---------|--------------------|-------------------|
| 1 | Host | Swagat Das |
| 1 | Basics of openCV | Adrian D'Souza |
| 2 | Object Recognition | Avadhoot Khedekar |
| 3 | Face Recognition | Niyati Vaidya |
| 3 (End) | Quiz round | - |



Day 1 of the Workshop



Day 2 of the Workshop



Day 3 of Workshop

There were 44 participants who attended this workshop. Most of them were from within the institute and rest from Terna Engineering College, SPN Doshi College, Bangalore institute of technology (Karnataka), MVJ College of Engineering and technology, Dr. Mahalingam college of engineering (Tamilnadu) and many more. The participants were taught about Basics of openCV to most used computer vision applications such as object recognition and face recognition on Google Colab. Participants successfully learned the topic and gained the insights of Computer Vision.

At the end, we conducted a quiz round based on all the topics which were covered in the course of three days. All Participants received a Certificate of Completion and top 3 scorer in the quiz received Certificate of Excellence. All the participants provided positive feedback.

3. EYANTRA 2020-21

e-Yantra Robotics Competition (eYRC) is a unique annual competition launched in the month of August every year for undergraduate students in science and engineering colleges, polytechnic. Selected teams are given a robotic kit complete with accessories and video tutorials to help them learn basic concepts in embedded systems and microcontroller programming. Abstracts of real world problems assigned as "themes" are then implemented by the teams using the robotic kits.

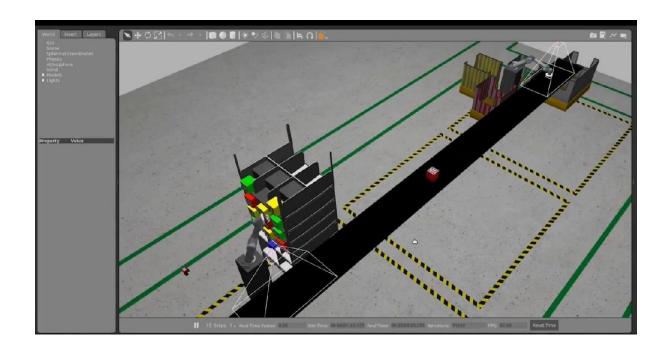
Website: https://portal.e-yantra.org/

This year the competition was a paid competition with INR 2000 as an entry fee for each team of 4 members. We participated with only one team which was as follows,

| Sr. No. | Name | Year-Dept | Team |
|---------|------------------------|-----------|------------------------|
| 1. | Tejas Phutane (Leader) | BE-EXTC | Simulation |
| 2. | Aaditya Auti | TE-EXTC | Electronics |
| 3. | Niyati Vaidya | SE-MECH | Coding |
| 4. | Tejal Temkar | SE-MECH | Design & Manufacturing |

The team cleared all the 6 tasks of the theme "Vargi Bots" which extensively used the intricacies of Robot Operating System (ROS) and IoT to control robots from a remote location. The competition was completely simulation based. Our team is among the top 90 of total of 500 teams participating in our theme.

Each team member have opportunity for summer internship depending upon the performance in each task, an online quiz, resume. Final shortlisting will be carried out on the basis of technical interviews.



e-Yantra 2021 Results of each task







Task 3 Result:

| Marks | Penalty | Total Marks |
|-------|---------|-------------|
| 96 | 0 | 96 |

Remark: For Task 3: Pass. You are using the default velocity/acceleration of the Arm. So, your score is adjusted accordingly. Task 3 output is as expected output.

Keep it up!

TASK 3 GRAPH

Task 4 Result:

| Marks | Penalty | Total Marks |
|-------|---------|-------------|
| 94.34 | 0.00 | 94.34 |

Remark: For Task 4: Pass. Task 4 output is as expected output.

Keep it up!

TASK 4 GRAPH

Task 5 Result:

| 97.87 25.00 72.87 | Marks | Penalty | Total Marks |
|-------------------|-------|---------|-------------|
| 51.01 25.00 12.01 | 97.87 | 25.00 | 72.87 |

Remark: For Task 5: Pass. Task 5 output is as expected output.

Keep it up!

TASK 5 GRAPH

Task 6 Result:

| Task | Marks | Penalty | Total Marks |
|---------------------------|--------|---------|----------------|
| Original Configuration | 100.00 | 0.00 | 100 |
| Bonus Configuration | 33.33 | 0 | 33.33 |
| Code | 100 | 0 | 100 |

Remark: For Task 6: Pass. Task 6 output is as expected

4. Overseas Studies Webinar with IMS

RGIT's Robotics Club organized a webinar on overseas studies on 7th October 2020 which was conducted by IMS Mumbai.



IMS Mumbai is one of India's pioneering institutions in management education training and was single-handedly responsible for building awareness about the MBA among the masses. Over the years, IMS has expanded into other sectors as well, providing training, counselling, and guidance for international tests like GMAT, GRE, and the SAT, and undergraduate tests like the BBA, Law entrance exams, and Bank exams.

The speaker was Mr. Sumeet Verlekar who conducted the session where he shared his valuable experiences about applying overseas. This would help the students of our college in multiple ways for choosing right career path.

3. Cozmo-Clench (Techfest 2021 IITB)

Cozmo-clench (Techfest) is an National level robotics hosted at IIT Bombay in online mode in Nov-Dec 2020.

