

THE AUTOHUB

AN ANNUALLY PUBLISHED NEWSLETTER



Accredited by NBA New Delhi



Best Innovative Project Award



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Vision

Create competent Automobile technocrat to take up challenges of ever changing global standards and serve local industrial and social requirements

Mission

To develop employable automobile technocrat with professional skills and ethical and social values.

To associate with industry and alumni for mutual benefits like training, internship and expert lectures for the students.

To encourage students for higher studies in recognized institutes

To inculcate entrepreneurial attitude and values with lifelong learning

**Prof. Pravin A. Desai**

Lecturer, AE Engg.

I hope this message finds you all in good health and high spirits as we embark on another exciting academic year in the Department of Automobile Engineering. As the Head of the department, it gives me immense pleasure to address you through this newsletter.

Automobile Engineering is a field that continues to evolve and push the boundaries of innovation. The automotive industry is undergoing a transformational phase, with the advent of electric and autonomous vehicles, advanced driver-assistance systems, and the integration of artificial intelligence. As a department, we strive to stay at the forefront of these advancements and equip our students with the necessary knowledge and skills to thrive in this dynamic landscape.

Our faculty members, who are experts in their respective fields, are committed to delivering a curriculum that encompasses both theoretical and practical aspects of automobile engineering. We emphasize hands-on learning experiences through laboratory sessions, research projects, and industry collaborations, ensuring that our students are well-prepared for the challenges of the real world. In addition to academic excellence, we also encourage our students to participate in various extracurricular activities, such as automotive design competitions, workshops, and industry visits. These opportunities not only enhance their technical skills but also foster teamwork, creativity, and leadership qualities, making them well-rounded professionals. Furthermore, we are proud to share that our department has been actively engaged in research and development, with several ongoing projects in collaboration with renowned organizations. These initiatives not only contribute to the advancement of the field but also provide our students with valuable research opportunities to explore their interests and contribute to the industry's growth.

I encourage all our students to take full advantage of the resources and support available to them. Utilize the guidance of our dedicated faculty, make use of the state-of-the-art facilities in our labs, and engage in discussions and collaborations with your peers. Remember, your time in this department is a precious opportunity to lay a strong foundation for your future careers.

Wishing you all a successful and fulfilling academic year ahead.

Alumni View

**TAMBOLI AKIL SAJID**Automobile Engineering
(Batch 2022-23)

Today marks a significant milestone in our lives as we stand here, on the cusp of entering the professional world, as graduates of the Department of Automobile Engineering. It is an honor for me to address you all on behalf of my fellow diploma passing out students.

First and foremost, I would like to express my heartfelt gratitude to our esteemed faculty members for their unwavering dedication and guidance throughout our educational journey. Their expertise, enthusiasm, and commitment have played a pivotal role in shaping us into competent and confident engineers. We are immensely grateful for their constant support, encouragement, and willingness to go the extra mile to ensure our success.

I would also like to extend my appreciation to the entire institute for providing us with a nurturing and conducive learning environment. Our institute has consistently strived for excellence and has equipped us with a comprehensive curriculum that blends theoretical knowledge with practical application. The state-of-

the-art facilities and laboratories have facilitated our hands-on learning experiences, enabling us to develop technical skills that are highly valued in the industry. Moreover, our institute's emphasis on holistic development has helped us grow not only as engineers but also as individuals. We have had the opportunity to participate in various extracurricular activities, clubs, and events, allowing us to explore our interests, develop leadership qualities, and build lifelong friendships. The Department of Automobile Engineering, in particular, has been instrumental in preparing us for the challenges and opportunities that lie ahead. The dynamic nature of the automotive industry demands engineers who can adapt to technological advancements and embrace innovation. Through rigorous coursework, practical training, and exposure to cutting-edge research, our department has equipped us with the necessary skills and knowledge to thrive in this ever-evolving field.

Let us embrace curiosity, creativity, and perseverance in our pursuit of excellence. Let us remain committed to continuous learning and growth, as the field of automobile engineering holds immense potential for innovation and societal impact.

