



CHRIST
DEEMED TO BE UNIVERSITY
BANGALORE - INDIA

THE TORQUE #4

4TH EDITION

DEPARTMENT OF MECHANICAL, AUTOMOBILE,
ROBOTICS AND MECHATRONICS ENGINEERING

FEBRUARY

2023

Vision & Mission

Vision

Develop Mechanical, Automobile Engineering, Robotics and Mechatronics graduates to be successful in chosen professional career with innovative academic processes for the overall development.

Mission

- To provide excellent academic ambience in curricular cocurricular and extracurricular initiative facilities and teaching learning experience
- To nurture holistic development of individuals.
- To imbibe professional ethics driven by a sense of moral responsibility committed to the service to society

HOD'S Message

‘It is my pleasure to congratulate the editorial board on this pleasant occasion of releasing the E-magazine for the period August 2022 to February 2023. It is great to find a considerable number of winners and participants in co-curricular and extracurricular activities which certainly prove that our staff and students are adequately equipped and possess necessary quality skill-sets to bring such laurels to the institution. I wish that this number may grow in the years to come. I am sure that publishing a newsletter of this sort containing the achievements of the CHRIST family will be a recognition to them. I wish them all the very best for future endeavours.’



-Dr Gurumuthy Hebbar

EDITORIAL

'The TORQUE' highlights how the energy of the students and the experience and wisdom of the faculty have been fused together to form a dynamic department. The faculty are polishing and fine-tuning the students into budding engineers. The students have begun to kickstart their careers through participation in various activities.

"The TORQUE #4", showcases the array of events conducted by the Department of Mechanical, Automobile, Robotics and Mechatronics Engineering through the months of September till February 2023. This includes tech talks by industry professionals, department orientation sessions, placement training, research publications, etc. Also included are the numerous achievements of our students and faculty, making our department proud. Finally, there are technical articles serving as food for thought. "The TORQUE" will culminate as "The SPARK" at the end of the academic year to summarize the efforts and achievements in our journey towards 'EXCELLENCE AND SERVICE'.

Our heartfelt thanks to Rachel Manoharan and Priyanka Chaudhary for their multitudinous and continual support to me in designing this newsletter expeditiously and excellently. We specially thank the Head of the Department, Dr. Gurummorthy Hebbar Sir, for his for his constant guidance. A wholehearted gratitude to all the faculty members for providing the information towards the newsletter.

–Dr Sajna Panigrahi

EDITORIAL



Dr Sajna Panigrahi



Dr Darshan S M



Hadiya Pritesh
Dulabhai



Priyanka Chaudhary
4BTRAM



Rachel Manoharan
4BTRAM

We hope you enjoyed the content we've created for you. Our team works hard to bring you informative and engaging articles, and we appreciate your support. If you have any feedback or suggestions for future articles, please do contact sajna.panigrahi@christuniversity.in. Until next time, thank you for your readership, and we look forward to bringing you more great content in the future.

Best regards,
Editors of Torque#4

BEST WISHES

“Courage is more exhilarating than fear and in the long run it is easier. We do not have to become heroes overnight. Just one step at a time, meeting each thing that comes up, seeing it is not as dreadful as it appeared, discovering we have the strength to stare it down.”



Rev Dr Fr Benny Thomas
Director, SOET & SOA



Rev Dr Fr Sony Chundattu
Campus Director,
Kengeri Campus



Dr Iven Jose
Dean, School of Engineering
& Technology



Dr Gurumurthy Hebbar
HoD, Mechanical, Automobile,
Robotics and Mechatronics
Engineering



Dr James Sathya Kumar
Coordinator,
Automobile Engineering



Dr Pal Pandian P
Coordinator,
Robotics & Mechatronics

ABOUT THE DEPARTMENT

The life of a student at the Department of Mechanical, Automobile, Robotics and Mechatronics engineering has variety of hues and encompasses an exciting and challenging set of experiences. The core values of the department are to guide the students to develop their overall personality and make them worthy technocrats to compete and work at global level.

Department has procured state of the art equipment like 3D Printer, KUKA Robot, FFT analyzer, Wind Emulator etc. to cater to the need of both researchers and students. The students and faculty of Mechanical & Automobile Engineering Department are challenged to go beyond the portals of the classroom, by involving themselves in project work, professional conversation and by participating in various technical as well as co-curricular events.



ADVANCED LAB FACILITIES

- Nano and ceramic coating
- Surface Engineering
- Spray Drier
- 3D Printing
- Kuka Robo And FMS
- CNC with Hard-machining
- Industry Automation
- Renewable and Alternate Energy
- Modern Automotive Technologies



INDUSTRY DEMAND SOFTWARES

- CREO
- ANSYS
- SOLIDWORKS
- STAR-CCM
- MATLAB
- 3DExperience CATIA
- SIMULIA Abaqus



RESEARCH THRUST AREAS

- Composite Materials and Coatings
- Alternate Fuels
- Welding Technology
- High speed machining/Hard machining
- MR fluids
- Hybrid Vehicles
- Robotics

PROGRAMMES OFFERED

Undergraduate

1. Bachelor of Technology Mechanical Engineering
2. Bachelor of Technology Automobile Engineering
3. Bachelor of Technology Robotics and Mechatronics