It is a competition where the team has to build a robot which is capable of picking and placing a cuboidal object at desired location in the game field by avoiding all the obstacles and reaching the end in the shortest time possible.

From the club, two teams (8 members) participated in the competition and both the teams were among the 60% of the participants. Hence were eligible to receive the Certificate of Participation as mentioned in the problem statement.









6. DD RoboCon 2021

DD-Robocon is a part of the Asia-Pacific Robot Contest (ABU Robocon). This event is aimed to build technical skills of under graduate engineering students of our country. IIT Delhi hosts DD-Robocon 2021 on behalf of Doordarshan (DD).

The competition is divided into three stages at domestic level, where the first stage is submission of design file and documents specifying details of both robots. Second stage includes video proof of robots based on designs created.

Due to pandemic, this year final stage may be held in online mode where teams need to shoot a complete continues video of robot performing all the tasks.

In offline mode, Third round is the challenge round in which two teams face off against each other within the given time limit. This round takes place in IIT Delhi. Team scoring maximum in all three stages will represent their country at International level of competition which is supposed be held at Jimo, China.

In stage 1, we have secured AIR 7 with marks 94/100 which qualified us for stage 2.

Due to restrictions from the pandemic and limited resources, we couldn't meet the stage two deadline on time and had to close the work on the competition for this year.

National Competition Website: http://www.ddrobocon.in/

International Competition Website: http://www.robocon2021.com/

Schedule:

Robocon National 2021 Live 30-July-2021 (ONLINE)

Important Dates

- Solution ideas(Proposal) submission by : March 04, 2021 by 11:59 pm
- Shortlisting : March 21, 2021
- Proof of concept(Video) submission by : May 25, 2021
- Shortlisting : June 2, 2021
- Online Event on : July 30, 2021

Stage 1 Result:

| Manipal Institute of Technology | | 20 | 40 | 40 | 100 |
|--|------|----|----|----|-----|
| Marathwada Mitra Mandal's College of Engineering, Karvenagar, Pune 52. | Paid | 20 | 40 | 40 | 100 |
| Maulana Azad National Institute of Technology, Bhopal | | 18 | 40 | 40 | 98 |
| MCT's Rajiv Gandhi Institute of Technology, Mumbai | Paid | 14 | 40 | 40 | 94 |

7. GATE and Employability Enhancement Program session by QACA Academy

RGIT's Robotics Club organized a webinar on GATE preparation and Employability Enhancement Program for the students of Mechanical engineering on 16th April 2020 which was conducted by QACA Academy.

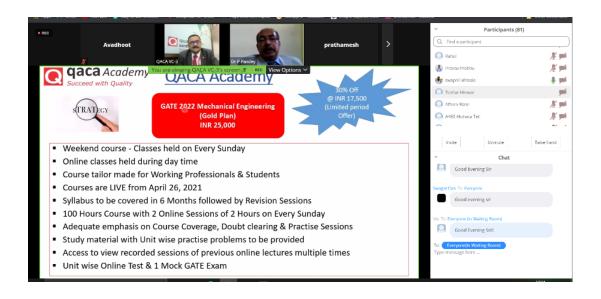
The speakers:

1. Dr. Praveen Pandey

- -B.Tech. in Mechanical Engineering from M. M. M. University of Technology, Gorakhpur.
- -M.Tech. from Indian Institute of Technology, Delhi

2. Ramesh Koregave

- -B.E. (Mechanical Engineering).
- -Business Management from Shivaji University
- -Qualified Six Sigma Green Belt



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TEAM RGIT RACING



The purpose of TEAM RGIT RACING - student Chapter at Rajiv Gandhi Institute of technology, Mumbai - To enhance the knowledge base of members who are mobility practitioners. To provide to its members access to SAE International programs and services globally enabling them to practice world class standard in productivity and quality. Its area of focus is Automotive, Automobile, Aerospace and Commercial Vehicle.

SAE International is a professional organisation and has over 138,000 global members. Aside from its standardization efforts, SAE International also devotes resources to projects and programs in STEM education, professional certification, and collegiate design competitions.

SAEINDIA is membership organization Founded in 1994 and in 2003 SAEINDIA became an Affiliate of SAE International. Today the President of SAEINDIA is Dr. R.K. Malhotra and has a membership count of more than 40,000 members around India.

Website TEAM RGIT RACING: https://www.teamrgitracing.com/

Website SAE INTERNATIONAL: http://www.sae.org/

Website SAEINDIA: http://www.saeindia.org/

Team RGIT Racing's Faculty Advisers: Prof. S. D. Gaikwad and Prof. Nikhil. V. Sarojini



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Events & Activities of year 2020-2021

| Events & Activities | S | Dates |
|--------------------------------|-------|---|
| FSEV Concept Challenge | | 26 th June 2020 - 22 nd July 2020 |
| Alumni Speak Series 2020 | | 8 th August 2020 - 11 th October 2020 |
| Formula Student Germany | | 29 th August 2020 & 5 th September |
| Academy | | 2020 |
| MATLAB & SIMULINK | | 31 st August 2020 - 2 nd September 2020 |
| Workshop | | |
| Team Training Program | | 14 th September 2020 - 19 th September |
| | | 2020 |
| Software Training Program | | 28 th September 2020 – 2 nd October |
| | | 2020 |
| FSAE International Quiz | | 5 th February 2021 & 12 th February |
| | | 2021 |
| Fundamentals of Electric Ve | hicle | 5 th March 2021 |

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Accomplishments at FSEV Concept Challenge 2020

- O 1st time EV powertrain design
- **O** FMEA 52.1/75
- **○** Design Specs 39.2/50
- O Overall Rank 27th out of top 40 team from Indian Universities.



