

DEPARTMENT OF MECHANICAL ENGINEERING MECHANICAL ENGINEERING ASSOCIATION



Mechanical Engineering Department's Official Newsletter

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DECEMBER 2021

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RUBBER TYRED METRO

Mr. Nithesh S V 20BME080 2nd Mech.- B

Rubber Tyre Metro System:

Rubber – tyred metro rail, was built in Montreal, Quebec, Canada. It was the first completely built metro system in 1966. This system is a form of Rapid Transit system which is made of a mixture of road and rail technology. They run on rubber tires, which rolls the pads on tracks as well as steel wheels with flanges on steel tracks. They are mostly purpose built and designed to be operated smoothly.

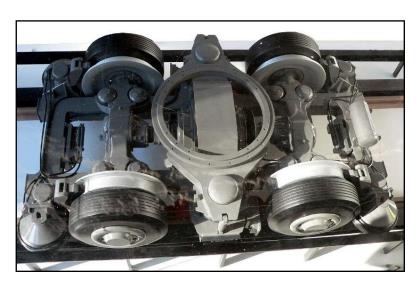
Iron wheeled Vs Rubber wheeled metro:

Comparatively the iron wheeled metro is 90% in current use than the rubber tyred system, but the rubber tyred system gives a good solution

Iron wheeled metros are ideal in reducing energy consumption (i.e.) low friction and provides lot of capacity for weight holding and is very economical. So comparatively, rubber tyred metro is more efficient than the other one. It is useful in steep areas, minimal infrastructure vibration, gives a strong grip and tyre flexibility is more. Technology:



General in trains, the driver has effort for steering, since the train relies on some guided path of the railway track. This guided ways vary with the type of networks. Major cases, there will be two parallel roll ways, and the tires are made of suitable materials.



The Montreal Metro, Toulouse Metro, and some more use concrete material and the Busan subway Line uses Concrete Slab. The Paris Metro, Non- underground section of Santiago Metro uses "H – shaped hot rolled steel". The Sapporo system uses single central guide rail.

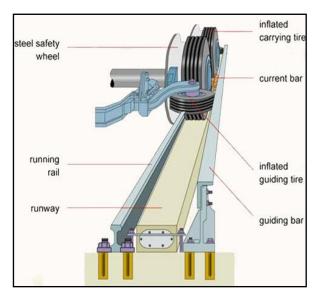
The electric power is generated from one of the guide bars, which acts as a third rail. The current is taken from pickup shoe and the return current is done through return shoe.

They have high rolling resistance than steel wheels.

Advantages:

Usually on daily basis, rubber wheel is more advantageous than steel wheel.

- It has quick and fast acceleration with high ability in climbing and descending in slopes.
- It is feasible with conventional rail tracks.
- Short and quick braking distance.
- Highly reduced rail wear, with reduced maintenance costs.
- ♣ It gives a smooth ride even in open air.



Disadvantages:

Due to higher friction and high rolling resistance there arises some disadvantages for rubber tyre metro when compared to steel wheels.

- It needs more energy.
- It results in generating more heat.
- It causes variation in weather around them.
- Traction control gets lost in unconditional weathers.
- Cost is high for replacement.
- Inside tunnel, it creates a high noise than others.
- Ride becomes worst in these cases.



Inference:

Even though this makes a complex system, rubber tyred metro is a bit simple one when compared to guided buses. It faces an issue of heat dissipation during electrodynamic braking. In frequent operations, the heat dissipated from braking is a big problem and it lags a good ventilation. Many rubber tyred metro do not have air conditioning since it would increase the temperature.

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PROGRAMMES ORGANIZED

 A technical talk on "Recent advancements on Productivity Improvement" was organized by the department in association with Coimbatore Productivity Council (CPC) on 25.11.2021.
Mr. Ravikumar R, General Manager - Operations, Roots Multi-clean Ltd., Coimbatore was the resource person.







Mr. M. A. Vinayagamorthi, Assistant Professor – II and **Mr. R. S. Mohankumar**, Assistant Professor, coordinated the event.

A IIC Quality Council Meet was organized in the department on 15.11.2021. Mrs. Radha, Founder, Spikra, Chennai was the chief guest. **Dr. S. Balasubramanian**, Associate Professor was the coordinate of the event.



