

IGNITE 2 INNOVATION....

THE AUTOMOBIL EXPRESS

An Annual Newsletter of Department of Automobile Engineering
 Parala Maharaja Engineering College, Berhampur

VOLUME 1: ISSUE MARCH 3, 2025



ABOUT THE DEPARTMENT

Modern automotive industries need experts in vehicle design and manufacture. With this in mind, the Department of Automobile Engineering was established in 2014 to train the students in the area of automobile engineering. Since southern side is the automobile hub of India. The objective of this B. Tech program in Automobile Engineering is to give students a broad exposure to the design, development, and testing of automobiles. Furthermore, the program trains them to meet the technological challenges and diverse needs of the industry and society in various areas of automobile engineering and equips them to excel in a truly competitive industry.

The department has a team of highly qualified, dedicated and experienced teachers. They specialize in IC Engines, Alternative, Fuels, Automotive Technology, Automotive Design, Production, Thermal & Electric Vehicles. Research activities are in progress in the areas of alternative fuels, Engine systems, vehicle dynamics and new trends in engine design.

● Vision

To be a world class Automobile Engineering education provider with imparting appropriate, latest, sustainable technology thereby producing globally competent Automobile Engineering with commitment to meet the ever-changing needs of the automotive industry and society.

● Mission

- To provide quality education in vibrant learning environment for achieving professional competency.
- To tie up with industries for mutual benefit like training, internship and partial delivery of courses for the students.
- To create successful professionals who contribute their knowledge, skill and attitudes to design, re-design, research & development in the automotive industry.
- To offer advanced courses for becoming center for excellence in the field of automobile engineering



MESSAGES

Principal's Message

Greetings from Parala Maharaja Engineering College (PMEC)! It is my pleasure to extend a warm welcome to all students, faculty, alumni, and well-wishers through this newsletter.

At PMEC, we are dedicated to fostering academic excellence, innovation, and holistic development. Our institution provides a dynamic learning environment where students are encouraged to explore new ideas, engage in hands-on learning, and develop the skills necessary to excel in their careers. With a strong emphasis on technical education, research, and industry collaboration, we strive to shape professionals who can contribute meaningfully to society.

The Department of Automobile Engineering has consistently demonstrated excellence in education, research, and industry engagement. With a focus on emerging technologies such as electric and autonomous vehicles, sustainable transportation, and advanced manufacturing, the department ensures that students are well-equipped to meet the challenges of the evolving automotive sector. The commitment of our faculty, combined with state-of-the-art laboratories and industry-oriented training, creates an environment that fosters innovation and growth.



Prof. (Dr.) Chittaranjan Mohanty
Principal, PMEC Berhampur

HOD's Message

Greetings from the Department of Automobile Engineering at Parala Maharaja Engineering College (PMEC)! It is my pleasure to connect with you through this newsletter and share insights into our department's vision and progress.

At PMEC, we are committed to shaping the future of automotive engineering through a dynamic curriculum, cutting-edge research, and hands-on learning. Our experienced faculty ensures that students gain the knowledge and skills required to excel in the ever-evolving automotive industry.

We continuously integrate emerging technologies such as electric and autonomous vehicles, sustainable transportation, and advanced manufacturing into our curriculum. Our state-of-the-art laboratories provide students with practical exposure, bridging the gap between theory and real-world application.

Beyond academics, we encourage active participation in technical competitions, conferences, and industry interactions through visits, expert talks, and workshops. The success of our alumni in leading automotive sectors is a testament to the quality education we impart.

Through this newsletter, we aim to keep you informed about the latest advancements, achievements, and opportunities in our department. We invite you to stay engaged, explore, and be a part of our journey toward excellence.



Dr. Kanchan Kumari
HOD, (AE)

MENTORS



Dr. Kanchan Kumari
Assistant Professor &
HOD



Dr. Saroj Kumar Padhi
Assistant Professor



Mr. Kamala Kanta Sahoo
Assistant Professor



Mr. Sibasis Harihar Sahu
Assistant Professor



Mr. Trilochan Pradhan
Assistant Professor



Mr. Abhishek Barua
Assistant Professor



Mr. Sovan Prasad Behera
Lab Assistant



Mr. Somonatha Gouda
Lab Assistant

STUDENT ACHIEVEMENTS



Celebrating Excellence – Gold Medal Achievement!

We are proud to congratulate Swayam Meher from the Automobile Engineering Department for securing the Gold Medal in academics! This remarkable achievement is a testament to their dedication, hard work, and passion for engineering excellence. Their success inspires fellow students to strive for academic brilliance and technical mastery.

Kudos to Swayam Meher for this outstanding accomplishment! Wishing them a future filled with even greater achievements.

CO-CURRICULAR ACTIVITIES

Teacher's Day Celebration



The Automobile Engineering Department celebrated Teacher's Day with gratitude and enthusiasm, honoring our esteemed faculty for their dedication and commitment to shaping young engineers. Students expressed their appreciation through heartfelt messages, cultural performances, and token gestures of respect. The event was a reminder of the invaluable role teachers play in our journey of learning and success.