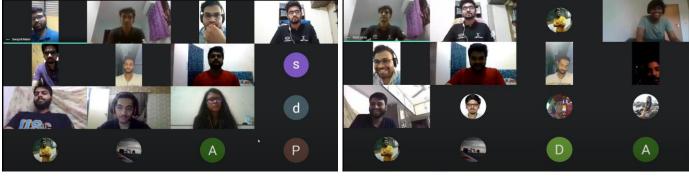
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Alumni Speak Series 2020

Google Meet

- We had Alumni interaction with the new team the series started from 8th August 2020 to 11th October 2020.
- One to one interaction with Alumni from 2009 batch to 2020 batch.
- O Q&A Session and Experience sharing
- O Design verification knowledge transfer





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Formula Student Germany Academy

Zoom Meet

- Team RGIT Racing joined the academy for improving the knowledge of electric vehicle for their future endeavours.
- O Various expert from Waymo LLC which is an American autonomous driving technology development company have given knowledge on various sensors.
- Recorded sessions were provided to all the team members.



MATLAB & SIMULINK Workshop

Google Meet

- O Team RGIT Racing in collaboration with RGIT MESA conducted 3- day MATLAB & SIMULINK Workshop on google meet from 31st August to 2nd September 2020.
- O Both the speakers Swapnil Mane & Malhardutt Hublikar were from Team RGIT Racing for different batches. Recording were provided.

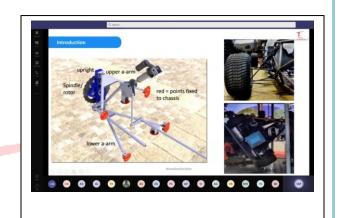


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Team Training Program

Microsoft Teams

- O Team RGIT Racing conducted basics of automobile 5 day workshop for members only from 14th Sept to 18th Sept 2020
- Every parts of FSAE vehicles were explained which helped members to understand about various sub systems.

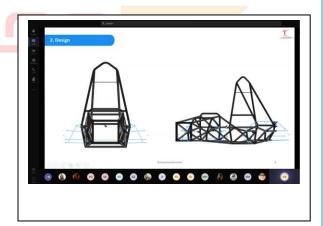


• Recorded sessions were provided to all the team members.

Software Training Program

Microsoft Teams

- O Team RGIT Racing conducted Software training program 6 day workshop for members only.
- Main software that were covered were Solidworks, Ansys & Protius.
- Each sub department head conducted session in individual batches for better understanding



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FSAE International Quiz

- Team RGIT Racing participates in various international quizzes every year. It helps the member for better understanding and application of the knowledge they learn from the team.
- The Quizzes include Formula Student Germany(FSG), FS Switzerland, FS East, FS Austria







FS East



Formula student Austria & Formula student Germany

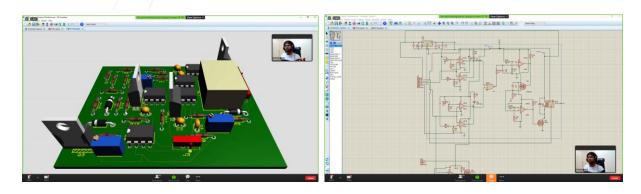
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Fundamentals of Electric Vehicle

Zoom Meet

- Team RGIT Racing in collaboration with IETE RGIT conducted a webinar on FUNDAMENTALS OF ELECTRIC VEHICLE on Zoom meet on 5th March 2021.
- O Basics of Electric Vehicle were explained by two of the team members, Vinayak Bhat (Accumulator Head) & Karan Gupta (Electrical Co-Head)
- The webinar was followed by Q&A session where all the doubts related to EV and EV industry were solved.





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TEAM RGIT RACING CORE MEMBERS 2020-2021

| SR. NO. | NAME | POST | YEAR |
|---------|--------------------------------|--------------------|------|
| 1. | Swapnil Mane | Captain | B.E. |
| 2. | Yash Bhat | Vice – Captain | B.E. |
| 3. | Mihir Raorane | Team Manager | B.E. |
| 4. | Tirth Raval | Manufacturing Head | B.E. |
| 5. | Malhardutt Hublikar | Electricals Head | B.E. |
| 6. | Saskhi Dighe | Statics Head | B.E. |
| 7. | Ameya Shendge | Brakes Head | B.E. |
| 8. | Rahil Idreshi | Marketing Head | B.E. |
| 9. | Vinayak Bhat | Accumulator Head | T.E. |
| 10. | Deep Manga <mark>onk</mark> ar | Head | T.E. |

TEAM RGIT RACING MEMBERS 2020-2021

| SR.NO. | NAME | YEAR |
|--------|------------------|------|
| 1. | Karan Gupta | B.E. |
| 2. | Aman Chodhari | T.E. |
| 3. | Yunus Khan | S.E. |
| 4. | Rupesh Nair | S.E. |
| 5. | Balasebh Jadhav | S.E. |
| 6. | Kaushal Bharambe | S.E. |
| 7. | Yash Jain | S.E. |
| 8. | Prathamesh Parab | S.E. |
| 9. | Omkar Rane | S.E. |
| 10. | Aditya Salunkhe | S.E. |
| 11. | Alisha Virerkar | S.E. |