Program Assessment Committee (PAC) meeting was conducted on 26.11.2021 in the department on 26.11.2021. **Dr. N Sangeetha**, Sr. Associate Professor, coordinated the event.

VALUE ADDED PROGRAMMES



Value added programme on "Product design and Development" is being conducted by Mr. R. S. Mohan Kumar, Assistant Professor and Dr. A. P. Arun, Assistant Professor – II from 24.11.2021 to 10.12.2021 for Third year students.





Another Value-added programme on "Basics of Python for Mechanical Engineers" is being conducted by **Dr. S. Sivakumar**, Assistant Professor – III from last month.

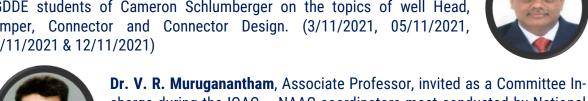
FACULTY AS RESOURCE PERSONS



Dr. S. Bhaskar, Associate Professor, invited as Resource person for offline session (02 hours -09.11.2021) - KCT New faculty induction - Arranged by HR Department - KCT - Topic: KCT's effort toward accreditation by NAAC and NBA" - at HR department conference room at KCT - for 03 newly recruited senior faculty of Kumaraguru College of Technology and he was the Resource person - online Session (01 hour - 24.11.2021) - Workshop on Preparing for NBA - Topic: "Preparation for NBA committee visit" - For Sakthi

Polytechnic College, Sakthi Nagar -638315, Organised by Sakthi Polytechnic College for around 75 of them faculty.

Dr. R. Manivel, Professor, Mechanical Engineering, delivered a lecture to PGDDE students of Cameron Schlumberger on the topics of well Head, Jumper, Connector and Connector Design. (3/11/2021, 05/11/2021, 11/11/2021 & 12/11/2021)





charge during the IQAC - NAAC coordinators meet conducted by National Science Foundation, Coimbatore on 20.11.2021 at Hotel Rathna Residency, Coimbatore.

Dr. C. Velmurugan, Professor, Dr. S. Balaji, Assistant Professor, Mr. P. Pradeep, Assistant Professor & Mr. S. Prabhu (Sr), Assistant Professor were invited as NBA external auditor by Sakthi Polytechnic College, Erode for reviewing the preparedness of the departments for the peer audit during 22-11-2021 and 23-11-2021.









Dr. V. Muthukumaran, Professor, Dr. K. M. Senthilkumar, Associate Professor, Dr. M. Rameshkumar, Assistant Professor, Dr. S. Balaji, Assistant Professor and Mr. S. Prabhu (Sr), Assistant Professor, were the expert members in PAC meeting conducted by the department on 26-11-2021.













Dr. V. Muthukumaran, Professor was the expert member in DAB meeting for Physics department of our institution conducted on 27-11-2021.

Dr. K. M. Senthilkumar, Associate Professor was the expert member in DAB meeting for Mechatronics department of our institution conducted on 27-11-2021.





Dr. M. Rameshkumar, Assistant Professor was considered as visiting faculty for CDAC, Kolkatta for their PG Diploma from 01-11-2021 and 13-11-2021.

Dr. S. Balaji, Assistant Professor, was the presenter in KCT Weekly Forum on 26-11-2021.



PAPER SUBMISSION

Following faculty members submitted their papers in various Scopus indexed journals for publication.

- Dr. V. Manivelmuralidaran V
- Dr. A. P. Arun
- Dr. K. Krishnamoorthi
- Dr. S. Thirumurugaveerakumar
- Dr. K. K. Arun
- Mr. V. R. Navaneeth



PAPER PUBLICATION



Dr. K. M. Senthil kumar, Associate Professor published a paper in the International Journal "Journal of Ceramic Processing Research". Vol. 22, No. 6, pp. 1~8 (2021).

LICENSE RENEWED

To check the similarity of Faculty and Student research articles, TURNITIN -Similarity check software (2163 user license) was renewed on 28-11-2021. For Rs. 6,52,868/-.

PAPERS REVIEWED



Dr. M. Thirumalaimuthukumaran, Assistant Professor, reviewed a paper titled "Finishing of laser powder bed fusion-based turbine blade using polymer rheological abrasive fluids" for AIMTDR Conference, PSGTECH.

Dr. C. Velmurugan, Professor, reviewed a paper titled "Bonding Properties of Al(Al2O3) bulk Composites produced via combined stir casting and Accumulative Press bonding" for the International Journal of Surface review and letters.