CO-CURRICULAR ACTIVITIES

Vishwakarma Puja



The Automobile Engineering Department marked Vishwakarma Puja with great devotion, honoring Lord Vishwakarma, the divine architect and engineer. Students and faculty gathered to seek blessings for innovation, skill, and excellence in engineering. The event emphasized the significance of craftsmanship, technology, and dedication in shaping a better future.

May Lord Vishwakarma bless us with creativity and success in all our endeavors!

STUDENT PARTICIPATIONS



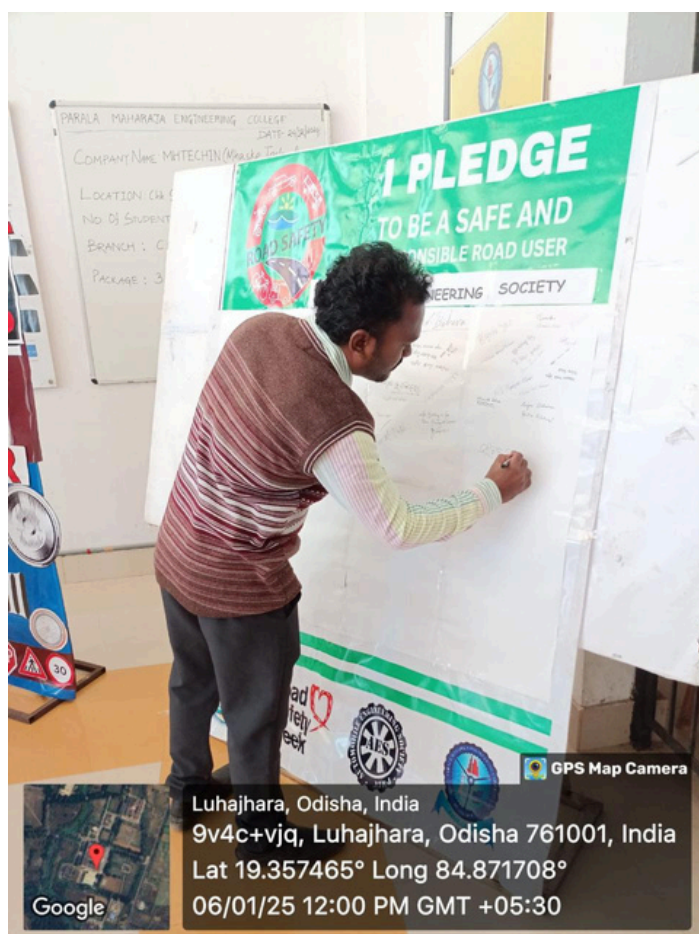
We are proud of Adyasha Sahu from the Automobile Engineering Department for her outstanding performance in dance. Her dedication, passion, and excellence in the art have brought pride to our department.

Her achievement is an inspiration to all, proving that engineering and creativity go hand in hand. Wishing her more success in the future!



CO-CURRICULAR ACTIVITIES

Road Safety Week



The Automobile Engineering Department actively participated in Road Safety Week, spreading awareness about responsible driving and traffic safety. Through seminars, awareness drives, and interactive sessions, students and faculty emphasized the importance of following traffic rules, wearing helmets & seatbelts, and avoiding reckless driving.

SOCIAL ACTIVITES



The Automobile Engineering Department took a step towards community learning by welcoming government school students to our laboratory. Through interactive demonstrations and hands-on sessions, we introduced them to the fascinating world of automobiles, inspiring young minds to explore engineering and technology.



STUDY TOUR



STUDY TOUR



INDUSTRIAL VISIT

ASHOK LEYLAND



Bridging classroom knowledge with real-world expertise! Our visit to the Ashok Leyland Service Unit provided students with hands-on exposure to commercial vehicle maintenance, diagnostics, and advanced servicing techniques. Learning from industry professionals, our future automobile engineers gained valuable insights into modern automotive service standards



INDUSTRIAL VISIT

IDTRS



Exploring the future of driving and vehicle technology! The Industrial Visit to IDTRS offered our students in-depth knowledge of advanced driver training methodologies, road safety protocols, and vehicle testing procedures. This experience reinforced our commitment to producing engineers who contribute to safer and smarter mobility solutions



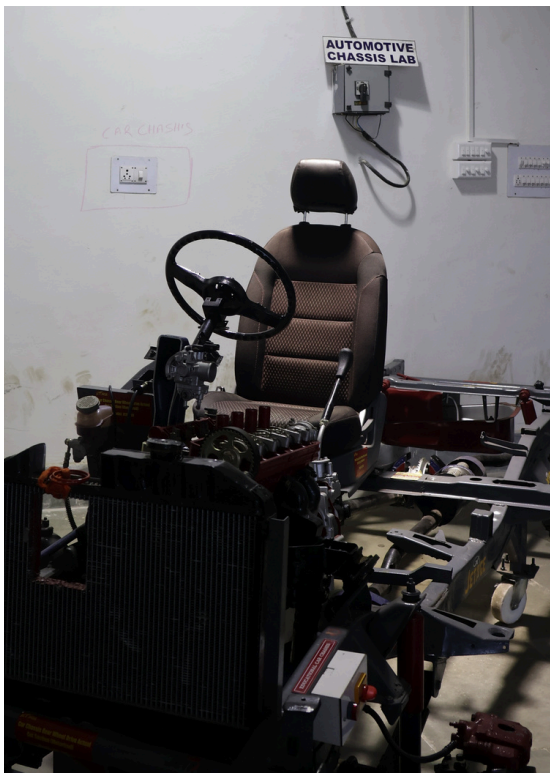
KARAYANA 2024



The Automobile Engineering Department at PMEC proudly hosted its annual Branch Fest, KARAYANA bringing together students, faculty, and industry experts. The event featured technical exhibitions, design challenges, hands-on workshops, and thrilling competitions, fostering creativity and teamwork. With a shared vision of shaping the future of mobility, the fest served as a dynamic platform for learning and innovation.



