



RAJARAMBAPU INSTITUTE OF TECHNOLOGY

POLYCONNECT



NEWSLETTER

Semester wise Publication of RIT_Diploma

Issue I : Jan 2021 - May 2021

Institute Vision

To be a recognized polytechnic institute committed to excellence in academics, knowledge creation and delivery to develop socially responsible professionals.

Institute Mission

- To impart technical knowledge and skills along with ethical and social values.
- To strengthen association with industry and alumni to make students technically and socially responsible citizens.
- To promote students for higher studies in reputed institutes.
- To ensure employability, encourage entrepreneurship and promote lifelong learning.

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DEAN'S DESK

All Educational System is now on Virtual Mode due to this Pandemic Situation. In this situation also We, RIT Diploma has organized many Events through Virtual Mode. This Newsletter gives better platform to showcase these Events as well as Students, Faculties Achievements.

Dr. H. S. Jadhav
Dean Diploma

Newspaper Coverage

District'10

RIT, Rajaramnagar (Diploma Wing) has organized DISTRICT'10 State Level Technical event for polytechnic students on 29th May, 2021. The purpose of this event is only to develop Professional skills and competitive environment in early stage of student life.

Virtual Platform: MS Teams

638	Students Enrolled	68	Polytechnic Institutes Participated
102	First Year Students	216	Second Year Students
		320	Third Year Students

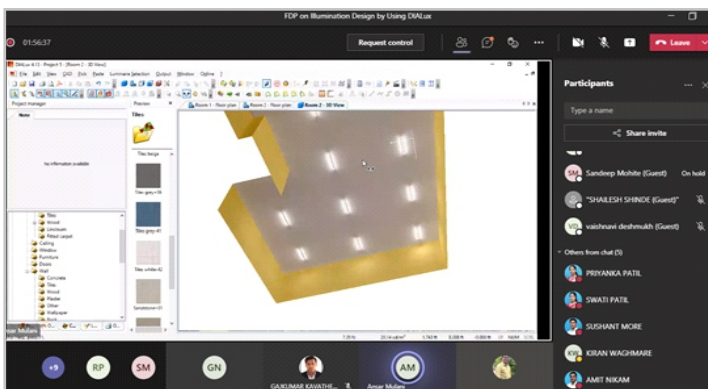
Events Organized



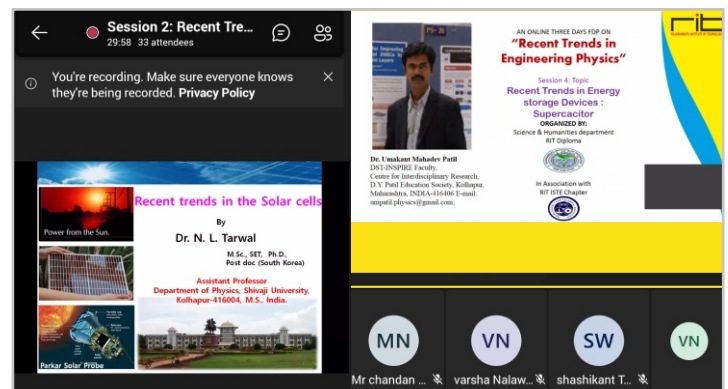
Department of Automobile Engineering has Organized One-Week Training Program for SSC Students to create awareness about driving safely & obeying the traffic rules from 26th to 30th July 2021.