Postgraduate

1. Master of Technology Machine Design
2. Post Graduate Diploma in Research Methodology (PGDR)

Doctoral (PhD)

1. Doctor of Philosophy (PhD) in Mechanical Engineering

Honors

1. Digital Manufacturing

CU-MBRDI DAIMLER TRUCK TEAR DOWN FACILITY

The Christ University - Mercedes Benz Research and Development India Pvt.Ltd(CU_MBRDI), Bengaluru formally signed a MoU on August 2017 in establishing a Daimler Truck Tear Down Facility At Faculty of Engineering, Christ. This facility is for the tear down of Daimler truck starting with a Low Duty Truck(LDT) followed by Heavy and Medium Duty Trucks which involves the dismantling of trucks in sequence starting from Cabin and Steering system, Engine periphery, Transmission System, Electrical System and Suspension and Braking Systems. This facility is basically for training the MBRDI employees and students of CHRIST.



FACULTY ACHIEVEMENTS

Sl.No	Date	Faculty Name	Topic	Organizing Institution
1	7TH June to 7th Nov 2022	Ivan Sunit Rout	Faculty Development Programme 2022	Centre for Education Beyond Curriculum (CEDBEC) and Internal Quality Assurance Cell (IQAC), CHRIST (Deemed to be University), Bangalore.
2	11th July to 11th Nov 2022	Dr P Pal Pandian	Thermal Science and Materials Engineering	Srinivasa Ramanujan Institute of Technology, Ananthapuramu
3	16th to 20th Aug 2022	Ivan Sunit Rout	21st century skills for teaching & learning	GMR Institute of Technology
4	16th to 20th Aug 2022	Anil Melwyn Rego	21st century skills for teaching & learning	GMR Institute of Technology
5	22nd to 27th Aug 2022	Ivan Sunit Rout	Amazon Web Services	GMR Institute of Technology, Rajam and Brainovision solutions India Pvt Ltd

RESOURCE PERSON

Sl.No	Date	Faculty Name	Topic	Organizing Institution
1	16th Sept 2022	Dr P Pal Pandian	Academic Council Interaction	PSNA College of Engineering and Technology, Dindigul
2	27th June 2022	Dr. Shivakumar S	ICRDME- 2022.	SIT, Tumkur, Karnataka
3	27th June 2022	Dr. G S Hebbar	ICRDME- 2022.	SIT, Tumkur, Karnataka
4	26TH Aug to 27th Aug 2022	Dr P Pal Pandian	2 Days World Innovation Patent Conclave 2022	Apeejay School of Management
5	26TH Aug to 27th Aug 2022	Dr P Pal Pandian	Shift Innovation Strategies	Apeejay School of Management

PhD COMPLETION

Heartfelt Congratulations for Successful Completion of Your Doctorate. We wish you all the very best luck with future endeavours.



Dr DARSHAN SM
NOVEMBER 2022



Dr NIRANJANA S J
NOVEMBER 2022



Dr RAVIKUMAR R
NOVEMBER 2022

PATENTS

Dr Pal Pandian P, Dr Ivan Sunit Rout: “Device to locate leakage and blockage in pipelines (Based on artificial Intelligence)”, Patent no : 370733001, Published on 9th January 2023

Kiran K , Ravikumar R , Gurumoorthy S Hebbar : “Bio-derived fuels as diesel fuel and gasoline blend components ”, Application No: 202241032675 A , Publication Date: 17th June 2022

START UP INCUBATION

PALTINUM CONSULTING PVT LTD:

1. Dr Pal Pandian P
2. Mrs Hema P

AAVISKAARBHARAT PVT LTD:

1. Dr Muralidhara H
2. Mrs Bindiya H C

CONSULTANCY

Sl.No	Name	Consultancy service offered Details
1	Dr Shivakumar	AADHYA TECH SOL 473/4, 1st Floor, 4th Main, 1st Cross, Srigandhakavalu, Kottigepalya, Vishwaneedam Post, Bangalore – 560091 Consultancy Area: Engineering and Manufacturing (CAE Tools) Amount : Rs.50,000
2	Dr Pradeep Kumar G S	Research Scholar VTU, Bangalore Consultancy Area: Slurry Erosive Tester (Slurry Machine) Amount : Rs.9000
3	Dr Shivakumar	Minda Coporation Pune Consultancy Area: CAE Tools Amount: rRs 64,800