LABORATORY FACILITIES



Innovation thrives where technology meets precision. Our High-Tech Equipment Laboratory is equipped with state-of-the-art tools, allowing students to gain practical insights into automotive systems, diagnostics, and performance analysis. With real-world exposure, we empower future engineers to master cutting-edge automotive advancements



LABORATORY FACILITIES



LABORATORY FACILITIES

Computer-Aided Design (CAD) Laboratory



Design is the heart of automotive engineering, and our CAD Laboratory fuels creativity and precision. With industry-standard software like AutoCAD, CATIA, and SolidWorks, students develop expertise in vehicle design, simulation, and analysis. This lab is where ideas take shape and future automobiles are conceptualized



STUDENT PLACEMENT

At PMEC's Automobile Engineering Department, we take pride in shaping industry-ready professionals. With strong technical expertise and hands-on experience, our students are excelling in placements across leading automotive and manufacturing companies. We continue to bridge the gap between academia and industry, ensuring our graduates drive innovation and success.



ALUMNI MESSAGE

The department has always been a place of innovation and learning. It provided me with a strong foundation in both theoretical and practical aspects of engineering, fostering my analytical and problem-solving skills. The faculty and peers played a crucial role in shaping my journey, offering constant support and motivation.

My journey has been a blend of academic excellence, hands-on experience, and continuous learning. From being a gold medalist in B.Tech to interning at Mahindra, where I explored CRM and vehicle dynamics, I transitioned into UI/UX design, blending my engineering expertise with user-centered design. My research pursuits and my internship at Lollypop Design Studio have further enriched my understanding of design thinking and industry trends. Receiving an award from the Governor of Odisha was a proud milestone in this journey.

Currently, I am interning as a UI/UX designer at Lollypop Design Studio, where I work on creating intuitive and user-friendly digital experiences. My work involves research, wireframing, prototyping, and collaborating with cross-functional teams to enhance user interactions.



Swayam Meher
(Batch 2020-24)



Suprabha Satapathy
(Batch 2020-24)

I feel truly obliged to have been a part of PMEC's Automobile Engineering Department, which played a pivotal role in shaping my career. The knowledge, practical exposure, and mentorship I received here have been invaluable in my journey. Today, as a Junior Engineer at PMI Electro Mobility Solutions Pvt. Ltd., I apply the skills and expertise nurtured during my college days to contribute to the evolving world of electric mobility.

PMEC has been more than just an institution—it has been a foundation for growth, innovation, and lifelong learning. I extend my heartfelt gratitude to my professors and peers for their unwavering support. To all aspiring engineers, dream big and work hard—success is just around the corner!

CONFERENCE

Patron-in-Chief

Prof (Dr.) Amiya Kumar Rath, Vice Chancellor, BPUT Odisha

Patron

Prof (Dr.) Chittaranjan Mohanty, Principal, PMEC, Berhampur
Smt. Nishi Poonam Minz [OAS(S)], Registrar, BPUT, Odisha

Conference Chair

Prof (Dr.) Trilochan Rout, Professor, Department of Mechanical Engineering, and Dean (Faculty & Planning), PMEC, Berhampur

Coordinators

Dr. Kanchan Kumari, Assistant Professor, Department of Mechanical Engineering, and Head, Department of Automobile Engineering, PMEC, Berhampur

Prof. Anukampa C. Pattnaik, Assistant Professor and Head, Department of Mechanical Engineering, PMEC, Berhampur

Co-Coordiators

Dr. Chitrasen Samantra, Assistant Professor, Department of Mechanical Engineering, PMEC, Berhampur

Prof. Jayanarayan Mahakud, Assistant Professor, Department of Mechanical Engineering, PMEC, Berhampur

Prof. Abhishek Barua, Assistant Professor, Department of Automobile Engineering, PMEC, Berhampur

National Advisory Committee

Prof. (Dr.) Bhim Charan Meikap, Professor, Chem, IIT, Kharagpur
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Prof. (Dr.) Sukesh Chandra Mohanty, Professor, ME, NIT, Rourkela
Prof. (Dr.) Surjita Kanta Pal, Professor, ME, IIT, Kharagpur

Prof. (Dr.) Saurav Datta, Professor, Professor, ME, NIT, Rourkela
Dr. Anil Kumar Chaubey, Sr. Principal Scientist, AMT, CSIR-IMMT, Bhubaneswar and Professor, ACSIR, Ghaziabad

Dr. Pratap Chandra Padhi, Chief Manager(T) and Principal, CIPET-IPT, Bhubaneswar

Dr. Swastik Pradhan, Assistant Professor, ME, LPU Punjab
Mr. Siddharth Jeet, Sr. Executive Engineer, RMS, RHI Magnesita (Formerly Dalmia OCL), Rajgangpur