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(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

FACULTY PUBLICATIONS IN JOURNALS ACADEMIC YEAR 2020-2021

| Sr. No. | Title of paper | Name of Author/s | Name of Journal | ISSN No. |
|------------|---|----------------------|--|----------------------|
| 1 | Porosity and Heat Transfer Characteristics Analysis of Stirling Cryocooler Regenerator using Darcy Permeability and Forchheimer Coefficient | Dr. S. U. Bokade | Indian Journal of Cryogenics | 0379-0479 |
| 2 | Adoption And Implementation Of Radio Frequency Identification (Rfid) In A Healthcare Sector: A Systematic Literature Review | Dr. S. U. Bokade, | Industrial Engineering Journal | 0970-2555 |
| 3 | Review on 3D Printed Bone Scaffold and Biocompatible Material | Dr. S. U. Bokade | Journal of 3D Printing and Applications | ISSN: Coming Soon |

DEPARTMENT OF MECHANICAL ENGINEERING

| 4 | Investigation of Performance Parameters Affecting the Efficiency of Solar Water Heater: A Review | Dr. R.V. Kale | IOP: Materials Science and Engineering | 1757-8981 |
|---|--|-----------------------|--|---|
| 5 | Optimization Of Performance Parameters Of A Super- Turbocharged Single Cylinder Four Stroke Diesel Engine Using A Taguchi Approach | Dr. R.V. Kale | Solid State Technology | 0038-111X |
| 6 | Performance Investigation And Emission Analysis On Single Cylinder Four Strokes Tri- Charged Diesel Engine | Dr. R.V. Kale | Solid State Technology | 0038-111X |
| 7 | Water Purification Using Solar Energy | Dr. K.M. Chaudhary | International Research Journal of Engineering and Technology (IRJET) | e-ISSN: 2395- 0056; p-ISSN: 2395-0072 |

DEPARTMENT OF MECHANICAL ENGINEERING

| 162 | 850 | ASS-0 | | 15/15/05/2 |
|-----|---|------------------------|---|---|
| 8 | Automated Filling Machine | Dr. K.M. Chaudhary | International Research Journal of Engineering and Technology (IRJET) | e-ISSN: 2395- 0056; p-ISSN: 2395-0072 |
| 9 | The Foldable E-tricyc bag | Prof. R.Y. Kurane | International Journal of Scientific Research in Engineering and Management (IJSREM) | 2582-3930 |
| 10 | Review on effect of corrugated surface on heat transfer and fluid flow characteristics | Prof. N.K. Deshmukh | International Journal of Research in Aeronautical and Mechanical Engineering (IJRAME) | 2321-3051 |
| 11 | Review on Analysis of Heat Transfer and Fluid Flow Characteristics in Corrugated Duct | Prof. N.K. Deshmukh | International Journal of Research Publication and Reviews (IJRPR) | 2582-7421 |
| 12 | Effect of Nano additives on engine performance and | Dr. A.G. Londhekar | Journal of Xi'an University of | 1006-7930 |

DEPARTMENT OF MECHANICAL ENGINEERING

| | emission analysis | | Architecture | |
|----|---|-------------------------|--|------------|
| | of blends of | | & | |
| | biodiesel- Review | | Technology | |
| 13 | An Analytical Investigation of Purification and Quantification for Exhaust Gases Emissions | Prof. N.B. Shahapure | International Journal for Research in Engineering Application & Management (IJREAM) | 2454-9150 |
| 14 | Blockchain-IoT based risk management approach for project procurement process of asset propelled industries | Dr. P. R. Potdar | International Jounrnal of Procurement Management (IJPM) | 1753-8440 |
| 15 | Design and fabrication of oil- revamp system using solar power | Prof. Nikhil V S | International Journal of Advance Research, Ideas and Innovations in Technology (IJARIIT) | 2554-132XX |
| 16 | Comparative Study and Analysis of HVAC systems | Dr R V Kale | Springer Proceedings, ICIMA- 2021 | |

(Permanently Affiliated to University of Mumbai) DEPARTMENT OF MECHANICAL ENGINEERING

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

| | using Solid and Liquid Desiccant Dehumidification Technology | | | |
|----|--|--------------------|--|---------------------------------------|
| 17 | Automated skull damage detection from assembled skull model using computer vision and machine learning | Prof Mangrulkar | Journal International Journal of Information Technology, Springer Nature | DOI 10.1007/s41870- 021-00752-5 |

FACULTY PUBLICATIONS IN CONFERENCES ACADEMIC YEAR 2020-2021

| Sr. No. | Title of paper | Name of Author/s | Name of Conference |
|------------|----------------|---------------------|--------------------|
|------------|----------------|---------------------|--------------------|

(Permanently Affiliated to University of Mumbai) DEPARTMENT OF MECHANICAL ENGINEERING