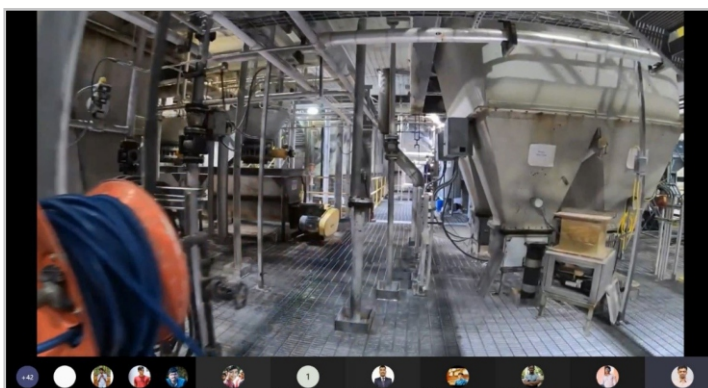
Department of Civil Engineering has Organized Expert Lecture on “Composite Water Management Index” under “Jal Shakti Abhiyan (Catch the rain)” webinar series – A Central Government initiative with RIT-ISTE CHAPTER (MH-084) on 06th August, 2021.



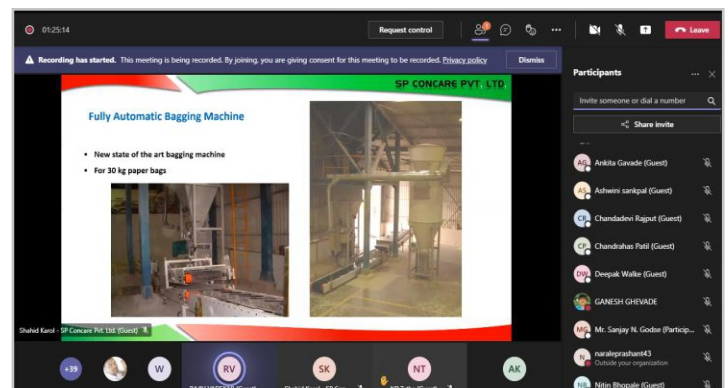
Department of Electrical Engineering has Organized Two Days Faculty Development Program on “Illumination Design using DIALux” from 12th to 12th May, 2021 certified by ISTE RIT Chapter.



Science & Humanities Department has organized Three Days Faculty Development Program on “Recent Trends in Engineering Physics” from 08th to 10th July, 2021



Department of Mechanical Engineering Organized Virtual Tour at “Renewable Energy Group” on 09th June, 2021 for Third Year Mechanical Students.



Department of Civil Engineering has Organized One Week Faculty Development Program on “Advance Construction Trends in Civil Engineering” from 12th to 12th May, 2021 certified by ISTE RIT Chapter.

Education is the passport to the future,
for tomorrow belongs to those who prepare for it today.

– Malcolm X

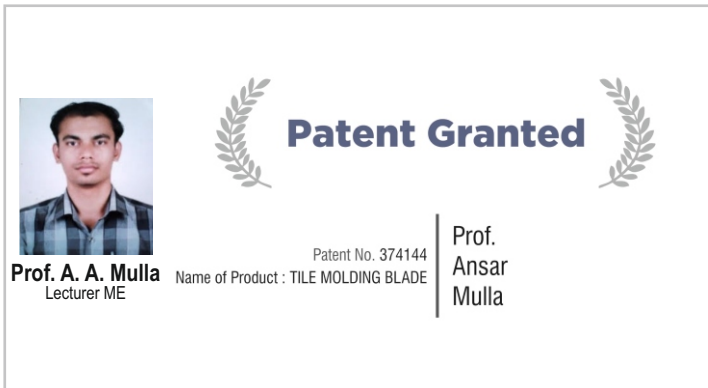
Achievements



Third Year Automobile Students developed Commercial Electric Cycle named as “इ-साईट”, under the Guidance of Prof. Randhir Chavan, Lecturer AE.



Ms. Tejal Mane has Participated and Achieved 2nd Rank in the State Level Paper Presentation Competition organized by, Tulsiramji Gaikwad Patil College of Engg., & Technology Polytechnic, Nagpur.



Mr. Anasr A. Mulla, Leturer in Department of Mechanical Engineering has received Patent for his work entitled “TILE MOLDING BLADE”
Patent No. : 374144 • Application No. : 3753/MUM/2015



Mr. G. R. Kavathekar has worked as a Technical Reviewer for a manuscript submitted for the IEEE Sponsored First International Conference on Emerging Trends in Industry 4.0 (2021 ETI 4.0) which will be published in the IEEE Xplore.