Prof. (Dr.) Saroj Kumar Sarangi, Professor, ME, VSSUT, Burla
Dr. Isham Panigrahi, Associate Professor, ME and Dy. Director (KIIT Student Research Centre), KIIT, Bhubaneswar

Prof. (Dr.) Purna Chandra Mishra, Professor, ME & Dean (Research), Associate Dean (Academics), KIIT, Bhubaneswar

Prof. (Dr.) Mihir Sarangi, Professor, ME, IIT, Kharagpur
Prof. (Dr.) Sukanta Kumar Dash, Professor, ME, IIT, Kharagpur

Prof. (Dr.) Ranjan Kumar Swain (Retd.), Professor, IGIT, Sarang; Former Principal, PMEC, Berhampur

Local Advisory Committee

Organizing Team

Prof. A. Patra, Asst. Prof., ME

Prof. S. Harichandan, Asst. Prof., ME

Prof. B. Sethi, Asst. Prof., ME

Prof. K. Dhamudra, Asst. Prof., ME

Prof. B. D. Rao, Asst. Prof., ME

Dr. B. K. Choudhury, Asst. Prof., ME

Prof. S. K. Murmu, Asst. Prof., ME

Prof. S. Bhoi, Asst. Prof., ME

Prof. A. R. Pradhan, Asst. Prof., ME

Prof. D. Padhy, Asst. Prof., ME

Prof. K. C. Patra, Asst. Prof., ME

Dr. D. Sethi, Asst. Prof., ME

Prof. P. Panda, Asst. Prof., ME

Prof. A. K. Mishra, Asst. Prof., ME

Dr. S. K. Padhi, Asst. Prof., AE

Prof. S. H. Sahoo, Asst. Prof., AE

Prof. K. K. Sahoo, Asst. Prof., AE

Prof. T. Pradhan, Asst. Prof., AE

Prof. (Dr.) S. K. Sahoo, Dean(PGS&R) and Prof., EE

Prof. (Dr.) B. Panda, Dean (SRIC) and Prof., EE

Dr. P. C. Biswal, Dean (DSW) and Asso. Prof., BS

Prof. D. Rath, F.O. and Asst. Prof., EE

Dr. S. Mishra, Asst. Prof. and Head, BS

Dr. H. Sahu, Asst. Prof. and Head, Chem

Prof. J. Mallick, Asst. Prof. and Head, Civil

Prof. R. Sing, Asst. Prof. and Head, CSE

Prof. N. Topno, Asst. Prof. and Head, ETC

Dr. M. Chhotray, Asst. Prof. and Head, HSS

Prof. P. Mohanty, Asst. Prof., EE

Dr. C. Mallick, Asst. Prof., BS

Dr. J. Mohanty, Asst. Prof., HSS

Prof. S. Prakash, Asst. Prof., EE

Dr. R. Behera, Asst. Prof., EE

Prof. T. M. Kumar, Asst. Prof. ETC

About the PMEC, Berhampur

Parala Maharaja Engineering College (P.M.E.C), Berhampur came into existence in the year 2009 on April 26th, as a constituent Government Engineering College of Biju Patnaik University of Technology (BPUT), Odisha, India with an area of nearly 80 acres. Now this college acts as a Government Autonomous college affiliated to BPUT, Odisha from year 2021. This college is one of the fastest growing technical institute in the state and is funded by the Government of Odisha. It has 8 B.Tech and 5 M.Tech programmes with 10 departments. Also, now it has a Nodal Center of Research under BPUT to conduct Ph.D. programmes. The main objective of the institution is to produce quality technocrats in various streams. Government of Odisha has recognized this institution as a leading institution of repute. The institute has two Centre of Excellence for catering learning and innovation. With a workforce of more than 100 faculties from the leading institutions across the country, the institute is contributing to new innovations and pioneering to the advanced of latest trending technology.

1st NATIONAL CONFERENCE

on

Powertrain, Mechanical Engineering and Computing (PMEC-2024) (Hybrid Mode)



8 - 9 October, 2024

Organized by: -

Department of Automobile Engineering

&

Department of Mechanical Engineering

Parala Maharaja Engineering College, Berhampur, Odisha

The Automobile and Mechanical Engineering Departments at PMEC successfully organized a conference on engineering innovations, bringing together researchers, industry experts, and students for knowledge exchange. The event featured technical paper presentations, expert talks, and discussions on the latest advancements in automotive and mechanical engineering. This conference served as a platform to foster innovation, research, and collaboration, driving us toward a future of cutting-edge engineering solutions. Together, we engineer progress!