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

| 1 | Optimization of performance parameters of a Super-turbocharged single cylinder four stroke diesel engine using a Taguchi approach | Dr. R. V. Kale | International conference on Advances in Engineering & Technology, 2020, NMIET, Pune |
|----|---|--|--|
| 2 | Image-based bio-cad modeling: overview, scope, and challenges | Prof. A.L. Mangrulkar | First International Conference on Advances in Physical Sciences and Materials 13-14 August 2020, Coimbatore, India |
| 3 | Computer vision methods for fragmented skull prototyping: Bio-CAD application | Amol Prof. A.L. Mangrulkar | International Conference on Smart Systems and Inventive Technology (ICSSIT), Aug 20-22 2020 ,Francis Xavier Engineering College Tirunelveli, India |
| 4 | A Future Viewpoint for Ion Optics of Ion Thruster | Dr. P.R. Potdar, Dr. N.J. Panaskar | 62nd National Convention (IIIE), Mumbai 29-30 Jan 2021 |
| 5 | A future perspective for multi-purpose agricultural machine | Dr. P.R. Potdar, Dr. N.J. Panaskar | 62nd National Convention (IIIE), Mumbai 29-30 Jan 2021 |
| 6 | Integrated Lean Six Sigma-Internet of Things (IoT) approach for Productivity Improvement: A Business case of Contactor Manufacturing Industry | Dr. P.R. Potdar | 62nd National Convention (IIIE), Mumbai 29-30 Jan 2021 |
| 7 | Polyacrylonitrile (PAN) Nanofibrous Membrane to Filter Particulate Matter from Automobile Exhaust System: A Review | Prof. A. V. Gotmare | 1st International Conference On Recent Advancements in Design and Manufacturing (ICRADM 2020), 16-17th July 2020 |
| 8 | A Low-Cost Portable Ventilator For Covid 19 Crisis | Prof. A. V. Gotmare | 62nd National Convention (IIIE), Mumbai 29-30 Jan 2021 |
| 9 | A post COVID – 19 outlook: The future of Supply Chain | Prof. A. V. Gotmare | 62nd National Convention (IIIE), Mumbai 29-30 Jan 2021 |
| 10 | Drivers and Barriers of Industry 4.0 Adoption in Manufacturing Sector: An Indian Perspective | Prof. A. V. Gotmare, Dr. S.U. Bokade | 62nd National Convention (IIIE), Mumbai 29-30 Jan 2021 |

PATENTS FILED
ACADEMIC YEAR 2020-2021

(Permanently Affiliated to University of Mumbai) DEPARTMENT OF MECHANICAL ENGINEERING

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

| Publisher | Title of the Patent | Patent Application Number | Date of Filing | Date of Publication | Author/ Authors |
|----------------------------|---|---------------------------------|-------------------|--------------------------|--------------------------------------|
| Indian Patent Office | A flywheel powered bicycle with hybrid technology | 202141013028 | - | 25/03/2021 | Prof. A.L. Mangrulkar |
| Indian Patent Office | Patent computational evaluation of an 202141018162 20/04/2021 | | 30-04-2021 | Prof. A.L. Mangrulkar | |
| Indian Patent Office | An experimental investigation of the heat transfer in the thermal drying process, by convection of agricultural products | 202141016992 | 12/04/2021 | 23-04-2021 | Prof. A.L. Mangrulkar |
| Indian Patent Office | Robust real-time action or pose recognition training model using 3d graphics engine | 202011053368 | 08/12/2020 | 11-12-2020 | Prof. A.L. Mangrulkar |
| Indian Patent Office | Flapper of turbocharger for petrol and diesel engines | 340292-001 | 03/06/2021 | | Dr, R.V. Kale, Dr. S.U. Bokade |

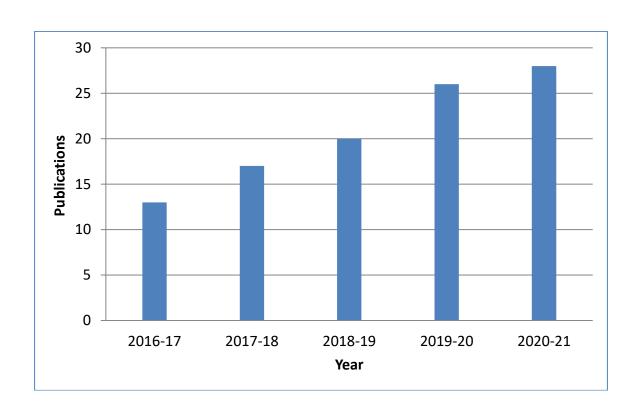
Summary Sheet

Faculty Publications

(Permanently Affiliated to University of Mumbai) DEPARTMENT OF MECHANICAL ENGINEERING

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

| Academic Year | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 |
|---|---------|---------|---------|---------|---------|
| Number of Publications (Journal + Conference) | 13 | 15 | 20 | 26 | 25 |
| Patent | - | 2 | - | - | 5 |
| Total | 13 | 17 | 20 | 26 | 30 |



Summary Sheet

Peer Reviewed Papers

DEPARTMENT OF MECHANICAL ENGINEERING

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

| Year/ Indexing | Scopus | SCI | UGC Approved | Thomson Reuters | Cross- ref | Inspec | Other Peer Reviewed | TOTAL |
|----------------|--------|-----|-----------------|--------------------|---------------|--------|---------------------------|-------|
| 2020-2021 | 5 | - | 3 | 2 | - | 1 | 15 | 26 |
| 2019-2020 | 12 | - | 3 | - | - | - | 7 | 22 |
| 2018-2019 | 1 | - | 4 | 1 | 3 | - | 9 | 11 |
| 2017-2018 | 1 | - | 2 | 1 | 1 | - | 13 | 15 |
| 2016-2017 | - | 1 | - | 1 | 4 | - | 11 | 11 |
| TOTAL | 19 | 0 | 12 | 5 | 8 | 1 | 55 | 85 |