PUBLICATIONS

- S M Darshan, Bheemappa Suresha, Jamadar, Imran M, “Optimization of Abrasive Wear Parameters of Halloysite Nanotubes Reinforced Silk/Basalt Hybrid Epoxy Composites using Taguchi Approach”, Tribology in Industry, ISSN/ISBN-2217-7965, 44 (2), 253-267, August 2022
- Thejaraju Rajashekaraiiah, Girisha Kanuvanahalli Bettaiah, Parvathy Rajendran, Mohamed Abbas, Sher Afghan Khan and C. Ahamed Saleel, “Numerical Modelling and Experimental Validation of Novel Para Winglet Tape for Heat Transfer Enhancement”, MDPI - Mathematics, ISSN/ISBN 2227-7390, 10 (2893), 44947, 12 August, 2022.
- Anil Raj, Pratap Kumar J, Ramesha K, Ivan Sunit Rout, Modelling, “Temperature Analysis, and Mechanical Properties of Friction Stir Welding of Al-Cu Joints with Hardened OHNS Steel Tools”, Journal of Mines, Metals and Fuels, ISSN/ISBN 0022-2755, 70 (8), 462-470, August, 2022.
- Sajna Parimita Panigrahi , Sarat Kumar Maharana , Thejaraju Rajashekaraiiah , Ravichandran Gopalashetty ,Mohsen Sharifpur 3 , Mohammad Hossein Ahmadi , C. Ahamed Saleel and Mohamed Abbas , “Flat Unglazed Transpired Solar Collector: Performance Probability Prediction Approach Using Monte Carlo Simulation Technique”, MDPI -Energies , ISSN/ISBN 0022-2755,15,1-17,November 2022.
- Pratap Kumar J, Anil Raj, Ramesha K, Ivan Sunit Rout, “Design and Optimization of Friction Stir Welding of Al-Cu BUTT Joint Configuration using Taguchi Method”, Journal of Mines, Metals and Fuels, ISSN/ISBN 0022-2755, 70 (8), 471-479, December 2022.
- S. Rudresha, E.R. Babu, R. Thejaraju, “Experimental investigation and influence of filling ratio on heat transfer performance of a pulsating heat pipe”, Thermal Science and Engineering Progress, ISSN/ISBN 2451-9049, 38, 1-13, January 2023.

FUNDED PROJECT

S. NO	Title of the Project	Agency and Scheme	Principal Investigator (s) & Co-Principal Investigator (s)	Grant(INR)	Time Period	Status
1.	Lattice Boltzmann Solver for Pore-Scale Transport and Electrochemistry in Lithium-Oxygen Battery	DST & NSM	PI: Dr Dileep V Nair & Dr Jithin M, Jyothi Engg., College	25,94,000	Mar 2021- Feb 2023	Ongoing
2.	Synthesis and Characterization of Plasma Sprayed Chromium Carbide Coatings for Aluminum Alloys	AICTE RPS	PI: Dr Pradeep Kumar G S Co-PI: Harish Kumar M	13,41,450	Mar 2022 - Feb 2025	Ongoing
3.	Scheme for Promoting Interest, Creativity and Ethics among Students (SPICES)	AICTE-SPICES	Coordinator : Dr Jangam Sasidhar Co-Coordinator : Mr Harish Kumar M	1,00,000	May 2022 - Apr 2023	Ongoing
4.	Development of AI Machine for Sex Identification of Pupa and Cocoon Cutting to Foster Women Empowerment in Seri	DST-SEED	PI: Dr Jyothi Thomas Co-PI: Mrs. Swathi Bale, Mrs. Vandana Reddy	20,59,410	Sep 2020 - Aug 2023	Ongoing

AWARDS AND ACHIEVEMENTS



The students of 3BTRAM participated in Intercollege Mechathon 2022 organized by the Department of Mechanical Engineering, Dayananda Sagar Academy of Technology and Management, Bangalore on 19 December 2022 and Won the Second Place with a cash prize of Rupees five thousand.

Aron Bino Samuel (2162804)
Duggimpudi Hemanth Reddy (2162806)
Rachel Manoharan (2162832)
Abhinandhan N (2162841)
Sri Vardhan Raj (2162856)



In recognition valuable contribution in building SAEINDIA for 25 years

AWARDS AND ACHIEVEMENTS



The paper titled Design and development of mobile robot with robotic arms for patient service during a pandemic situation authored by **Dr.Amruta Rout, N S Pranay, Atmuri V, Renin Francis T, Sri Vardhan Raj and Prof. Bbvl Deepak** is selected as the most distinguished Paper during the international conference on 44th Innovative Product Design and Intelligent Manufacturing Systems (IPDIMS).

Students from 4BTRAM participated and WON 1st Prize with a cash prize of Rupees ten thousand for "Pulsanzer Bot(medical robot)" in robo exhibition at JSS ACADEMY Bangalore.

Hemanth Reddy(2162806)
Bhavesh Reddy(2160606)
Vardhan raj(2162856)



AWARDS AND ACHIEVEMENTS



Robotic Claw Manipulator by **Aiswar P**, 4BTRAM and **Allen Thomas John**, 4BTRAM won First Prize in National Level Science Exhibition, T John Group of Pharmacy on 6 September 2022.

Electric Cart Vehicle by **Sourabh Moily** 8BTAE, **Sahas Dhananjay** 8BTME, **Abid Ali Puthiyaveettal** 8BTAE, Akshay Uthaman 8BTME and **George Thevercad** 8BTME won Third Prize in National Level Science Exhibition, T John Group of Pharmacy on 6 September 2022.