Dr. S. Balasubramanian, Associate Professor, reviewed following tiled papers for the International Journal Materials Today

- Mode Shape Modification of Irregular Design of Buildings
- Risk assessment of cost overrun using fuzzy logic model
- Tuning of Photoluminescence Behavior of Gold Coated Chitosan-Polyvinyl Alcohol binding with Graphene Quantum Dots

Dr. K. M. Senthilkumar, reviewed a couple of papers titled "Performance evaluation of composite coagulant in treating textile wastewater" and "The Flyash addition on Al 5xxx series alloys prepared by die cast and examine its surface by Radiographic method" for the International Journal Materials Today.



AWARDS APPLIED



Mr. B. Jeeva, Assistant Professor applied for Science Academies- Summer Research Fellowship Programme at Indian Academy of sciences, Bangalore.

AWARDS RECEIVED

Dr. V. R. Muruganantham, Associate Professor received a participative award from National Science Foundation Head Quarters, Coimbatore on 20.11.2021



CONSULTANCY



Dr. M. Rameshkumar, Assistant Professor with his team provided consultancy worth Rs. 3,89,400/- for M/s. Emerald Jewellery, Coimbatore during the month of November.

PATENTS FILED

Dr. S. Thirumurugaveerakumar, Associate Professor, filed a patent application titled "Smart Rodent Trap on Agricultural Farm" on 13-11-2021.



Dr. K. M. Senthil Kuamr, Associate Professor, **Dr. S. Balaji**, Assistant Professor and **Dr. V. Muthukumaran**, Professor filed a patent application titled "Footrest for kids on Bike" on 11.08.2021







Dr. K. M. Senthilkumar, Associate Professor, **Dr. S. Balaji**, Assistant Professor, **Dr. K. K. Arun**, Assistant Professor – II, **Mr. V. R. Navaneeth**, Assistant Professor and **Dr. M. Rameshkumar**, filed a patent application titled "Milk Overflow Detector" on 27-11-2021.











PROGRAMMES ATTENDED / COURSES COMPLETED



Prof. T. R. Sukumar, Associate Professor participated in a Workshop on "Entrepreneurship and innovation as career opportunity" from 30-11-2021 to 30-11-2021, organized by Textile Technology, KCT. He also participated in a Webinar on "Recent trends in automotive industries" on 13-11-2021, organized by ECE department, Kumaraguru College of Technology. Further he also participated in another Webinar on "Introduction to product design and development" on 29-11-2021, organized by IIT, ROORKEE.



Mr. S. Rajesh, Assistant Professor complied an online course through COURSERA on "Python programming basics" from 01-10-2021 to 30-11-2021.

Dr. S. Balasubramanian, Associate Professor, **Mr. M. A. Vinayagamoorthi**, Assistant Professor – II and **Mr. R. S. Mohankumar**, Assistant Professor completed a NPTEL course on "Welding Application Technology" from 01-08-2021 to 31-10-2021, organized by NPTEL, Guwahati.







Mr. P. Karthi, Assistant Professor completed an online course through COURSERA on "The Finite Element Method for Problems in Physics" from 01-10-2021 to 30-11-2021.





Mr. P. D. Devan, Assistant Professor completed a couple of Certification courses on "Supply Chain Management" and on ""Inventory Management" from 11-02-2021 to 14-11-2021 and from 19-11-2021 to 29-11-2021 respectively, conducted by Great Learning.

Dr. S. Sivakumar, Assistant Professor - III completed an online Refresher Course on "Basics of Python" from 01-08-2021 to 30-11-2021, organized by COURSE ERA.





Dr. S. Balasubramanian, Associate Professor completed an Online Course on "Industrial Automation" from 01-10-2021 to 30-11-2021, organized by ROBORAM, Nagercoil.

Dr. M. Balaji, Associate Professor participated in a Conclave on "5th Edition 'Quality Conclave' -'Quality Redefined'" from 19-11-2021 to 19-11-2021, organized by CPC and QCFI, Coimbatore, Racecourse, Coimbatore.





Dr. B. N. Sreeharan, Assistant Professor - II participated in a Webinar on "How is Data Science being used in Engineering" from 30-10-2021 to 30-10-2021, organized by Department of Electronics and Communication Engineering of Mahendra College of Engineering, Namakkal and he participated in an FDP on "Additive Manufacturing: Present & Future Trends" from 01-11-2021 to 06-11-2021, organized by Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology, Hyderabad.