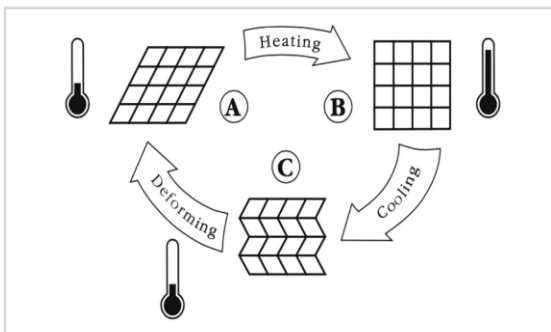
Team Elite & Team Srujan Secured 1st and 3rd Rank in Best Practices Activity organized by Academic Section RIT, Rajaranmagar,

Tell me and I forget, teach me and I may remember, involve me and I learn.
- Benjamin Franklin



Mr. Sahil Nadaf
 Second Year Mechanical
 A. Y. 2020-21

Shape Metal Alloys



What is an SMA?

A shape-memory alloy (SMA, smart metal, memory metal, memory alloy, muscle wire, smart alloy) is an alloy that “remembers” its original shape and that when deformed returns to its pre-deformed shape when heated. This material is light in weight.

Applications

Aircraft:-

Boeing, General Electric Aircraft Engines, Goodrich Corporation, NASA, and All Nippon Airways developed the Variable Geometry Chevron using shape-memory alloy that reduces aircraft’s engine noise.

Telecommunication :-

There are currently several companies working on an optical image stabilization (OIS) module driven by SMA wires.

Medicine :-

Shape-memory alloys are applied in medicine, for example, as fixation devices for osteotomies in orthopaedic surgery, in dental braces to exert constant tooth-moving forces on the teeth.

Optometry :-

Eyeglass frames made from titanium-containing SMAs are marketed under the trademarks Flexon and TITAN flex. These frames are usually made out of shape-memory alloys that have their transition temperature set below the expected room temperature.



Ms. Swarali Kadam
 Third Year Electrical
 A. Y. 2020-21

Need of Non-conventional Energy Sources



As the consumption of energy grows, the population depends more and more on fossil fuels such as coal, oil and gas day by day. There is a need to secure the energy supply for future since the prices of gas and oil keep rising by each passing day. Here, the best importance of non-conventional energy as they are renewable, pollution-free, availability of them is in abundance, and they are environmentally friendly. The main reasons to harness non-conventional sources of energy are - The population of the world is increasing at a very rapid rate due to which demands for energy is increasing day by day.

Are the advantages of non- conventional sources of energy ?

- These sources of energy are environmentally friendly.
- They are inexhaustible.
- They are easy to operate.

Features of non-conventional sources of energy -Energy generated from natural sources like wind, tides, solar, geothermal heat, and biomass including farm and animal wastes is called non-conventional energy. It has following features like; it is pollution free; they are renewable and are abundant in nature. Pollution is a major ecological issue when it comes to non-conventional energy sources. These are pollution free and hence we can use these to produce a clean form of energy without any wastage. Two reasons for the need to harness non-conventional sources of energy are as follows:

(a) Conventional sources are going to be exhausted in near future.

(b) Burning of fossil fuels causes' environmental pollution. These are pollution free & hence we can use these to produce a clean form of energy without any wastage.

Prof. Nilesh C. Gaikwad
Lecturer
ME



Making Online Teaching-Learning Process More Effective by Blending Various ICT Tools

World Health Organization has announced COVID-19 as a pandemic. The Coronavirus which was estimated that it was originated from Wuhan, China is widespread across the world. Due to this pandemic situation education industry has shifted from regular classroom teaching-learning to online teaching-learning. To transfer knowledge of various subjects variety of platforms were adopted so that respective subject knowledge will be dispersed amongst students effectively. One of the most important hurdles is that to ensure that students are engaged effectively in online teaching-learning mode as it is a new era to them also.