Finally, on behalf of my fellow diploma mates, I would like to express our gratitude to our families and loved ones who have been our pillars of support throughout this journey. Their unwavering belief in our abilities and their sacrifices have been the driving force behind our achievements. As we embark on this new chapter of our lives, let us carry the knowledge and values imparted to us by our department and institute, and make a positive difference in the world through our contributions to the field of automobile engineering.

Thank you, and congratulations to the class of 2023..!!

Industry 4.0 in the Indian Automotive Sector:

Revolutionizing the Road Ahead

In recent years, the Indian automotive industry has witnessed a significant transformation with the advent of Industry 4.0. This fourth industrial revolution, characterized by the integration of digital technologies and automation, has revolutionized the manufacturing processes and operations in the automotive sector. As India strives to become a global manufacturing hub, Industry 4.0 is playing a crucial role in driving efficiency, productivity, and innovation across the entire automotive value chain.



KORDE AVISHKAR ARAVIND

Third Year,
Automobile Engineering

- 1. Connected Manufacturing:** Industry 4.0 has brought forth the concept of connected manufacturing, where machines, processes, and systems communicate and collaborate seamlessly. In the Indian automotive sector, this connectivity is enabling real-time data collection and analysis, facilitating predictive maintenance, optimizing production schedules, and reducing downtime. With the implementation of Internet of Things (IoT) devices and sensors, manufacturers can monitor and control production lines remotely, ensuring higher productivity and quality standards.
- 2. Robotics and Automation:** Automation has become a cornerstone of Industry 4.0, and the Indian automotive industry is embracing it wholeheartedly. Robots are increasingly being employed in various manufacturing stages, including assembly, welding, painting, and inspection. These robots not only enhance efficiency but also improve safety by taking over repetitive and hazardous tasks. Furthermore, collaborative robots, or cobots, are working alongside human workers, leading to increased flexibility and higher precision in manufacturing processes.
- 3. Big Data and Analytics:** The abundance of data generated in the automotive industry is being harnessed through big data analytics. Manufacturers are using advanced analytics tools and algorithms to analyze vast amounts of data collected from sensors, production lines, and supply chains. This enables them to gain valuable insights, optimize processes, improve product quality, and make informed decisions. Additionally, predictive analytics helps identify potential failures or malfunctions in vehicles, leading to proactive maintenance and improved customer satisfaction.
- 4. Additive Manufacturing:** Additive manufacturing, commonly known as 3D printing, has emerged as a game-changer in the automotive industry. It enables the rapid prototyping of parts, customization, and low-volume production. Indian automotive companies are leveraging 3D printing to reduce lead times, cut costs, and enhance design flexibility. This technology is particularly beneficial for creating complex geometries, lightweight structures, and functional prototypes, enabling faster innovation and reducing time-to-market.
- 5. Supply Chain Optimization:** Industry 4.0 is reshaping the traditional supply chain models in the Indian automotive sector. Through real-time tracking and monitoring, manufacturers can gain visibility into their supply chains, ensuring efficient inventory management, reducing stockouts, and enhancing delivery performance. Additionally, technologies like blockchain are being explored to enhance transparency, traceability, and security within the supply chain, promoting trust among stakeholders and streamlining transactions.

As Industry 4.0 continues to unfold in the Indian automotive sector, it brings forth immense opportunities for growth, innovation, and competitiveness. The integration of digital technologies, automation, and data-driven decision-making is transforming traditional manufacturing practices, making them more efficient, sustainable, and customer-centric. With its vast talent pool, strong engineering capabilities, and growing emphasis on digitalization, India is poised to become a global leader in Industry 4.0 adoption, driving the automotive industry into an era of unprecedented advancements and success.

A State Level Project Competition | **DIPEX 2023**

03 Consecutive Years



2020-21

DIPEX 2020

Best MSBTE Project Award

2021-22

Hackathon 2022

Best Automobile Engineering Award

2022-23

DIPEX 2023

Best Innovative Project Award

BEST INNOVATIVE PROJECT AWARD

Student Wins Best Innovative Award in State-Level DIPEX 2023 Project Competition in Collaboration with ABVP (Akhil Bharatiya Vidyarthi Parishad)

We are thrilled to announce that a talented student from our institution has achieved a remarkable feat by winning the prestigious Best Innovative Award in the State-Level DIPEX 2023 Project Competition. This recognition, achieved in collaboration with ABVP (Akhil Bharatiya Vidyarthi Parishad), showcases the student's exceptional creativity, ingenuity, and dedication to innovation.