SAE REEV COMPETITION 2023

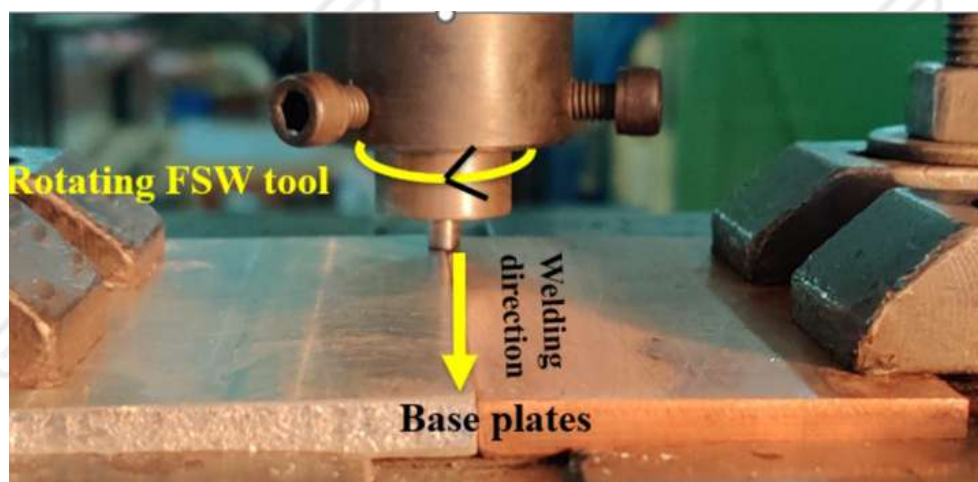


The Range Extended Electric Vehicle (REEV) is a game-changing student competition in India, where the students are challenged to design, develop, test and put on road an urban mobility vehicle concept with a given styling which significantly constrains the packaging of all other vehicle aggregates. Further, integrating the engine, motor, battery, and controllers in the vehicle is an additional challenge that students will take up in this competition. The competition was conceived and developed by industry professionals from GM-TCS in collaboration with other partnering organizations. The Students of Christ (Deemed to be University) bagged the second prize with rupees lakh on 9th January 2023.

FRICION STIR WELDING IT'S RELEVANCE IN THE METAL JOINING INDUSTRY AND RESEARCH

Welding as you all know is a metal joining process have a major role in various industries such as construction, aerospace, ship building, automobile industries etc. In the last 100 years, welding processes have proven vital to the economical fabrication of almost all metal items. World Wars I and II both depended on quick and reliable methods for joining metals for implements of warfare. Over the last 50 years, welding and material joining has become more automated, productive, and safer. New processes – such as electron beam welding, friction welding, plasma arc welding, friction stir welding, explosion welding, and laser beam welding – have increased the range of materials and components that can be welded. In addition, industrial robots and computer-controlled automated welding are used today to improve both quality and productivity.

In this article we will have a bird's eye view of friction stir welding process, which was developed by The welding institute (TWI) UK in December 1991. This process attracted researchers all around the world as it opened up vast plethora of possibilities. Friction stir welding process is carried out by rotating a cylindrical tool which has a profiled pin that has a diameter lesser than its shoulder. During welding the tool is fed into a butt joint between two clamped workpieces, until the probe pierces into the workpiece and shoulder touches the surface of the workpieces. The friction between workpieces, shoulder and pin causes heat to be generated, which causes the stirred materials to soften without melting. As the tool advances rotating forward, the pin forces the leading face material to the rear where the high forces assist in forced forging of the weld.



FRICION STIR WELDING, IT'S RELEVANCE IN THE METAL JOINING INDUSTRY AND RESEARCH

This solid-state welding process, also helps in joining various types of materials with different welding point temperatures. As the metals never reaches the melting point temperatures the micro structural characteristics will not change considerably. Also, the heat affected zone of the weld joint will remain in close proximity to the welded region. As the heat affected zone is reduced to a minimum the welded joints don't have to undergo heat treatment processes. This saves a lot of time in production of products and components. The weld joints exhibit characteristics of parent materials as friction stir welds are created without the use of filler materials. This is very important in various industries such as aerospace, automotive, electrical and electronics industries. As the welding rods cannot be manufactured for special materials. The filler materials may also change the physical characteristics of the weld joint like ductility, malleability etc.

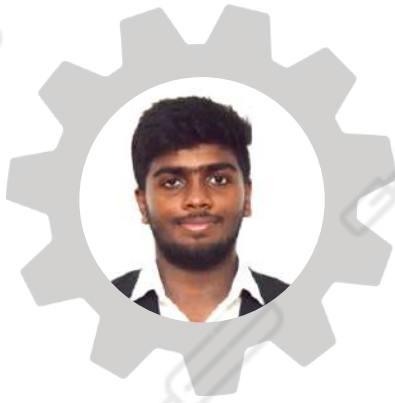
The factors that affect the quality of weld in friction stir welding are mainly tool material, tool pin profile, tool rotational speed, tool feed rate, thrust force etc. Most of the research papers published recently on friction stir welding reveals that above mentioned parameters change can largely affect the quality of weld joint created. The studies published on intermetallic bond formation between the workpieces joined also proves efficient joint creation. This feature of joint creation helps in creating joints for specific requirements such as electrical conductor plates, pipe joints carrying petroleum products, aerospace components, aluminium fabrications, chemical tanks etc. As the tools used in friction stir welding are hardened tools made of H13 tool steel, OHNS tool steel etc the tool life of tool will be very high. Most of the time each tool can weld almost equal to one kilometre.

