



DEPARTMENT OF MECHANICAL ENGINEERING

National Level Technical Symposium

MECH STORM 2K23

On 11th October 2023

Symposium Report

Organized by

Department of Mechanical Engineering,

Kings College of Engineering,

Punalkulam-613303, Pudukkottai Dt.

Website: www.kingsengg.edu.in

AGENDA

TIME	EVENTS	INCHARGE
10.00am-10.05am	Prayer Song	
10.06am-10.11am	Welcome Address	Mr. K. Dinesh, Student, III Mechanical
10.12am-10.15am	Lightning the Lamp	Dignitaries
10.16am-10.25am	Inaugural Address	Dr. J. Arputha Vijaya Selvi, Principal, KCE
10.26am-10.35am	Presidential Address	Dr. R. Rajendran, Secretary, KCE.
10.36am-10.45am	Felicitation Address	Dr. S. Sivakumar, Vice Principal, KCE.
10.46am-10.50am	Introduction to Chief Guest	Mr. S. Ponnarasan, Student, III Mechanical
10.51am-11.10am	Special Address (Chief Guest)	Dr. S. Jayabal, Principal, GCE, Sengipatti.
11.11am-11.15am	Release of Souvenir	Dignitaries
11.16am-11.30am	Tea Break	
11.31-am-1.15am	Session I	Technical & Non-technical Events
1.16pm-2.00pm	Lunch	
2.01pm-3.00pm	Session II	Technical & Non-technical Events
3.01pm-3.15pm	Tea Break	
3.16pm-3.45pm	Valedictory Function	
3.45pm-4.00pm	Vote of Thanks	Mr. S. Sabanayagam, AP/Mechanical, KCE

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REPORT ON MECHSTORM 2K23

The Department of Mechanical Engineering at Kings College of Engineering proudly organized the national-level technical symposium "MECHSTORM 2K23" on 11th October 2023. The event served as a platform for students, academicians, and professionals to share knowledge and innovations in the field of mechanical engineering.

The symposium commenced with the "Tamil Thai Vaazthu" prayer song. Welcome address was given by Mr.K.Dinesh, III Mechanical Engineering student, Kings College of Engineering. The dignitaries began the symposium by lighting the lamp, which marked the beginning of the event. Dr. R. Rajendran, Secretary of the KCE, presented a shawl and a memento to the distinguished guest as a token of his appreciation.

The Inaugural Address was given by Dr. J. Arputha Vijaya Selvi, the Principal of Kings College of Engineering. Dr. Selvi emphasized the importance of research, innovation, and collaboration among academic institutions and industries. She set the tone for the symposium, underscoring the need for continuous learning and development in the field of mechanical engineering.

The Presidential Address was delivered by Dr. R. Rajendran, the Secretary of Kings College of Engineering. Dr. R. Rajendran shared his insights on the significance of such events in promoting academic and technical excellence. He also encouraged the participants to engage actively and make the most of the opportunities presented at MECHSTORM 2K23.

Dr. S. Sivakumar, the Vice-Principal of Kings College of Engineering, presented the Felicitations Address. He acknowledged the efforts of the organizing committee, faculty, and students in putting together an event of this scale. Dr. S. Sivakumar encouraged the participants to take advantage of the technical and non-technical sessions, and paper presentations to expand their knowledge and skills.

The Chief Guest for the event was Dr. S. Jayabal, Principal of Government College of Engineering, Sengipatti. Mr. S. Ponnarasan, a student of III Mechanical Engineering, introduced Dr. S. Jayabal, highlighting his numerous contributions to the field of engineering.

Dr. S. Jayabal expressed his gratitude for the warm welcome and spoke about the role of technology in shaping the future of the mechanical engineering field.

The highlight of the event was the Special Address by Chief Guest Dr. S. Jayabal. He delved into the challenges and opportunities in the mechanical engineering domain and stressed the importance of nurturing talent and fostering research and development. Dr. S. Jayabal's insights were invaluable to the aspiring mechanical engineers in attendance.

Glimpses of the Symposium “MECHSTORM 2K23”