DIPEX, an esteemed platform for showcasing innovative projects, attracts participants from across the state, each demonstrating their prowess in a wide array of disciplines. The collaboration with ABVP added further prestige to the competition, highlighting the recognition and support extended by a prominent student organization known for fostering academic excellence and holistic development.

The winning project, conceived and executed by our talented student, exemplified groundbreaking innovation and practical application. Their exceptional creativity, meticulous planning, and technical expertise were evident in every aspect of the project. It showcased a solution to a significant problem faced by society, underscoring the student's commitment to making a meaningful impact through their work.

The Best Innovative Award stands as a testament to the student's relentless pursuit of excellence, originality, and problem-solving. It reinforces our institution's commitment to nurturing talent, encouraging innovation, and preparing students to address real-world challenges. This achievement also reflects the valuable mentorship and guidance provided by our esteemed faculty members, who consistently inspire and support students in their pursuit of knowledge and innovation.

Collaborating with ABVP provided an invaluable opportunity for our student to gain exposure to a wider audience, network with like-minded individuals, and interact with prominent professionals in their field of interest. This collaboration further solidifies our commitment to fostering meaningful partnerships that enhance the overall development of our students. We extend our heartfelt congratulations to the winning student for this well-deserved recognition. This achievement serves as an inspiration to their peers and the wider student community, highlighting the boundless potential that lies within each individual. We are confident that this accolade will motivate other students to explore their own innovative ideas, pursue their passions, and strive for excellence in their respective fields.

We express our sincere gratitude to ABVP for their collaboration, guidance, and support throughout the project competition. Their partnership has provided a platform for students to showcase their talents, refine their ideas, and gain recognition for their exceptional work. This collaboration has further nurtured an environment of innovation and excellence within our institution.

As an institution, we take immense pride in our students' achievements and commend their commitment to pushing the boundaries of knowledge and innovation. We look forward to witnessing the continued growth and success of our students as they contribute their talents and ideas to shape a brighter future for society.

Once again, congratulations to the outstanding student for this significant accomplishment. May this recognition be a stepping stone towards greater achievements and impactful contributions in their chosen field.

Thanks,

Department of Automobile Engineering, RIT Rajaramnagar (Diploma)

DISTRICT'10

A STATE LEVEL TECHNICAL EVENT
FOR POLYTECHNIC STUDENTS

In Association with



Faculty Coordinator : Mr. M. J. Thorat & Mr. R. Y. Chavan

THINK BLINK FIXUP

About DISTRICT 10:2023

K. E. Society's Rajarambapu Institute of Technology, Rajaramnagar (Diploma) organized A State Level Technical Event District'10 for Polytechnic Students (Offline mode) in Association with RITISTE Chapter MH-084. Total **497** Students have enrolled and participated in District'10 from different Polytechnic Institutes of Pune region.

About Think Blink Fixup:

On the day of 15th April 2023 the Rajarambapu institute of Technology (Diploma wing) conducted an event DISTRICT 10, in this event Department of Automobile engineering has conducted Think Blink FixUp for AE/ME group.

The total entries for Technical topic presentation are 11 groups, the winner for this Event is from Rajarambapu Institute of Technology & Awarded with cash prize of 1000 rupees, and Runner up from this event is from Rajarambapu Institute of Technology & awarded with cash prize 500 rupees. Third price from this event from Adarsh Institute of Technology, Vita & awarded with a memento and certificate.