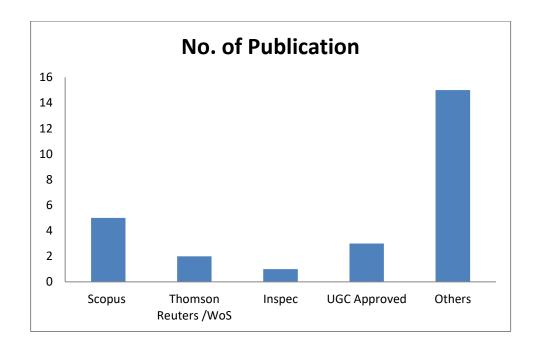
Index Summary Academic year 2020-2021

MANJARA CHARITABLE TRUST

RAJIV GANDHI INSTITUTE OF TECHNOLOGY, MUMBAI (Permanently Affiliated to University of Mumbai)

DEPARTMENT OF MECHANICAL ENGINEERING

| Indexing | Paper Sr. No. | | TOTAL |
|----------------------------|---------------|------------|-------|
| | Journal | Conference | |
| Scopus | 5, 6, 14 | 2, 3 | 5 |
| Inspec | - | 3 | 1 |
| Thomson Reuters /WoS | 4 | 2 | 2 |
| UGC Approved | 2, 7, 8 | - | 3 |
| Other peer-reviewed | 1-13 | 2, 3 | 15 |



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(NBA- Accredited UG Program)

MoU CONTENT

| SN | NAME | LOGO |
|----|--|--|
| 1 | CEMS, Mumbai | CEMS |
| 2 | IIRS-ISRO, Dehradun | इसरो डिएव |
| 3 | Rashtriya Chemicals & Fertilizers Ltd, (RCF), Mumbai | आर सी एफ |
| 4 | HCL Technologies, New Delhi | HCL |
| 5 | Reliance Infrastructure Ltd, Palghar | adani |
| 6 | KVIC, Mumbai | कामचे दुरवलामनास्। माणिनाम् आनिनासनम्॥ |
| 7 | India Nivesh Securities Ltd, Mumbai | IndiaNivesh® |
| 8 | TechFest IIT, Bimbay | Techfest Indian institute of technology, Bombay |
| 9 | IITB, (INUP), Mumbai | Section of the sectio |
| 10 | VJTI, Mumbai | ESTO 1887 |

Preared By HOD

Prof Amol mangrulkar Dr Rajesh V. kale

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

Student Achievement

2020-2021

| SN | Name of the Student | Event | Achievement |
|----|---------------------|--------------------------------------|--------------------------|
| 1 | Devanand Patil | Selected in ISRO as Junior Scientist | All India Rank 01 (OBC) |
| | Alumni 2017 | | ISRO Exam – 2020 |
| 2 | Ameya Shendge | Project Competition, SCOE, | 2 nd Winner |
| | Neha Yelve | Avishkar 2021 | |
| | Alisha Thakare | | |
| | Pritam Tambe | | |
| 3 | Rugved Raote | TPP, Calibre 2K21, FCRIT, Vashi | 3 rd Position |
| 4 | Akanksha Shirke | TPP, Calibre 2K21, FCRIT, Vashi | 3 rd Position |
| 5 | Aishwary Kakodkar | TPP, Calibre 2K21, FCRIT, Vashi | 3 rd Position |
| 6 | Neha Yelve | BE Project Competition, Pillai COE, | 3 rd Position |
| | | Navi Mumbai | |
| 7 | Pritam Tambe | BE Project Competition, Pillai COE, | 3 rd Position |
| | | Navi Mumbai | |
| 8 | Alisha Thakare | BE Project Competition, Pillai COE, | 3 rd Position |
| | | Navi Mumbai | |

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

Report on "ALUMNI SPEAK SERIES"

Duration: 18 June- 12July 2020

Venue: online platform-youtube, Zoom app

Organised By:

Department of Mechanical Engineering MCT's Rajiv Gandhi Institute of Technology Juhu Versova Link Road, Andheri (W) Mumbai-400053

CHIEF PATRONS

Shri. Amit Deshmukh, Secretary, Manjara charitable Trust

Mrs. Aditi Amit Deshmukh, Trustee, Manjara Charitable Trust

PRINCIPAL Dr. S. U. Bokade

HEAD OF DEPARTMENT Dr. R. V. Kale

Department Alumni COORDINATOR-: Prof. N.K. Deshmukh
Assistant Professor

Department Alumni committee:- Prof. Parmeshwar Paul, Prof. Chetan Rane

Report Prepared By: Prof. N.K.Deshmukh

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

Report on

"ALUMNI SPEAK SERIES"

Academic Year 2019-20

About the Institute

The great visionary & philanthropist Hon. Vilasrao Deshmukh founded Manjara Charitable Trust in the year 1988. In 1992, the Trust started the college of Engineering at Airoli (Navi Mumbai) to meet the demand of engineering & technocrats in the country. The institute was renamed as Rajiv Gandhi Institute of Technology & shifted to the permanent campus in 2002. Over the past one & half decades, the Institute has marched towards the pinnacle of glory through its remarkable achievements & laurels in the field of Engineering Education. The institute is committed to impart quality education by ensuring practical, innovative, technology-driven delivery of the programs & creating outstanding managers & technocrats who make valuable contribution to the global business & society to suit their ever changing needs.