In this Article, various ICT tools were elaborated which was used for the class of 3rd year mechanical engineering students for the subject advance manufacturing process. The tools were selected in a such way that students can be leveraged from remembering level to application level. The active learning tools were selected keeping in mind that the end semester examination of students will be on the multiple-choice question type. The ultimate aim to use specific platforms and active learning tools is that to improve subject results and subject understanding. The platforms adopted for online teaching-learning are Socrative, Moodle, MS Team, and Google Forms. The active learning techniques incorporated in the teaching-learning process were Online Quizzes, Assignments, Peer Questioning & Discussion Forums. The study population of this action research is the third-year Mechanical engineering students (N=79; males=74; females=05). In the end, outcomes and feedback were discussed about the efficacy of the ICT tools on overall subject result and understanding.

For the course Advance Manufacturing Processes(AMP) for the class of 3rd year diploma mechanical students, online teaching-learning was blended with various active learning techniques by the use of ICT tools. The active learning techniques used for the AMP course are Online Quizzes, Online Assignments, Discussion Forums, and Peer Questioning, by using various ICT platforms like Socrative, Moodle, and MS Team. The ultimate aim of all the efforts done is to deliver lectures and the course effectively, and engage students in the course actively.

Prof. Pravin A. Desai
Lecturer
AE



India's shift to electric mobility. Dream or distant reality?

In recent years, the entire world and all of its automobile manufactures, have changed their agendas. Unless you are out of touch, or living under a rock, you will be aware of this trend. You've probably guessed it. It is the shift towards electric mobility. To understand what this is all about, let's assess the situation, based on just two important questions.

1) What are the pros?

Well, I shall gladly tell you that the Government of India is on your side this time. The Govt of India has reduced GST on electric vehicles down to just 5%. Also, you get a unique set of registration plates too. Many mainstream manufactures are now offering fully electric variants of their existing products or, creating new products for this category specifically. Many new names have gained traction due to the rise in demand for electric vehicles. Tesla Inc., Aether Energy are some of the examples. As of these recent months, many mainstream manufacturers have also boarded the EV train. Thus, allowing for an array of options on the market for customers to pick out the best vehicle.

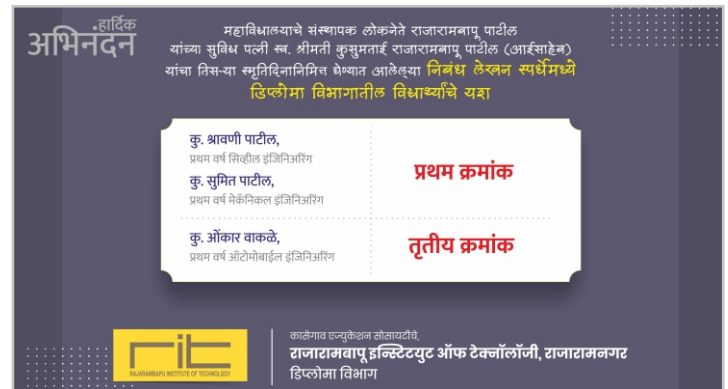
2) What are the cons?

They are expensive. Battery packs in EV's need to be replaced every seven years on average. Although newer systems with more life, are under development, they will not bring down any costs. Speaking of battery life, EVs are favorable for city runarounds only, as of now. Lack of charging stations is next on the list. There are only three major charging stations, as of 2018. Interstate travel will be a very time consuming and unexciting activity. The charging time for EVs is approximately forty-five to sixty minutes on an average, compared to ten to fifteen minutes for a complete refuel. That is, of course, if you manage to find a charging station on your route. If you decide to charge your vehicle at home, you might have to get a permit (in most places) to set up a charging station for private use. Just a reminder, you are not exactly saving the world by using an EV.