This process has various advantages over fusion welding. Friction stir welding creates joints will very little distortion as the specimens are clamped in position. The joint accuracy can be effortlessly controlled by controlling the process parameters. The joints created will retain close to the original yield strength and tensile strength of parent material as the heat affected zone is very less. The cost of the weld is relatively less compared to fusion welding as this process does not use filler materials or shielding gasses. The weld can be created in even dissimilar metals like aluminium-copper, copper-magnesium etc. Weld joints can be made in very thin sheets with good precision and with less blow holes. The joint accuracy and finish are also higher than fusion welding. The welding cost also is comparatively lesser than fusion welding. Comparatively the process has less drawbacks compared to fusion welding. Some of them are sturdy fixtures requirements to hold the workpieces firmly throughout the process. The length of workpieces joined are limited to the size of fixture available. Tool preparation and manufacturing costs are comparatively higher as hard materials and heat treatment requirements. This technique opens up lot of avenues of research for the young graduates as there are a lot of variables which can be altered to produce a good joint.



Dr Anil Raj
Assistant Professor

PLACEMENTS



S SARAN MONEESH
Mobelium



DALTON PINTO
KOCH



SOMASHEKHAR G SWAMI
Ingersoll Rand



GEORGE JOSEPH CHERIAN
TEACHNOOK/ JCI



RUTHVIK V
TEACHNOOK



**GONDROTHU TATA ATCHUTH
RAM**
TEACHNOOK



CLARITUS D SOUZA
SBD AUTOMOTIVE/ Royal Enfield



AVEZ MOHIUDDIN
TEACHNOOK

PLACEMENTS



RYAN SAGAAI GABRIEL
TEACHNOOK/ JCI



ALTONN S A
TEACHNOOK



NEHAL VARGHESE JACOB
OPTMYZR



MUHAMMAD ASHHAQ P
DAIMLER



KAUSHIK NAYAK
JCI



VIVEK JAISWAL
COGNIZANT



MEIT WORAH
Royal Enfield



IJANAGANI BHARGAVA
COGNIZANT/ TEACHNOOK

PLACEMENTS



HARSHIT EKKA
CAPGEMINI



AQIB RIZAL THENNADAN
QUEST GLOBAL



BHARATH K
Sun Mobility



SATHWIK SASANK REDDY Y C
Sun Mobility



ABID ALI PUTHIYAVEETIL
Sun Mobility



SOURABH S MOILY
Royal Enfield



FAUZAN AHMAD
Royal Enfield

PLACEMENTS



LOCHAN B R
COGNIZANT



BASIL JOY
SBD AUTOMOTIVE



SAHAS
DHANANJAY
Autoliv



MEESALA GOPI CHANDU
Tsworks

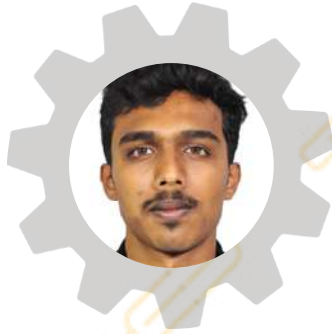


ACHU KARAMCHAND A
Middleby

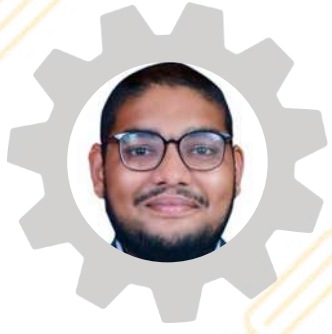


ADVAITH KAIKINI
Middleby

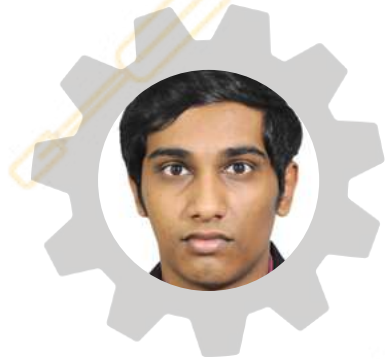
HIGHER STUDIES



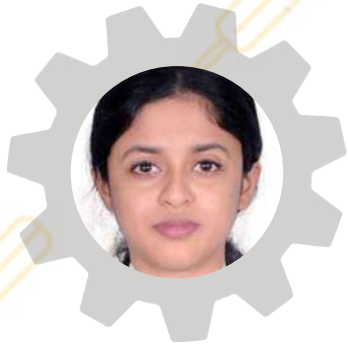
SUJITH G GOWDA
University of Southern
California



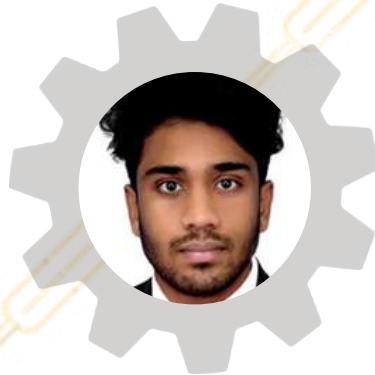
NALLURI AKASH
University of
Houston, University of Texas
Arlington, Arizona state
University