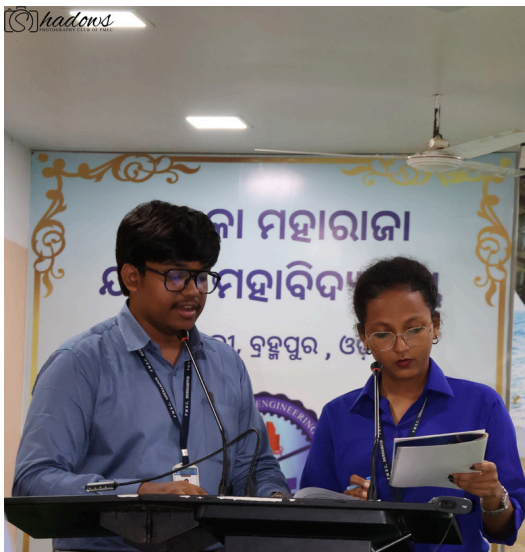


WEBINAR



The Automobile Engineering Department at PMEC successfully hosted an insightful webinar on “Indian EV Ecosystem and Flexi-Fuel Technology.” Industry experts and academicians shared their knowledge on electric vehicle advancements, sustainable mobility solutions, and the future of alternative fuels.

The session provided students with valuable insights into India’s transition towards greener transportation, inspiring them to be a part of the evolving automotive landscape. Driving towards a sustainable future!



RESEARCH AND PUBLICATIONS

Name: Dr. Kanchan Kumari

Designation: Assistant Professor and HoD

List of Journals

1. Mahto RP, Iqbal MP, Kumari K, Pal SK. Control of the Weld Heterogeneity by Using a Novel Counter Variable Pin Shoulder Rotation Friction Stir Welding: A Simulation and Experimental Study. Journal of Manufacturing Science and Engineering. 2024 Jun 1;146(6). (Indexed in SCIE/ Scopus).
2. Patra A, Kumari K, Barua A, Pradhan S. Advancing Visible Spectroscopy through Integrated Machine Learning and Image Processing Techniques. Applied Sciences. 2024 May 25;14(11):4527. (Indexed in SCIE/ Scopus).
3. Samantra C, Barua A, Pradhan S, Kumari K, Pallavi P. Parametric Investigation of Die-Sinking EDM of Ti6Al4V Using the Hybrid Taguchi-RAMS-RATMI Method. Applied Sciences. 2024 Aug 14;14(16):7139. (Indexed in SCIE/ Scopus).
4. Kumari K, Pradhan S, Priyadarshini M, Barua A. Weld Quality Appraisal Of AA1050/Cu FSWed Joints: A Novel Hybrid Taguchi-WASPAS-Alibaba And The Forty Thieves Algorithm. Surface Review and Letters. 2024 Nov 19:2550059. (Indexed in SCIE/ Scopus).
5. Barua A, Pradhan S, Priyadarshini M, Patra A, Kumari K. Recent Advancement in Tungsten Heavy Alloy Processing for Different Industrial Applications. Journal of Materials Engineering and Performance. 2024 Nov 20:1-21. (Indexed in SCIE/ Scopus).

List of Paper published in conference proceedings

1. Kumari K, Barua A, Patra A. Automated Identification and Classification of Polymeric Waste Wrappers Using Convolutional Neural Networks and IoT-Based GSM Communication. InConference on Polymer Technology Connect 2023 Dec 15 (pp. 89-104). Singapore: Springer Nature Singapore. (Indexed in Scopus).
2. Kumari K, Samantra C, Barua A, Jeet S, Pradhan S, Sahu B, Dhal PR. Experimental Analysis on CNC-Turning of Nickel–Chromoly Steel in Different Lubricating Environments using Taguchi Coupled WASPAS Method. InSustainable Materials, Structures and IoT (pp. 181-185). CRC Press. (Indexed in Scopus).
3. Samantra C, Kumari K, Barua A, Pradhan S, Dhal PR. Parametric Appraisal of Dry-Turning of EN24 using Taguchi-WASPAS and Sunflower Algorithm. InSustainable Materials, Structures and IoT (pp. 25-28). CRC Press. (Indexed in Scopus).

List of Book Chapter

1. Priyadarshini M, Kumari K, Pradhan S, Barua A. Ceramics-based antiwear coatings for friction stir welding tools: A review. Advanced Ceramic Coatings for Energy Applications. 2024 Jan 1:289-311.

List of Book

1. Barua A, Kumari K, Saha S, Jeet S, Pradhan S. Institutional and Industrial Safety Engineering Practices. John Wiley & Sons; 2024 Dec 12.

List of Patent/ Design

1. Application number: 501645, "COUNTER ROTATING TWIN TOOL WITH VARIABLE GAP SETUP FOR FRICTION STIR WELDING", Inventors: Surjya Kanta Pal, Kanchan Kumari, Vijay Sharma, Publication date: 22-01-2024, Patent office: India, Type: Patent.
2. Application number: 431312-001, "PETAL DISC BRAKE ROTOR", Inventors: Kanchan Kumari, Abhishek Barua, Trilochan Rout, Swastik Pradhan, Manisha Priyadarshini, Publication date: 14-11-2024, Patent office: India, Type: Design.
3. Application number: 421551-001, "AUTOMATED GARBAGE PICKING AND SEGREGATION ROBOT", Inventors: Aman Patra, Kanchan Kumari, Preetam Kumar Sahu, Abhishek Barua, Publication date: 23/08/2024, Patent office: India, Type: Design.
4. Application number: 421551-001, "Motorcycle Rear Sprocket", Inventors: Kanchan Kumari, Abhishek Barua, Trilochan Rout, Chitrasen Samantra, Swastik Pradhan, Manisha Priyadarshini, Publication date: 14/02/2025, Patent office: India, Type: Design.