Central Inauguration of Event :District 10



Scrutiny Stage : Blink Round



Final Stage : Fixup Round



Felicitation of Achievers

Total Number of Technical Event : 08

Total Number of Participants :497

Faculty Achievement & Awards



Prof. Randhir Y. Chavan Felicited for receiving Best Technical Research Paper Award at International conference

Prof. Randhir Y. Chavan has awarded with Promising Young Teacher award 2023 for his contribution during AY 2022-23

Sponsored Projects/ R& D activities (Externally funded):

Sr. No.	Title of Project/R&D activity	Name of the Faculty	Sponsored by
1.	MPFI Layout for Automobile Students	Prof. R. S. Sargar Prof. P. A. Desai	SEED Funding Scheme, RIT
2.	Design and Development of Automatic Sugarcane Planting machine	Prof. R.Y.Chavan Mr. M. J. Thorat	SEED Funding Scheme, RIT
3.	Hydraulic coil spring compressor	Prof. M. J. Thorat	M/s. Pandit Auto, Vaduj
4.	Prototype of Solar and Wind powered charging stations for Electrical vehicles	Prof. P. A. Desai	M/s. S. P. Autocare, Urun Islampur

Student Achievement

TY Diploma Automobile student **Mr. Harsh Pawar** leads the RIT Dance crew for various dance competitions in this academic year. With the excellent performing team RIT Dance club had won several recognized competition



RIT Dance Club Students team achieved **3rd Rank in Medha Cup Dance Competition 2023** organized by Amrutvahini Sheti & Shikshan Vikas Sansthan, Sangamner Dist. Ahmadnagar on 25th Feb. 2023



RIT Dance team for winning **4th Rank in Yuva Spandan** State level Dance Competition held at Ichalkaranji on 11th Dec 2022.

Technical Paper Publication/Seminar/Training Program Attended

- | | |
|------------------------------|---------------------------------|
| • International Journal : 15 | • International Conference : 02 |
| • National Conference : 02 | • Workshop/FDP/STTP : 31 |

Seminar/ Workshop/ Conference conducted



Organized workshop for TY students on the topic Capstone project selection and its development



Organized PMKVY - Light Motor Driver Training Program for Students, Teaching & Non teaching staff



Organized workshop for Faculty on the topic Intellectual Property Awareness Jointly Organized by Intellectual Property Office and GOI



Organized Science exhibition for 7th to 10th std students

Eminent personalities/Renowned Alumni visited to dept



Alumni Expert Interaction by Ms. Nida Sutar (Land Rover, Jagaur, Slovakia)



Alumni Expert Interaction by Mr. Prasanna Vibhute (Carraro India Pvt. Ltd, Pune)



Champion of Cricket Tournament

DIPLOMA ANNUAL SPORT



2022-23



Mr. Avinash More

100 mtr Running



Uran Islampur, Maharashtra, India
37CM+H9R, Sakharale, Uran Islampur, Maharashtra
415414, India
Lat 17.071487°
Long 74.283312°
20/10/22 11:41 AM GMT +05:30



One-day PUC inspection camp was organized at Sakharale on 20/10/2022. The program received a good response from the people of the Sakharale village. At the end of the day we checked a several all types vehicles are inspected and certificates are distributed

Industry - Institute Interactions (Visit & Lectures) -

Lectures : 06

Industry Visit : 04



Ind. Visit at Rocket Engg. & Mayura Steel Kolhapur for SY & TY Students



Mr. Siddhant Jadhav (Founder GVPL, Pune)



Mr. Ashutosh Gupta (Asst. Manager, Hyundai Motors India Ltd.)



Mr. Ramesh B Patil (MVI, RTO Sangli)

Academic Toppers

In the pursuit of Excellence in Technical Education

HIGHEST PACKAGE

3.5 Lakhs Per Annum

100% Placement for Academic Year 2022-23

Class	Rank	Name of the Student	%
TY	1 st	Tamboli Akil Sajid	81.51
	2 nd	Pandit Viraj Santosh	80.86
	3 rd	Korde Avishkar Korde	77.14
SY	1 st	Mulla Sakalain Najir	76.35
	2 nd	Deshmukh Shubham Dipak	75
	3 rd	Padalkar Harshad Amol	71.88

Sr. No	Company Name	No. of students Placed	LPA
1	Magna Automotive Pvt Ltd	08	1.8
2	GE Aerospace	01	1.7
3	Digit Insurance	02	3.5
4	Carraro India Pvt ltd, Pune	10	1.92
5	Tata Motors seating, Pune	03	1.5
6	Sai Sales & Services	01	1.8
7	Bharat Forge Ltd	02	1.8