PROFESSIONAL SOCIETIES' ACTIVITIES

INDIAN WELDING SOCIETY (IWS)

The following thirty-five students of Second Year Mechanical Engineering of 2020 Batch have applied for IWS student members for three years through Indian Welding Society Students Forum, Department of Mechanical Engineering, Kumaraguru College of Technology, Coimbatore.

LIST OF STUDENTS APPLIED FOR IWS STUDENT MEMBERSHIP

1	AKASI	1 \ / - 1		ARIKII	
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		1 V L L	\neg	\neg	v

2. ANANTHU KRISHNA G V

3. ARUNVASAN S D

4. ATHARSH A R

5. DOMINIC SAVIO J

6. GOKULAVASAN K

7. GOWTHAM R

8. GURUBARAN R

9. IMAYAN K T

10. JEEVABHARATHI K

11. JEFFIN SHIBU

12. JEYASURIYAA K P

13. KALAISELVAN P

14. KARTHICK RAJA R M

15. KARTHIK RAJA J

16. KASHYAP RAJEEV

17. KAWIN SIDDARTH R

18. KEVIN RICARDO RAJ R

19. KISHORE A

20. MADHAVAN G S

21. MAHESH S

22. MOULEESWAR K

23. MUKESH K

24. NANDEESH M

25. NAVINKARTHIK G G

26. PRADEEPKANNAN R

27. PRADHEEP L

28. RAKUL S

29. RAMANAN B

30. SAI VISHNU S S

31. SIVASUBRAMANIAN P

32. SRIDHARAN S

33. THARAN KUMAR M

34. THILAK T G

35. VIDHUN C R

COIMBATORE PRODUCTIVITY COUNCIL (CPC)

The following Sixty-one students of Second Year Mechanical Engineering students and thirteen of three years registered for CPC student membership, through KCT-CPC students forum, Department of Mechanical Engineering, Kumaraguru College of Technology, Coimbatore.

LIST OF STUDENTS - CPC STUDENT MEMBERSHIP

- AAKASH KUMAR V
- ABHINAV R
- AHAMED SHARIEFF
- ANANTHU KRISHNA G V
- ARUNVASAN S D
- BALAVIGNESH P
- BHARATH YUVARAJ P
- BRAVIN S D
- DHARANEESH N
- GOKULAVASAN
- GURUBARAN R
- ANJANA PRASAD
- IMAYAN K T
- JEEVABHARATHI K
- JEFFIN SHIBU
- JOBISHA CELIN. A
- KALAISELVAN P
- KARTHIK RAJA J
- JEYASURIYAA K P
- KASHYAP RAJEEV
- KAWIN SIDDARTH R
- KEERTHIVASAN S P
- KRITHIK SIVASUBRAMANIAN
- KUMARASAMY R
- LOKESWARAN R
- MADHAVAN G S
- MAHESH S
- MANOJ KUMAR T
- MUKESH K
- MURUGA SHRI V
- NAVINKARTHIK G G
- NISANTH R
- NITHESH S V
- NITHIN KARTHIK S
- PRABHAKAR T R
- PRADEEPKANNAN R
- PRASATH D M
- DARSHAN S

- PRAVEEN KUMAR R
- RAHUL V
- RAJAMANICKAM RAMESH SHRIVISHNIJ
- RAKUL S
- RITHUVARSHAN I M
- ROSHAN V
- SAM TIRSHATH J
- SANGEETH R
- SANJAI KUMAR A D
- SANJAIS
- SARAN K
- SHAKEEL AKTHAR S
- SHAKTHIESWARAN M
- SHRIYAAS V
- SIVA GNANA DEEPAK S
- SRIGANESH M
- STEVE LEO J
- STUART L
- SUBRAMANIAN M
- SUJITH KUMAR S
- SURENDHER S
- THILAK T G
- VIJAY M
- MANAV R SAMANT
- RAAJ KHISHORRE K R
- KISHORE KRISNA S
- NITHEESHWAR R K
- ASWIN BAALAJE R
- JAYABALU S
- SANGEETHKUMAR B
- SUVANRAJ R
- MOHAMED THOUFEEK M
- GEORGE JOHN PANICKER
- PRAVEEN KUMAR J
- SIVA K
- KAMALESH S

CONFEDERATION INDIAN INDUSTRY (CII)

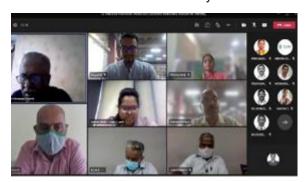
CII Industrial Innovation Award 2021- Research Institution Category Assessment meeting.