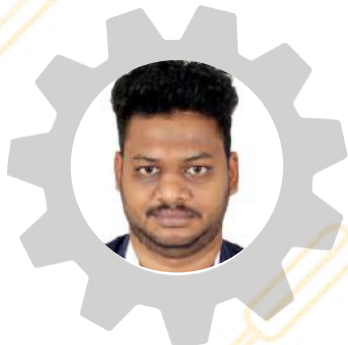
ROSHAN BABY MATHEW
University of Exeter, UK



SHARON BIJU
National University
of Singapore
(NUS)



DAYA UMESH B
University of
Hertfordshire



PAVAN TEJA GADDAM
The University of Texas at
Dallas

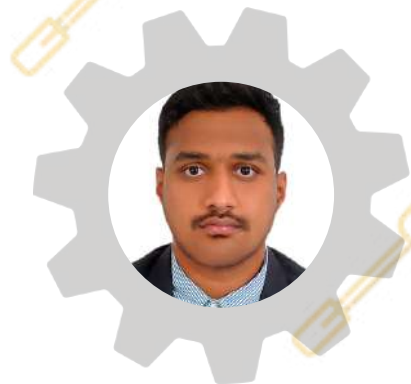
HIGHER STUDIES



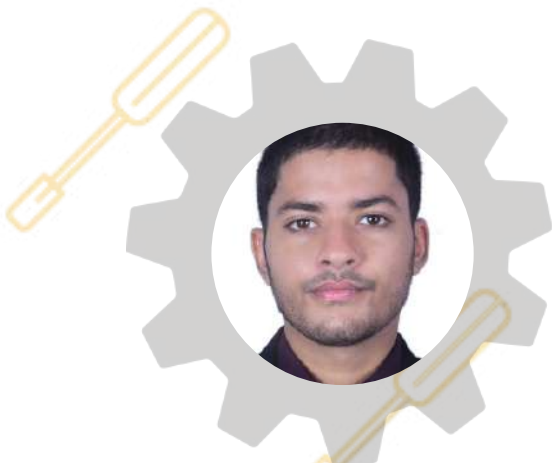
NITHIN MANOJ
Soutgern Cross
University



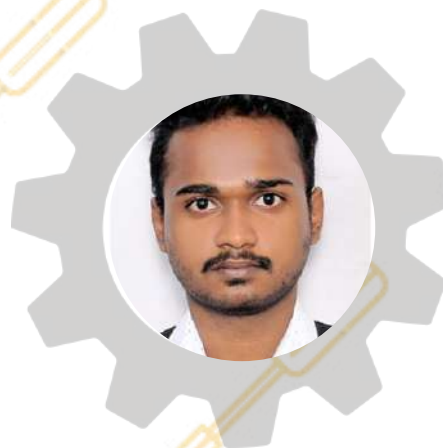
GOWTHAM SIDHARDHA
The University of Texas at
Dallas



NALLMOTHU NITHIN
The University of Texas at
Dallas



AJIL DAVIES
University of Buffalo, State
University of New York






NIVIL MACHIKALAPATI
Illinois Tech University

ODD SEM TOPPERS 2022-23

Sl.No	Name	Reg. No. and Class	Percentage	Photos
1	PRITHVI RAJ	2161210 3BTAE	81.8%	
2	JOSHUA C WILSON	2061206 5BTAE	89.23%	
3	BASIL JOY	1961202 7BTAE	83.87%	
4	C R SAI DHANUSH	2161445 3BTME	80.91%	
5	HARI PRASAD	2061416 5BTME	84%	

ODD SEM TOPPERS 2022-23

Sl.No	Name	Reg. No. and Class	Percentage	Photos
6	BHARATH K	1961425 7BTME	83.57%	
7	RISHABH JAIN	2162851 3BTRM	83.67%	
8	AFWADH V B	2062801 5BTRM	89.33%	

ENGINEERS DAY ICETECH



CHRIST
DEEMED TO BE UNIVERSITY
BANGALORE - INDIA

**CHRIST (Deemed to be University)
Kengeri Campus, Bangalore - India**



School of Engineering and Technology
&
School of Architecture

Cordially Invites You To

ICETech 2022
Engineer's Day Celebration
"A tribute to Sir M. Visvesvaraya"

CHIEF GUEST



Dr Rakesh Kumar

IEEE Life Fellow, IEEE TA Hall of Honor Chair,
IEEE Roadmaps Chair, IEEE Data Based Strategy
ADHOC President,
Technology Connexions, Inc.