RESEARCH AND PUBLICATIONS

Name: Sibasis Harihar Sahu

Designation: Assistant Professor

Research Publication

SHAMBHU K MAHATO, R K SINGH, SK MURMU, BAISALINI SETHI, KAMALA K SAHOO & SIBASIS HARIHAR SAHU

STUDY OF HEAT TRANSFER ENHANCEMENT WITHIN A SQUARE DUCT TWISTED CLOCKWISE-COUNTERCLOCKWISE

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY, TRANSACTIONS OF MECHANICAL ENGINEERING, ISSN NO. 2228- 6187

VOLUME-47.

ISSUE NO.-1, YEAR 2023

1-13

Books/Book Chapters

ANITA PRITAM & SIBASIS HARIHAR SAHU

KALAM KRAFT PUBLICATION

INTRODUCTION TO MATLAB

ISBN NO-978-93-5850-127-8

1-70

Patents

1. AN ECONOMICALLY LOW COST INTEGRATED MODEL FOR THE HYBRIDIZATION AND ELECTRIC TRANSFORMATION OF CARS AND ADDED MECHATRONIC VEHICLES (202231004407)
2. IMPACT OF RELATIVE HUMIDITY AND TEMPERATURE RELIANT THERMAL CONDUCTIVITY OF INSULATION MATERIALS ON HEAT TRANSFER THROUGH THE BUILDING ENVELOPE (202231015035)

Name: Kamala Kanta Sahoo

Designation: Assistant Professor

Research Publication

SHAMBHU K MAHATO, R K SINGH, SK MURMU, BAISALINI SETHI, KAMALA K SAHOO & SIBASIS HARIHAR SAHU

STUDY OF HEAT TRANSFER ENHANCEMENT WITHIN A SQUARE DUCT TWISTED CLOCKWISE-COUNTERCLOCKWISE

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VOLUME-47.

ISSUE NO.-1, YEAR 2023

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RESEARCH AND PUBLICATIONS

Name: Abhishek Barua

Designation: Assistant Professor

List of Journals

1. Patra A, Kumari K, Barua A, Pradhan S. Advancing Visible Spectroscopy through Integrated Machine Learning and Image Processing Techniques. *Applied Sciences*. 2024 May 25;14(11):4527. (Indexed in SCIE/ Scopus).
2. Samantra C, Barua A, Pradhan S, Kumari K, Pallavi P. Parametric Investigation of Die-Sinking EDM of Ti6Al4V Using the Hybrid Taguchi-RAMS-RATMI Method. *Applied Sciences*. 2024 Aug 14;14(16):7139. (Indexed in SCIE/ Scopus).
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1. Kumari K, Barua A, Patra A. Automated Identification and Classification of Polymeric Waste Wrappers Using Convolutional Neural Networks and IoT-Based GSM Communication. In *Conference on Polymer Technology Connect 2023* Dec 15 (pp. 89-104). Singapore: Springer Nature Singapore. (Indexed in Scopus).
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3. Samantra C, Kumari K, Barua A, Pradhan S, Dhal PR. Parametric Appraisal of Dry-Turning of EN24 using Taguchi-WASPAS and Sunflower Algorithm. In *Sustainable Materials, Structures and IoT* (pp. 25-28). CRC Press. (Indexed in Scopus).

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2. Application number: 421551-001, "AUTOMATED GARBAGE PICKING AND SEGREGATION ROBOT", Inventors: Aman Patra, Kanchan Kumari, Preetam Kumar Sahu, Abhishek Barua, Publication date: 23/08/2024, Patent office: India, Type: Design.
3. Application number: 421551-001, "Motorcycle Rear Sprocket", Inventors: Kanchan Kumari, Abhishek Barua, Trilochan Rout, Chitrasen Samantra, Swastik Pradhan, Manisha Priyadarshini, Publication date: 14/02/2025, Patent office: India, Type: Design.

RESEARCH AND PUBLICATIONS

Name: Trilochan Pradhan

Designation: Assistant Professor

List of Paper published in conference proceedings

- 1.Pradhan, T., Pradhan, A. R., Mishra, A. K., & Panda, P. Characterization of Mechanical Properties of Epoxy Glass Fiber Reinforced Composite. In Sustainable Materials, Structures and IoT (pp. 140-145). CRC Press. (Indexed in Scopus).
- 2.Pradhan, A. R., Pradhan, T., Mishra, A. K., & Panda, P. Investigating Slurry Erosion Resistance of HVOF coated SS-409 for Slurry Transportation System. In Sustainable Materials, Structures and IoT (pp. 125-129). CRC Press. (Indexed in Scopus).
- 3.Panda, P., Pradhan, T., Pradhan, A. R., & Mishra, A. K. Investigating the Influence of Natural Fibers on Mechanical Properties of Epoxy Composites. In Sustainable Materials, Structures and IoT (pp. 130-134). CRC Press. (Indexed in Scopus).