- Recognized by All India Council for Technical Education, New Delhi.
- "A" Grade awarded by Govt. Of Maharashtra.
- ISO: 9001-2008 Certified Institution.
- Permanently affiliated to University of Mumbai
- National Board of Accreditation (NBA) accredited undergraduate programs in Mechanical Engineering, Electronics & Telecommunication and Computer Engineering
- Institute offers 4-year degree engineering Courses in Mechanical, Electronics &Telecommunication, Information Technology, Computer& Instrumentation Engineering.
- Institute also offers PG Programs in Mechanical, Electronics & Telecommunication, Computer Engineering & Information Security.
- Institute offers Research Programme (PhD) in Electronics & Telecommunication, Computer & Mechanical Engineering.

Department of Mechanical Engineering

The Department of Mechanical engineering was established since inception of this institute in 1992. The department offers B.E., M.E. program in Heat Power & PhD Program. A team of highly qualified & experienced staff is the major strength of this department. The Department focuses on cutting edge technologies & updates the faculty about the current trends in the field of Mechanical engineering. The academic leadership of department aims at preparing students for the better & secure future.

Date: 22/10/2020

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

The undergraduate program B.E. (Mechanical) of the department is accredited by National Board of Accreditation since July 2014 and reaccredited up to 30 June 2021.

About "Alumni Speak Series"-

This time department has organized online Alumni Webinars named "Alumni Speak Series" to provide the virtual platform to alumni to express their experiences, insights and share knowledge to the present students. Under this series, department invited distinguished senior alumni. This series also offered opportunity to the students to learn & get motivated in this present covid -19 pandemic situation.

Objective of Alumni Speak Series-

- ➤ To provide the virtual platform to alumni to express their experiences, insights and share knowledge to the present students.
- ➤ To create awareness among the mechanical engineering students about exploration of career opportunities in interdisciplinary fields.
- ➤ To familiarize with the latest technological development in engineering field.
- ➤ To establish the linkages with industries with the help of alumni and thereby promote Training and placement activities of mechanical engineering department.

About Participants-

Students joined online by youtube as well as Zoom app students from various Engineering and Technological Institutes from India. Live streaming was done on "MCT'S RAJIV GANDHI INSTITUTE OF TECHNOLOGY MUMBAI YOU TUBE CHANNEL" as well as "ZOOM APP."

Participation for all was free of cost.

Registration link URL:https://forms.gle/22Z5TyGKsen1mkKf8

DEPARTMENT OF MECHANICAL ENGINEERING

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

Organizing & Technical Team-

Prof.Ratnam Gujar, Prof. Parmeshwar Paul, Prof. Chetan Rane, Prof. Ashwini Gotmare Prof.Priyanka Deshmukh ,Prof.Nilesh Shahapure,Prof.Prathmesh Potdar,Ms.Kajal Vartak, Mrs.Sweety Vartak

Department Invited -----

SPEAKER 1 -Mr. Ajay Sharma--(Alumni batch 2009)- (Lead account Manager, Digital sales, Halliburton-Northern Gulf) on dated 18 June 2020(Time-11:00AM) on topic "Prospects for Mechanical Engineering Graduates in oil & gas sector".

Zoom Meeting

https://zoom.us/j/99953281480?pwd=SnRrRDRSR2Zjc1FseVg2cDQxclh0UT0

Meeting ID: 999 5328 1480, Password: 790102 Youtube Link:https://youtu.be/ycmun3qFhfI

Flow of "Alumi Speak Series"-1

Dr. R. V. Kale, Head of Mechanical Engineering Department, formally welcomed Mr.Ajay Sharma & Principal Dr.S.U.Bokade, Vice Principal S.D. Deshmukh ,HOD's ,all the participants and shared his views & objectives for the program. He requested to all participants to enrich their knowledge from this by effective participation. Then he introduced Mr.Ajay Sharma to the attendees and invited Mr.Ajay sharma to start his session .At the end of session Mr Ajay sharma answered the questions of participants in Q/A sessions. Prof.N.K.Deshmukh thanked Mr Ajay Sharma ,All participants, HOD's & Principal Dr.S.U.Bokade, Vice Principal S.D. Deshmukh for kind support.

> SPEAKER 2- Mr. Aniket Chaudhary-(Alumni batch 2010)-Engineer at National Manufacturing Institute, Scotland, Glasgow) on dated 28 June 2020(11:00AM) on topic "Exploration of Career opportunities for Mechanical Engineers in the world of Automobile Engineering".