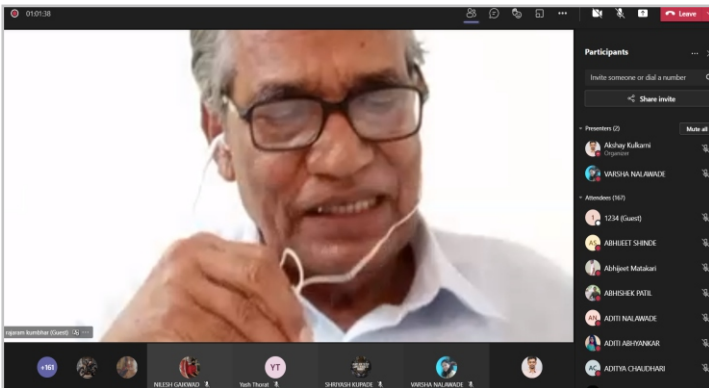
Events Organized



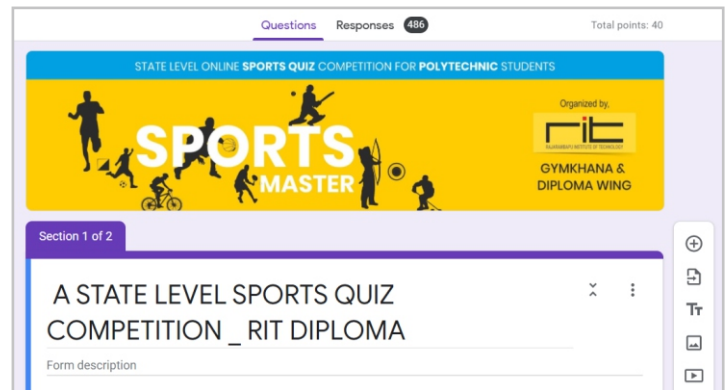
Celebration of Marathi Rajbhasha Din organized by Diploma Wing on 27th February, 2021 on the occasion of Birth Anniversary of well known Poet Vishnu Vaman Shirwadkar (Kusumagraj)



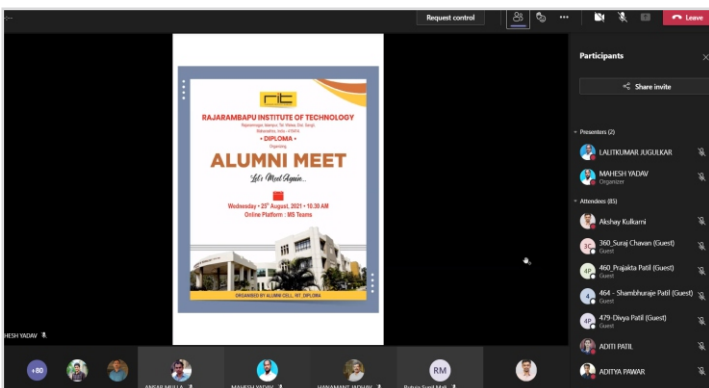
Essay and Art competition was Conducted on occasion of 3rd Remembrance day of Smt. Kusumtai Rajarambapu Patil (Aaisaheb), on 29th December 2020. 03 Students from Diploma has secured rank in same.



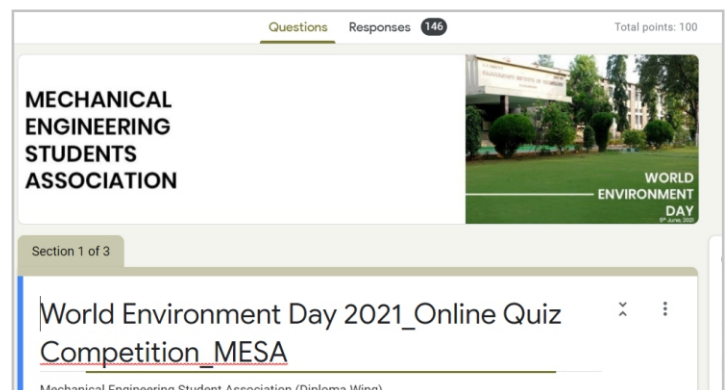
Counselling Cell _ Diploma Wing has organized counselling session on topic ऑनलाइन शिक्षण पद्धतीत कसं शिकायतं आम्ही..?. This session was conducted by Dr. R. A. Kumbhar, Karad on 15th May, 2021 through Virtual Platform MS Teams