VENUE:
**BLOCK 3 AUDITORIUM (4TH FLOOR),
KENGERI CAMPUS**

DATE AND TIME:
09:15AM - 09:45AM
THURSDAY, SEPT 15, 2022,

ENGINEERS DAY ICETECH

Sl.No	Project Name	Team Members	Project Guide
1	TABLE TOP WIND TUNNEL	R Ram Prasath Vineeth Joshi Manjunath C Rahul Reddy S	Dr Thejaraju R
2	ROBOTIC CLAW MANIPULATOR	Aiswar P Alen Thomas John Jis George Mathew Jocob Shaji	Dr Ivan Sunit Rout
3	MAIZE KERNEL MACHINE	Sandesh S Govind Hariharan Prince josey	Prof Kiran, and Prof. Ravikumar R
4	ANTI-PINCH WINDOW SYSTEM	Meit Worah Sreehari S	Punit Kongi
5	VACUUM CLEANING CAR	Manreet Kaur Priyanka V Shivanand Deshpande	Dr Ivan Sunit Rout and Dr Manikandan P

ENGINEERS DAY ICETECH

Sl.No	Project Name	Team Members	Project Guide
6	CARTESIAN ROBOT WITH FOUR DOF	Deepak Buldak Tej Vanpariya Rishabh Jain Karnika Jain	Dr Ivan Sunit Rout and Mr. Umesh V
7	SCALE DOWN VERSION OF A WIND TUNNEL	Siva Santhosh M Emil Vincy Koshy Tayyab Khan Adeeb Raza	Prof.Punit Kongi
8	GESTURE CONTROLLED CAR	Shaun Thomas Shashank.s Sam Philip Shohan Renold Abdul Rahman	Dr. Ivan Sunit and Mr. Umesh V
9	REPLACING TIMING CHAIN WITH SENSORS	Aby Mathew Royce Mathew Binil Thomas john thomas John Sebastian	Mr Gowtham Sanjai S
10	HOW PLASTIC INJECTION MOULD WORK	Jayanth BK Rajesh MJ Santosh V chandhan	Mr Gowtham Sanjai S

ENGINEERS DAY ICETECH

Sl.No	Project Name	Team Members	Project Guide
11	SAFETY SCOOP SYSTEM	Jeffron S	
12	AUTOMATIC ARM	Rajveer Singh Sahni Kingshuk Maji Priyanka chaudhary Tanishka aggarwal	Dr. Ivan Sunit
13	PATH FOLLOWER ROBOT	Ramkannan ASK Sreekar Reddy Kumar Srinu Nehanth	Pritesh Hadiya
14	COATING OF LANTHANUM ZIRCONATE BY HVOF METHOD	Jeffron S Ashwin Gowda	Dr. Reghu VR sir
15	SUPERMATERIALS	Jeffron S Abchen E Beno Claritus Ruban D'Souza	

ENGINEERS DAY ICETECH

Sl.No	Project Name	Team Members	Project Guide
16	NURSING ROBOT	Vardhan raj A Lohith Naidu Renin Vvdk Sushanth Andrew Mohammad Arshad Alen Mathew	Dr. Amruta Rout
17	AUTOMATIC RAIN SENSING WIPERS	Sampreeth Sunkad Sathwik Sashank Reddy Shyam S Jogeshwar	Punit Kongi
18	RESCUE BOUY	Tejas bs Jayasurya D Shashank.s	Kiran K, Ramesha K, Amruta Rout,
19	ROBOTIC ARM	Jeffron S Ashwin Gowda	Dr. Reghu VR

DEPARTMENT ACTIVITIES

School of Engineering and Technology
Department of Mechanical and Automobile Engineering

INTERNATIONAL DAY OF CHARITY
Date :- 7th sep 2022
Timing :- 2:00pm-4:00pm
Venue :- Amphi theatre

SCHOOL OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF MECHANICAL & AUTOMOBILE ENGINEERING

Student Development Program on
HYBRID ELECTRIC VEHICLE TECHNOLOGY

Faculty Co-ordinator: **Dr. Pradeep Kumar**
H.O.D: **Dr. G.S. Hebbar**

DATE: 12-09-2022
TIME: 10 AM
VENUE: 3RD BLOCK 4TH FLOOR AUDITORIUM KENGERI CAMPUS

WORLD BIOFUEL DAY
10th Aug

School of Engineering and Technology
DEPARTMENT OF MECHANICAL AND AUTOMOBILE ENGINEERING
10 AUG 2022, 02-04 PM, III BLK AUDITORIUM

Department of Mechanical and Automobile Engineering

Organizing Awareness Session on "Animation"
From Arena Animation
11:30 AM TO 1 PM
SATURDAY, 21 JANUARY

Venue: 3rd Block Auditorium

YATRA TATRA SARVATRA

SUSTAINABLE CAR BUILDING CONTEST

SCHOOL OF ENGINEERING AND TECHNOLOGY
MECHANICAL AUTOMOBILE ROBOTICS AND MECHATRONICS ENGINEERING

17 NOV 2022, @ 02PM, VENUE: STUDENT SQUARE
GUEST OF HONOUR: H. RAGHAVENDRA, IRPS, MANAGING DIRECTOR
GOVERNMENT TOOL ROOM & TRAINING CENTRE - KARNATAKA
SPONSORED BY: AICTE-SPICES

Inauguration of SUSTAINABLE ENGINEERING CLUB
(Affiliated to Bamboo Society of India)

DEPARTMENT OF MECHANICAL & AUTOMOBILE ENGINEERING
School of Engineering & Technology, CHRIST (Deemed to be University), Bangalore

SPEAKERS

Shri. Punali Girchar, IFS (Retd)
Shri. K. P. Murthy
Dr. Ivan Jose
Rev. Dr. Benny Thomas
Rev. Dr. Sony Chandattu

ON SATURDAY 5th November 2022
START AT 09:00 AM
1ST BLOCK AUDITORIUM SOET, CHRIST KENGERI CAMPUS
SPONSORER AICTE-SPICES

Event Poster

ANDROID CONTROL ROBOTICS STAGES

- 2 days workshop @ Zonal Centre
- Competition & Certification
- Grand Finale @ IIT

HIGHLIGHTS

- Make your android control robot.
- Hardware tool kits will be given in a group of 5-6 students.
- All participants will get a certificate & winners will get a Merit Certificate.
- Note: Merit Students will get the direct entry at IIT for Grand Finale.