Our institution has applied for the Confederation of Indian Industry (CII) in Sep 2021. The Evaluation for the award application was done on Nov 8th, 2021 by CII appointed jury member Mr. K Veeramani. Mr. Veeramani completed graduation form NIT Rourkela in 1983 and post-graduation in Metallurgical Engineering from NIT Rourkela. He has worked with M/s Larsen & Toubro Limited for 38+ years. Now is a retired Engineer settled in Chennai.

The event was coordinated by the following team members from various department:

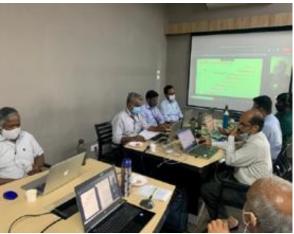
- Research and Development team: Dr. R. Manivel/ Professor- Mech and Dr. Sampath. K/ AP-I SFS
- IPR cell members: Dr. K. Paramasivam, Professor/ EEE and Mr. M. Mathankumar, AP-I/ EEE
- Institution Innovation cell (IIC) members: Dr. K. Paramasivam, Professor/EEE, Dr. V. Geetha, Professor, MCA, Mr. R. Navaneethakrishnan, AP-I/ ECE, Mr. S. Suryaprakash, AP-I/ EEE and Dr. S. Balasubramanian, Associate Professor/Mech
- Forge: Dr. L. Meera and Mr. N. Deepak
- Awards and Competition Coordinator: Mr. B. Jeeva, AP-I/Mech

The Assessment was attended by around 50+ faculty members and 10 students from KCT who are involved in research and innovation activities, filing patents, licensing patent to companies, etc. The event was attended by educators from Research cell, Forge, i-Qube, KCIRI, etc.,









PLACEMENT DRIVE

The department of Mechanical Engineering has arranged for an on-campus recruitment drive for the Mechanical Engineering students on 24-11-2021. M/s. MACBRO Technologies conducted the drive. 12 students have been shortlisted for the final HR interview which is planned during the first week of December 2021.







GLIMPSES OF PAC MEETING

PAC MEETING is conducted on 26.11.2021 to assist academic units with assessment of student learning and development by reviewing the quality of, and providing feedback on, their assessment plans.





Innovism 3.0-Virtual Innovative Idea Symposium by ProjectContest.com



Last Date to apply: 18/12/2021

Reward: Cash Prize + Award + Certificates

INTRODUCTION:

Innovism 3.0-India's Virtual Innovative Symposium which is in the 3rd Edition Organized by Projectcontest.com in association with Business Incubation Centre of Periyar University, Cambrionics Life Science, Nandha InfoTech, Trueline Publisher, EDiyLabs Technological Solutions, Startup Culture & Dream360 to bring out Ideas/Solutions for problems and nurture innovative skills among Indian students pursuing degree in colleges. In the Previous Editions More than 50+ Colleges with 260+ Participants across India Presented their Idea and Project Demo.

Innovism 3.0 will Completely be an Online Events -

- 1. Innovative Idea/Project Presentation
- 2. Quiz on Intellectual Property Rights (60 Min)
- 3. Workshop on "IOT Using NodeMCU"- 4 hrs

Rules and Guidelines:

- Students as an Individual or a **Team of max 4 members** can participate.
- Entire Paper/PPT with max length of 6 pages/10 slides with file size less than 2MB to be submitted in the Registration Link (if available or Submit later)
- Presentation to be delivered online to Jury Panel Members.
- Faculty Mentor will receive Mentoring Certificate if Students Enroll as a Team (Min 3) & Best Mentor Award if the team wins.
- Payment can be made in the given UPI ID or NEFT and the Screen shot to be submitted in the registration Link.
- Students will be connected in What-app group for further proceeding
- Quiz Event conducted with Proctor Enabled Google Form(30 Min)
- Workshop is planned to Conduct from 2.30pm to 5.00pm(150 minutes) on the Innovism day

Workshop Topics:

- What does "the Internet of Things" means and how does it relate to Cloud computing concepts.
- How do open platforms allow you to store your sensor data in the Cloud?
- The basic usage of the NodeMCU environment for creating your own embedded projects at a low cost
- How to connect NodeMCU with Android phone.
- How to send data to the Internet and talk to the Cloud.
- How to update sensor readings on Social Networking Sites/ Google sheets.