RIT_Diploma Wing in association with Gymkhana Department has organized A State Level Sports Quiz Competition for Polytechnic Students. This Online quiz was conducted through Google Form on 10th June, 2021



Alumni Cell Diploma organized Alumni Meet for Alumna of 2019-20 and 2020-21 Batch. This event was organized on 25th August, 2021 through Virtual Platform MS Teams.



Department of Mechanical Engineering has organized Online Quiz Competition on the occasion of World Environment Day 2021 through Google Form, 05th June, 2021.

Successful and unsuccessful people do not vary greatly in their abilities.
They vary in their desires to reach their potential.
- John Maxwell

Class	Rank	Name of Student	% Marks
FY AE	01	CHAVAN SAMARTH SUDESH	80.73
	02	TAMBOLI AKIL SAJID	79.33
	03	KORDE AVISHKAR ARAVIND	76.73

Class	Rank	Name of Student	% Marks
SY AE	01	SAWANT VINAYAK ANANDA	89.7
	02	CHIKANI HARSHAV PRAVINKUMAR	86.6
	03	MOHITE SHAILESH SANDIP	86.2

Class	Rank	Name of Student	% Marks
TY AE	01	VEER HARSHWARDHAN JAGANNATH	93.77
	02	SURYAWANSHI NIKHIL RAMCHANDRA MALGUNDE PRATHAM VIJAY	91.57
	03	SURYAWANSHI PRASAD ARUN	90.63

Class	Rank	Name of Student	% Marks
FY CE	01	SHINDE ADITYA NITIN	89.00
	02	MANE VEDANT SUHAS	86.12
	03	NALAWADE ADITI KULDEEP	85.70

Class	Rank	Name of Student	% Marks
SY CE	01	PATIL AISHWARYA VIJAY	90.29
	02	PATIL ADITYA HANMANT	88.76
	03	MADALE OMKAR BABAN	86.59

Class	Rank	Name of Student	% Marks
TY CE	01	NALAGE OMRAJ SUNIL	96.00
	02	NARUTE SHARAD MARUTI	95.84
	03	MALI SHIVAM DHANANJAY	95.37

Class	Rank	Name of Student	% Marks
FY EE	01	JADHAV OMKAR NIVRUTTI	86.3
	02	TOMAKE PRASANNA MANIK	84.03
	03	PATIL SAMRUDDHI SUDHAKAR	82.07

Class	Rank	Name of Student	% Marks
SY EE	01	PATIL ANKITA ANANDRAO	91.88
	02	AWATI PRATIKSHA PRADEEP	90.11
	03	JADHAV VARADRAJ BHARGAV	89.75

Class	Rank	Name of Student	% Marks
TY EE	01	GAWADE SADHANA ARJUN	90.9
	02	MULANI NIHAL DASTAGIR	90.41
	03	PATHAN RIYAJ DASTAGIR	88.67

Class	Rank	Name of Student	% Marks
FY ME	01	JADHAV ADITYA RAJENDRA	79.46
	02	SHINDE PRANAV SUBHASH	74.87
	03	GADALE MAKARAND MALHARRAO	74.68

Class	Rank	Name of Student	% Marks
SY ME	01	PATIL VISHWAJIT VIJAY	95.03
	02	PATIL SHRIMAN ZUNJARRAO	94.4
	03	PATIL HRUSHIKESH DHANAJI	92.00

Class	Rank	Name of Student	% Marks
TY ME	01	SHENDAGE NIKHIL PRAKASH	94.55
	02	CHAVAN SURAJ BAJIRAO	94.45
	03	MALI AKSHAY NANAPPA	93.59