EVENT DETAILS

- Zonal Centre: Christ University
- Event Date: 9-10 Feb 2023
- Event Fee: Rs. 999/- per participant
- contact: 8660663113, 8660793897

STUDENT'S CORNER



KINGSHUK MAJI
4BTRAM



B.TECH IN MECHANICAL ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

- 1.DEMONSTRATE TECHNICAL COMPETENCE IN APPLYING MECHANICAL ENGINEERING PRINCIPLES TO DEVELOP SOLUTIONS USING CONTEMPORARY TOOLS TO SOLVE PROBLEMS IN CORE AND MULTI-DISCIPLINARY DOMAINS.
- 2.CONTINUOUSLY UPGRADE KNOWLEDGE AND SKILLS IN CURRENT AND EMERGING TECHNOLOGIES THROUGH SELF-LEARNING, RESEARCH AND PURSUIT OF SPECIALIZATION.
- 3.WORK WITH ETHICAL VALUES IN MULTI-DISCIPLINARY AND DIVERSE TEAMS EXHIBITING LEADERSHIP IN CONTRIBUTING TO THE SOCIETAL NEEDS AND ENVIRONMENT.

PROGRAM SPECIFIC OUTCOME (PSOS)

- 1.POSSESS THE KNOWLEDGE AND SKILLS TO CHOOSE APPROPRIATE MATERIALS AND MANUFACTURING METHODOLOGIES TO PRODUCE COMPONENTS AND ASSEMBLIES WITH BUILT-IN QUALITY AND COST EFFECTIVENESS.
- 2.USE OF CONVENTIONAL AND CONTEMPORARY TOOLS FOR THE DESIGN AND ANALYSIS OF STRUCTURAL AND THERMAL SYSTEMS.
- 3.DEPLOY EFFICIENT, CLEAN AND GREEN TECHNOLOGIES IN ENERGY CONVERSION FOR A SAFE AND SUSTAINABLE ENVIRONMENT.

B.TECH IN AUTOMOBILE ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

- 1.APPLY BASIC AND ENGINEERING SCIENCE KNOWLEDGE TO PROVIDE WORKABLE SOLUTIONS TO THE VARIOUS AUTOMOTIVE APPLICATIONS.
2. DEMONSTRATE PROFESSIONAL COMPETENCE THROUGH CONTINUOUS LEARNING, AND ACQUIRE PROFESSIONAL SKILLS IN THE FIELD OF AUTOMOBILE ENGINEERING TO DEVELOP SOLUTIONS TO THE COMPLEX PROBLEMS.
- 3.DEMONSTRATE THE CHARACTERISTICS OF SOCIAL RESPONSIBILITY, PROFESSIONAL ETHICS AND CONTINUOUS LEARNING FOR THE SUCCESSFUL PROFESSIONAL CAREER.

PROGRAM SPECIFIC OUTCOME (PSOS)

- 1.APPLY THE CONCEPTS OF AUTOMOBILE ENGINEERING TO DESIGN AND BUILD VEHICLES FOR DIFFERENT APPLICATIONS.
- 2.DISASSEMBLE AND ASSEMBLE VEHICLES SUCH AS TWO AND THREE-WHEELER AND ALSO LIGHT DUTY, HEAVY DUTY TRUCKS.

B.TECH IN ROBOTICS AND MECHATRONICS

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

- 1.USE THE DOMAIN KNOWLEDGE TO EVOLVE SOLUTIONS FOR THE CHALLENGES ARISING OUT OF APPLICATIONS OF ROBOTICS AND MECHATRONICS.
- 2.WORK IN CORE AND INTERDISCIPLINARY PROJECT TEAMS, PURSUE SPECIALIZATION AND RESEARCH.
- 3.DESIGN AND DEVELOP ENGINEERING SYSTEMS WITH ETHICAL PROFESSIONALISM FOR THE BENEFIT OF THE INDUSTRIAL WORLD AND THE SOCIETY.

PROGRAM SPECIFIC OUTCOME (PSOS)

- 1.SHOULD HAVE THE ABILITY TO SELECT AND APPLY APPROPRIATE TECHNIQUES AND PROGRAMMING TOOLS TO DEVELOP SAFE AND EFFICIENT ROBOTIC AND MECHATRONIC SYSTEMS FOR THE SPECIFIC INDUSTRIAL REQUIREMENTS.
- 2.SHOULD HAVE THE ABILITY TO ANALYSE AND IMPROVE THE PERFORMANCE OF MANUFACTURING PROCESS BY IMPLEMENTING ROBOTICS AND AUTOMATION.



CONTACT US

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