Event Date: 25th & 26th December 2021

2022 Third International Conference on Intelligent Computing Instrumentation and Control Technologies (ICICICT), Vimal Jyothi Engineering College, International Conference, Kannur, Kerala, 11th - 12th August 2022

Category: International Conference Start Date: 11th August 2022 End Date: 12th August 2022

Organiser: Vimal Jyothi Engineering College

City: Kannur State: Kerala

CONTACT DETAILS

Dr. G. Glan Devadhas Conference Chair ICICICT-2022, glandeva@vjec.ac.in +919894896257

LAST DATES FOR REGISTRATION

Full Paper Submission : 4th March 2022 Notification of Acceptance : 5th May 2022

Final Paper Submission and Author's Registration: 6th June 2022

Conference Date: 11th and 12th August 2022

REGISTRATION FEES

Category Delegates From India (IEEE Members) PG/ UG students INR 5000/-Faculty/ Research Scholars INR 6000/-From Industry INR 7500/-Accompanying Person INR 2000/-

USEFUL LINKS:

Brochure Link

EVENT LINK: https://vjaei.com

International Conference on Soft Computing and Intelligent Technologies ICSCIT 2021, Cheran College of Engineering, International Conference, Karur, Tamil Nadu, 24th December 2021

Category: International Conference Start Date: 24th December 2021 End Date: 24th December 2021

Organiser: Cheran College of Engineering

City: Karur

State: Tamil Nadu

CONTACT DETAILS:

S.Kannadhasan

B.E.,M.E.,M.B.A.,[Ph.D].,PGDCA.,PGVLSI.,PGESDI.,PGDRD.DCHN,DCP.,ADSE.,PGDBI.,B.Sc.,M.Sc. ,M.A, MIE.,MISTE.,MIETE.,CSI.,IACSIT.,IAENG.,IEAE., ICSEC.,SPG.,SEEE.,SDIWC.,IJSPR.INSC.,IARDO.,EAI **Assistant Professor** Department of Electronics and Communication Engineering

Cheran College of Engineering, K.Paramathi

Karur, Tamilnadu-639111

Ph: 9677565511 (Whatsapp), 8838586305

LAST DATES FOR REGISTRATION:

Last Date of Paper Submission: 20/12/2021

Mail your research Paper: submit@conferenceworld.in

REGISTRATION FEES:

Non- Author Participation (Only for attending the conference): 500 INR Presenting the paper in the conference (Max 3 Authors in a paper): 1000 INR Publication in conference proceeding with ISBN (Max 3 Authors in a paper): 1500 INR Publication in conference proceeding with ISBN and Publication in Journal: 2000 INR [(Peer Reviewed), 8000 INR (Web of Science), 12000 INR (Scopus)] If More than three authors, each additional author will have to pay 500 INR. Page Limit 12, INR 100 will be Charge for each additional page.

EVENT LINK: https://conferenceworld.in

ICTAHSEL 2K22, ASET Institute of Technology Chennai Campus, International Conference, Chennai, Tamil Nadu, 28th - 29th January 2022

Category: International Conference Start Date: 28th January 2022 End Date: 29th January 2022

Organiser: ASET Institute of Technology Chennai Campus

City: Chennai State: Tamil Nadu

DESCRIPTION:

International Conference On "Technological Advancement in Health Safety Environment & Logistics" – 2022 (ICTAHSEL 2K22)

28th & 29th January 2021 At ASET INSTITUTE OF TECHNOLOGY CHENNAI CAMPUS

LAST DATES FOR REGISTRATION

Last date for Registration fee: 22nd January 2022

REGISTRATION FEES

Students

Before Due Date: Rs 600 (9 USD) After Due Date: Rs 900 (13 USD)

Faculty & Rs

Before Due Date: Rs 900 (13 USD) After Due Date: Rs 1100 (15 USD)

Industrial Delegates

Before Due Date: Rs 1200 (17 USD) After Due Date: Rs 1600 (22 USD)

Foreign Delegates

Before Due Date: (200 USD) After Due Date: (220 USD)

EVENT LINK: https://www.asetsafety.ac.in/international-conference-2022/

STUDENT ACTIVITIES

Inauguration Of Centre of Exemplary Learning - CAD

The Inauguration was organized by COEL - CAD Team and held on 15th November, 2021 at 5:00 PM to 6:00 PM at CADD Centre – D Block. The 30 students present in the inauguration have topped a screening test with marks more than 70%. The first step towards the learning had already begun in an exemplary manner.