List of paper presented in conference

- 1.Pradhan, T., Pradhan, A. R., Mishra, A. K., & Panda, P. Characterization of Mechanical Properties of Epoxy Glass Fiber Reinforced Composite. In Sustainable Materials, Structures and IoT (pp. 140-145). CRC Press. (Indexed in Scopus).
- 2.Pradhan, A. R., Pradhan, T., Mishra, A. K., & Panda, P. Investigating Slurry Erosion Resistance of HVOF coated SS-409 for Slurry Transportation System. In Sustainable Materials, Structures and IoT (pp. 125-129). CRC Press. (Indexed in Scopus).
- 3.Panda, P., Pradhan, T., Pradhan, A. R., & Mishra, A. K. Investigating the Influence of Natural Fibers on Mechanical Properties of Epoxy Composites. In Sustainable Materials, Structures and IoT (pp. 130-134). CRC Press. (Indexed in Scopus).

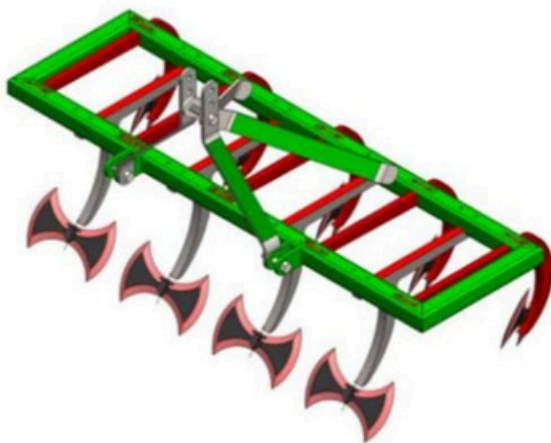
Name: Dr. Saroj Kumar Padhi

Designation: Assistant Professor

Presented a paper on “The Basics of Electric Vehicles: Headway, Preferment, Related Technologies and Future Scopes” at National conference on “Powertrain, Mechanical Engineering, and Computing (PMEC-2024)” jointly organized by Department of Automobile Engineering and Department of Mechanical Engineering, Parala Maharaja Engineering College, Berhampur on October 8-9, 2024.

LATEST PATENT

Design Number	439837-001
Class	15-03
1.Mr. Shibashish Rath UG Scholar, Department of Automobile Engineering, Parala Maharaja Engineering College, Berhampur, Od 2. Mr. Swayam Susovan Sahoo UG Scholar, Department of Automobile Engineering, Parala Maharaja Engineering College, Berhampur, Odisha, India 3. Mr. Sibasis Harihar Sahu Assistant Professor, Department of Automobile Engineering, Parala Maharaja Engineering College, Berhampur, Odisha, India 4. Dr. Kanchan Kumari Assistant Professor, Department of Mechanical Engineering, Parala Maharja Engineering College, Berhampur, Odisha, India , et al.	
Date of Registration	08/12/2024
Title	Dual Action Offset Plough
Priority NA	



CONFERENCES AND WORKSHOPS

Name: Dr. Kanchan Kumari

Designation: Assistant Professor and HoD

List of paper presented in conference

1. International Conference on Sustainable Materials, Structures and IoT (SMSI-2024) organized by Indira Gandhi Institute of Technology, Sarang, Dhenkanal, Odisha, India from 6th to 8th July, 2024

· Experimental Analysis on CNC-Turning of Nickel–Chromoly Steel in Different Lubricating Environments using Taguchi Coupled WASPAS Method.

· Parametric Appraisal of Dry-Turning of EN24 using Taguchi-WASPAS and Sunflower Algorithm.

2. 5th International Conference on Recent Advances in Mechanical Engineering Research and Development (ICRAMERD-2025) organized by the Department of Mechanical Engineering, Institute of Technical Education and Research, Siksha 'O' Anusandahan (Deemed to be University), Bhubaneswar, Odisha from 12th to 14th December, 2024

· Evaluation of M30 Grade Concrete's Performance by Using Sugarcane Bagasse Ash, Marble Powder, and Glass Fiber as Partial Replacement of Fine Aggregate

· Parametric Investigation of Dry Turning of Ti6Al4V with Double Tempered Cryogenic Treated Cutting Inserts: A Novel Hybrid Taguchi-ARAS-Walrus Optimization approach

· Comparative Evaluation of Process Parameters of WEDM Machined AISI P20 Steel Using Taguchi-WASPAS and White Shark Optimization

List of Workshop/ FDP/ STC/ STTP attended

1. March 16, 2024 to March 17, 2024

Participated in 7th National workshop on “Recent trends in industrial engineering (RTIE)” organized by Department of Mechanical Engineering, Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat and Indian Institution of Industrial Engineering, Surat Chapter, India.

2. June 17, 2024 to June 21, 2024

Completed one week online short term course on “Recent trends in manufacturing process (2024)” organized by Department of Production Engineering, National Institute of Technology, Agartala, Tripura, India.

3. June 24, 2024 to June 29, 2024

Completed one-week national e-workshop on “Innovation & Intellectual Property Rights” organized by Innovative Technology Enabling Centre, CSIR-IMMT, Bhubaneswar, Odisha, India.

4. July 01, 2024 to July 05, 2024

Participated in five days online national workshop on “Sustainable Manufacturing & Industry 4.0: Special emphasis on 3D printing & microwave material processing (SMI 4.0)” organized by Department of Mechanical Engineering, National Institute of Technology, Rourkela, Odisha, India.