Zoom Meeting:

https://zoom.us/j/91777657146?pwd=M1Z1NnJpRkp0am9WcXJxZVNtY0Qxd **z**09

Meeting ID: 917 7765 7146, Password: 675517

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

Youtube Link - https://youtu.be/ycmun3qFhfl

Flow of "Alumi Speak Series"-2

Dr. A.G.Londhekar, Asst.professor, Department of Mechanical Engineering, formally welcomed Mr. Aniket Chaudhary & Principal Dr.S.U.Bokade, Vice Principal S.D. Deshmukh, HOD's, all the participants and shared his views, objectives for the program. He requested to all participants to enrich their knowledge from this by effective participation. Then he introduced Mr. Aniket Chaudhary to the attendees and invited Mr.Aniket Chaudhary to start his session to start his session. At the end of session Mr Aniket Chaudhary answered questions of participants in Q-A session. Prof. Amol Mangrulkar proposed vote of thanks to Mr. Aniket Chaudhary, All participants, HOD's & Principal Dr.S.U.Bokade, Vice Principal S.D. Deshmukh for kind support.

SPEAKER 3- Mr.Prafulla Dangat -(Alumni batch 1997)- (Commercial Director in spanish Multinational M/S Tecnicas Reunidas -India Region) on dated 04 July 2020 (Time 5:00PM) on topic "General knowledge of Economics and Finance for Engineering Professionals."

ZoomMeeting*: https://zoom.us/j/98204524729?pwd=YmtxUk1jbm43OHI3ZVlva05LN2JvOT09

Meeting ID*: 982 0452 4729

Password*: 296863

Youtube Link: https://youtu.be/H155ubQPT0E

Flow of "Alumi Speak Series"-3

Prof. R. Y Kurane ,Associate Professor,Department of Mechanical Engineering Department, formally welcomed Mr. Prafulla Dhangat & Principal Dr.S.U.Bokade Vice Principal S.D. Deshmukh,HOD's,all the participants and shared his views for the program. He requested to all participants to enrich their knowledge from this by effective participation. Then he introduced Mr.Prafulla Dhangat to the attendees and invited Mr.Prafulla Dhangat to start his session. Mr Prafulla Dhangat answered questions of participants in Q-A session..At the end Prof. S.D.Gaikwad thanked Mr.Prafulla Dhangat ,All participants, HOD's & Principal Dr.S.U.Bokade ,Vice Principal S.D. Deshmukh for kind support.

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SPEAKER 4- Mr.Tarun Ochani -(Alumni batch 1997)- (Account Executive & global portfolio leader at Capgemini, Greater Atlanta Area, USA) on dated 12 July 2020 (Time 5:30 PM) on topic "LEADERSHIP"

Zoom Meeting-

https://zoom.us/j/95946882054?pwd=VmFCa3FEZ2RyRjFxZEdYR1dld01GUT09

Meeting ID*: 959 4688 2054 ,Password*: 021493

You tube live link-https://youtu.be/w0ZDfK-a8iU

Flow of "Alumi Speak Series"-4-

Dr. R. V. Kale, Head of Mechanical Engineering Department, formally welcomed Mr.Tarun Ochani & Principal Dr.S.U.Bokade, Vice Principal S.D. Deshmukh, HOD's, all the participants and shared his views for the program. He requested to all participants to enrich their knowledge from this by effective participation. Then he introduced Mr Tarun Ochani to the attendees and invited to start his session. At the end Prof.Nikhil V. S. thanked Mr. Mr Tarun Ochani, All participants, HOD's & Principal Dr.S.U.Bokade, Vice Principal S.D. Deshmukh for kind support.

FLYERS for "ALUMNI SPEAK SERIES" ---



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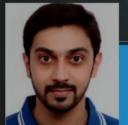
Department of Mechanical Engineering

presents

ALUMNI SPEAK SERIES

Speaker 2

Exploration of Career Opportunities for Mechanical Engineers in the World of Automobile Engineering



28th June 2020, 11 a.m. onwards

MR. ANIKET CHAUDHARY
R&D ENGINEER AT NATIONAL
MANUFACTURING INSTITUTE,

Live stream on Zoom and Youtube

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Department of Mechanical Engineering

Presents

ALUMNI SPEAK SERIES

Speaker 3

General Knowledge of Economics and Finance for Engineering Professionals

4 July 2020 @ 5p.m.



MR. PRAFULLA DANGAT

Spanish Multinational M/s.
Tecnicas Reunidas - India
Region, involved in
specialized Engineering &
Construction Projects in Oil
& Gas Sector.

Live
streaming
on Zoom
and
YouTube

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From Department Alumni Coordinator-Expression of Gratitude-

I ,Prof.N.K.Deshmukh deem it a great honour to propose the vote of thanks to all who have helped in making "Alumni Speak Series" such a resounding success.

I would like to propose hearty vote of thanks to all our distinguished and respected alumni namely, Mr. Ajay Sharma, Mr. Aniket Chaudhary, Mr. Prafulla Dhangat, Mr. Tarun Ochani for taking their precious time out and accepting invitation of this event.Indeed alumni's words of experience and encouragement will definitely inspire students to seek job in various fields of engineering.

The event like this can not happen overnight. The wheels start rolling a month ago.It requires planning and birds eye details.I take this opportunity to thanks our organizing and technical team members for their amazing work behind the curtain.

(UG Program - NBA- Accredited; PG in Heat Power and Ph.D. Technology)

I would like to express my profound gratitude to our Principal Dr.S.U.Bokade,Vice Principal Dr. S.D.Deshmukh,Head of Department Dr.R.V.Kale for constant guidance and support to this event.

I must mention my deep sense of appreciation to wonderful students & participants who have turned up in such a great numbers and overwhelming response Finally, I would like to thanks all HOD's ,staff members for gracing this event . Thanks to all who helped directly or indirectly for making this event a great success.

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