The inauguration event was started with a welcome address by Mr. Manav R Samant. Certified Solidworks Professional. Then. Dr. Velmurugan, HOD of Mechanical Engineering Department gave a brief introduction about the Centre and its importance, in a futuristic scope. Followed by the Department HOD, Mr. Sukumar, Academic Coordinator of the Mechanical Engineering Department gave a motivational speech to our students. The faculty coordinator Dr B N Sreeharan. Assistant professor - II, gave a



complete pathway guide for the entire course. Team COEL gave a presentation on the complete course and the details on 2 certifications that are to be completed within the specified time – CSWA – Mechanical Design and Additive Manufacturing. Seniors from MEA gave a view and posted their opinion on the requirement of the centre.

After a small interactive session with the students Nitheeshwar, Certified Solidworks Professional provided with the vote of thanks.

MEA team coordinated the event flow under the guidance of V R Muruganantham, Associate professor and Mr. M A Vinayagamoorthi, Assistant professor – II.





STUDENT ACTIVITIES

Technical Talk on "Recent Advancements on Productivity Improvement"

The Session was organized by KCT CPC Students Forum and held on 25th November, 2021 at 3:30 PM to 4:40 PM at Civil Department – Seminar Hall. It was started with a welcome address by Mr. Raaj Khishorre K R, Student Coordinator of KCT CPC Students Forum. Then, Mr. M. A Vinayagamoorthi, Faculty Coordinator gave a brief introduction about the resource person Mr. Ravikumar R who is currently working as a General Manager – Operations, Roots Multiclean Ltd, Coimbatore.



And then, the session was started by Mr. Ravikumar. He had given an informative and wonderful insights on Productivity improvement.

After the technical talk, CPC Student membership certificates was distributed to 74 students by Mr. Ravikumar R, Mr. MA Vinayagamoorthi and Mr. R S Mohan Kumar. And then, Mr. R. S Mohan Kumar sir, one of the faculty Coordinator of CPC proposed a vote of thanks.

This was organized under the guidance of Dr. V R Muruganantham, Associate professor and Mr. M A Vinayagamoorthi, Assistant Professor – II.



AWARDS APPLIED

Mr. P. Rahul, 19BME020, applied for Science Academies- Summer Research Fellowship Programme at Indian Academy of sciences, Bangalore.

STUDENT ACTIVITIES

NCC CAMP

Mr. R. S. Tarun, 20BME117 selected for RDC (Training III + Launch) camp from 26.11.2021 to 15.12.2021 at NTA, Idayapatti, Madurai.

ALUMNI VISIT

Mr. S. Sudharan, Alumni, M. E. (Indl Engg - 2011-2013 batch) who is working for M/s. JJ Mills, Bangladesh visited the department during November 2021.

PROGRAMMES ATTENDED

59 of second year mechanical students completed course on "Design Thinking and New Product Development "at CADD Centre Training Services, Coimbatore during 13.11.2021 to 29.11.2021.