5. July 08, 2024 to July 15, 2024

Participated in One week faculty development programme on “Emerging Concepts in HVAC&R” organized by Indian Society Heating, Refrigerating & Air-Conditioning Engineers (ISHRAE) and Kalinga Institute of Industrial Technology, Bhubaneswar, Odisha, India.

6. June 08, 2024 to June 22, 2024

Completed Industrial Training at Forties Chemical, Jharsuguda, Odisha, India.

7. December 09, 2024 to December 13, 2024

Completed One Week Faculty Development Programme/ Short Term Training Programme on “Green Energy and Environment” organized at Katihar Engineering College, Bihar, India by NITTTR Kolkata

8. September 09, 2024 to September 24, 2024

Participated in Refresher Course on “Principles of Engineering Mechanics and Mechanics of Solids” organized by Jawaharlal Nehru Technological University Hyderabad, Telangana, India.

9. December 16, 2024 to December 21, 2024

Completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on " Crystal Growth, Semiconductor Processing and Manufacturing Technologies " organized by Indian Institute of Technology (Indian School of Mines) Dhanbad, Jharkhand, India.

CONFERENCES AND WORKSHOPS

Name: Abhishek Barua

Designation: Assistant Professor

List of paper presented in conference

1. International Conference on Sustainable Materials, Structures and IoT (SMSI-2024) organized by Indira Gandhi Institute of Technology, Sarang, Dhenkanal, Odisha, India from 6th to 8th July, 2024
 - Experimental Analysis on CNC-Turning of Nickel–Chromoly Steel in Different Lubricating Environments using Taguchi Coupled WASPAS Method.
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 - Evaluation of M30 Grade Concrete's Performance by Using Sugarcane Bagasse Ash, Marble Powder, and Glass Fiber as Partial Replacement of Fine Aggregate
 - Parametric Investigation of Dry Turning of Ti6Al4V with Double Tempered Cryogenic Treated Cutting Inserts: A Novel Hybrid Taguchi-ARAS-Walrus Optimization approach
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7. December 09, 2024 to December 13, 2024
Completed One Week Faculty Development Programme/ Short Term Training Programme on “Green Energy and Environment” organized at Katihar Engineering College, Bihar, India by NITTTR Kolkata
8. January 21, 2025 to January 25, 2025
Participated in EICT Faculty Development Programme on " Image Processing and Pattern Recognition ", organized by Indian Institute of Technology, Roorkee, Uttarakhand, India
9. January 27, 2025 to February 01, 2025
Participated in 6-Day Faculty Development Programme on "Drive Train: Building Expertise for the Next Gen Automotive Classroom", organized by Department of Mechanical Engineering, GITAM Deemed to be University, Visakhapatnam, Andhra Pradesh, India.

CONFERENCES AND WORKSHOPS

Name: Sibasis Harihar Sahu

Designation: Assistant Professor

Conferences

EXPERIMENTAL STUDY ON ELECTRIC RICKSHAW

INTERNATIONAL CONFERENCE ON

FUTURE TECHNOLOGIES IN MANUFACTURING, AUTOMATION, DESIGN & ENERGY (2022)

15-12-2022

OFFLINE

DESIGN AND FABRICATION OF BLDC MOTOR OPERATED PORTABLE GRASS CUTTER

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING AND TECHNOLOGY INDUSTRY

4.0(ETETI-2023)

07-05-2023

ONLINE

Name: Kamala Kanta Sahoo

Designation: Assistant Professor

Conferences

EXPERIMENTAL STUDY ON ELECTRIC RICKSHAW

INTERNATIONAL CONFERENCE ON

FUTURE TECHNOLOGIES IN MANUFACTURING, AUTOMATION, DESIGN & ENERGY (2022)

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INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING AND TECHNOLOGY INDUSTRY

4.0(ETETI-2023)

07-05-2023

ONLINE

Name: Trilochan Pradhan

Designation: Assistant Professor

1.March 16, 2024 to March 17, 2024

Participated in 7th National workshop on "Recent trends in industrial engineering (RTIE)" organized by Department of Mechanical Engineering, Sardar Vallabhbhai National Institute of Technology, Surat, Gujarat and Indian Institution of Industrial Engineering, Surat Chapter, India.

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4.Participated in One Week Short term Training Program (STTP) on Robotics and AI for Autonomous Robots (ROBOAI 2024) from (Feb 26th Mar 1st 2024) organized by, SVNIT, Surat.

5.Participated in MSME Sponsored One Week Advanced Entrepreneurship and Skill Development Programme (A-ESDP) on "Robotics for Domestic and Industrial Applications" (8th to 12th March 2024) organized by department of mechanical engineering, NIT, Sikkim.

6.Participated in Department of Science & Technology (DST) sponsored workshop cum seminar on "NEP-2020" organized by Department of Mechanical Engineering, NIT, Jamshedpur held on 3rd Feb 2024.

7.Participated in DST sponsored workshop cum seminar on "New direction in Teaching and Learning" organized by ME department of NIT, Jamshedpur held on 19th March 2024,



MR. TRILOCHAN PRADHAN
(FACULTY COORDINATOR)

STUDENT COORDINATORS



SHIBASHISH RATH



RAIKISHAN TRIPATHY



EKANT PATNAIK



MISHBAH-UL-HAQ



ASHUTOSH ACHARY