SANJAI KUMAR A D AKASH VELANGANNI D

GOWTHAM R LOKESWARAN R ARUL MURUGAN K

ABINESH A VENKATESAN U SHRI VISHNU R R THILAK T G

MAHESH S GOKULAVASAN K HARIRAJULU S KEERTHIVASAN S P

PRADHEEP L BALAMURUGAN S PRABHAKARAN T R KAWIN SIDDARTH R

NISANTH R

RITHUVARSHAN I M MOULEESWAR K RAMANAN B GURUBARAN R

SANTHOSH KUMAR S BRANESH KUMAR J SANGEETH R ADHIDHYA R P RAHUL V

S RAKUL

BALAMURUGAN A JOEL DAVID JOEL PRINCE P ATHARSH RAHIL S

BHARATH YUVARAJ P

KRITHIK SIVASUBRAMANIAN

VASEEKARAN S L VIDHUN C R MONISH P NITHESH.S.V ASHWIN K GOWSHICK G

SUDHEESH A

THIYANESHWARAN N

VIKASH GS DHARANEESH N MADHAVAN G S NANDEESH M

D P JAGDISH CASTRO

VETRISELVAN SHAKTHIESWARAN ARUNVASAN S D

GURU G SANJAI S AAKASH B GOWTHAM S LALITKISHORE. N JEEVABHARATHI K

VISVA K

SAI VISHNU SS

HUSQVARNA VECTORR CONCEPT



Mr. Nithesh S V 20BME080 2nd Mech.- B

Husqvarna Motorcycles:

Husqvarna motorcyles are manufactured in Sweden. They are not as much popular but are guaranteed that, they make only solid products which are very much worthy. They are well established with a reputation for their strong, dependable build all around the world.

- They released their first motorcycle in 1903
- In 1933, their bikes were more competitive with modern designs.
- ♣ Bil Nillson won the world title on 500cc
- Company got the hit of "Golden age"
- Became the legend in 70's and benchmark in 1983
- At present they are one of the most resilient teams on planet

Husqvarna Vectorr concept:

This is the new concept from this company which is to be expected to launch in the upcoming year. The estimated period was on March,2022. Actually the specifications of this concept electric scooter was not clearly given from the company. Till now the images have been leaked and the main informations.

This electric scooter comes with an powerful motor of 4kW. The battery used is not specified but the range is claimed to be 95 km. These information gives us an idea that it would be an apt one for our regular usage.



Appearance:

This scooter has been designed with many features and an aggressive good looking modern design. The front portion has a Round LED headlamp with Husqvarna batching, which is similar to their previous motorcycles. The rear side looks really amazing. In short the entire appearance is really stunning and their Black and White combination makes our eyes turn back to them. The white and black colour combination, with a lick of bright yellow is neatly executed.





COIMBATORE - 641 049

Department of Mechanical Engineering

INSTITUTE VISION:

The vision of the college is to become a technical university of International Standards through continuous improvement.

INSTITUTE MISSION:

Kumaraguru College of Technology (KCT) is committed to providing quality Education and Training in Engineering and Technology to prepare students for life and work equipping them to contribute to the technological, economic, and social development of India. The College pursues excellence in providing training to develop a sense of professional responsibility, social and cultural awareness and set students on the path to leadership.

DEPARTMENT VISION:

To emerge as a centre, that imparts quality higher education through the programme in the field of Mechanical Engineering and to meet the changing needs of the society.

DEPARTMENT MISSION:

The department involves in sustained curricular and co-curricular activities with competent faculty through teaching and research that generates technically capable Mechanical Engineering professionals to serve the society with delight and gratification.

B. E. MECHANICAL ENGINEERING

PROGRAM EDUCATIONAL OUTCOMES (PEO's):

Graduates will take up career in manufacturing and design related disciplines. PEO 1: PEO 2 : Graduates will be involved in the execution of Mechanical Engineering projects. Graduates will take up educational programme in mastering Mechanical sciences PEO 3 :

and management studies.

PROGRAM OUTCOMES (PO's):

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

- 2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **5. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **6. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 7. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **8. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **9. Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **11. Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **12. Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSO's):

- 1. Apply the fundamentals of science and mathematics to solve complex problems in the field of design and thermal sciences.
- 2. Apply the concepts of production planning and industrial engineering techniques in the field of manufacturing engineering.

M. E. INDUSTRIAL ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES (PEO's):

PEO 1 : Graduates will be mid to higher level management / engineering professionals with responsibilities in engineering management, data analysis and business operations.

PEO 2: Graduates will be engineering professionals, and technology leaders who would manage such functions as plant engineering, production, supply chain and quality management.

PEO3: Graduates would function as educators or researchers in academic institutions.

PROGRAM OUTCOMES (PO's):

P01 : An ability to independently carry out research /investigation and development work to solve practical problems.

PO2 : An ability to write and present a substantial technical report/document.

PO3 : Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

PROGRAM SPECIFIC OUTCOMES (PSO's):

PS01: Graduates able to apply the engineering management and data management concepts in industrial engineering areas.

PS02: Graduates able to apply industrial engineering skills and knowledge to manage the functions of production and supply chain management.