Opening Ceremony-Tamizh Thai Vazhthu



Welcome Address by Mr.K.Dinesh,
Student, III Mechanical Engineering



Dr.R.Rajendran, Secretary, KCE
lighting the kuthuvilakku



Dr.S.Jayabal,Principal,GCE,Sengipatti,
lighting the kuthuvilakku



Dr.J.Arputha Vijaya Selvi, Principal, KCE lighting the kuthuvilakku



Dr.S.Sivakumar, Vice Principal, KCE lighting the kuthuvilakku



Honoring the Chief Gueset



Inaugural address by Dr.J.Arputha Vijaya Selvi, Principal, KCE



Presidential Address by Dr.R.Rajendran, Secretary, KCE



Felicitation Address by Dr.S.Sivakumar, Vice Principal, KCE



**Chief Guest introduction by Mr.S.Ponnarasan,
Student, III Mech**



Special Address by Chief Guest



Releasing of souvenir by dignitaries



Audience for paper presentation at Chera Hall

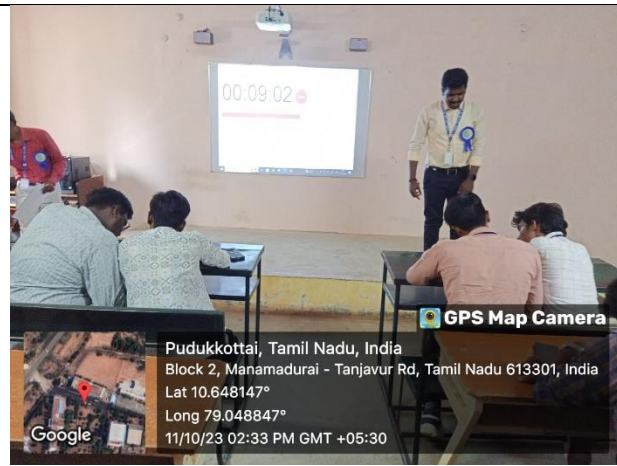
The "MECHSTORM 2K23" event included technical events, non-technical activities, and fun events. Paper presentation, Technical Quiz, CAD Modelling, Technical Connection, and Project Expo were the technical activities planned. Short Film, Free hand sketching, photography memory, and Pictionary were the non-technical activities of the technical conference, while the fun events were Free Fire (BR Squad), Karaoke with singing, and Magic Bowl. The symposium also featured a competition for student teams to showcase their engineering skills through various practical challenges.

Regarding the main technical event, out of 33 technical papers 15 papers were selected and presented in the paper presentation session. The session was chaired by Dr. T. Pushparaj, HOD/Mech, Dr. P. P. Shantharaman Asso. Prof/Mech and Dr. R. Shankar Asst. Prof/Mech. They reviewed and selected the two best papers.

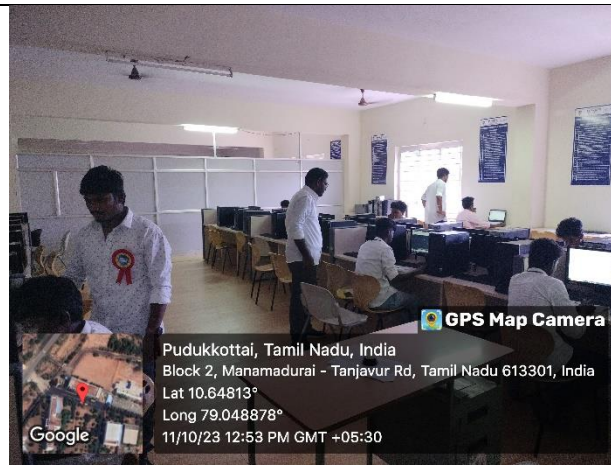
Other technical, non-technical and fun events was given in the summary table.



Paper Presentation



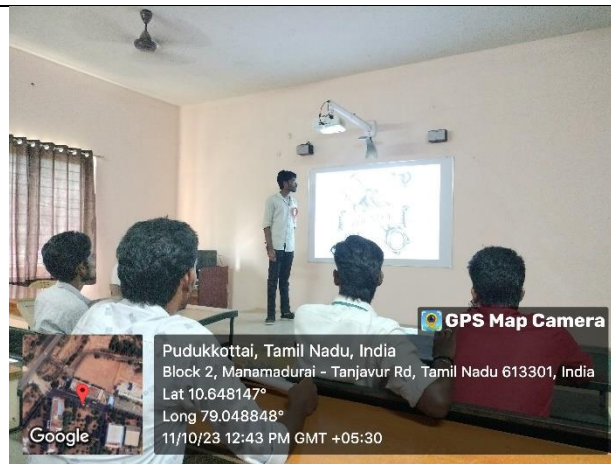
Technical Quiz



CAD Modeling



Technical Connection



Pictionary



FreeFire

The event was a resounding success, with enthusiastic participation from students, faculty, and professionals from various institutions. It offered a rich learning experience and served as a testament to the commitment of Kings College of Engineering to promote excellence in mechanical engineering.

In conclusion, MECHSTORM 2K23 was a remarkable gathering of individuals passionate about the field of mechanical engineering. The event left participants inspired, motivated, and better equipped to face the challenges and opportunities that lie ahead in this dynamic field. The organizers and participants are grateful to the distinguished guests and speakers for their valuable contributions to the event's success.

Finally, the valedictory function was started with a video presentation by final Mechanical students that showed the latest innovations (Projects done by Mechanical students of KCE) in Mechanical Engineering. Mr.S.Sabanayagam, an AP/Mechanical, provided a symposium summary. Dr.T.Pushparaj, Head of Department of Mechanical Engineering, handed out awards to the winners and gave out certificates of achievement to everyone who took part. Mr.H.Agilan, AP/Mech, Mr.S.Sabanayagam AP/Mech, Mr.R.Rajadurai AP/Mech and Mr.S.Balaganesh AP/Mech organized and coordinate the entire symposium. Mr. S.Sabanayagam, AP/Mech delivered vote of thanks. The symposium was successfully finished with national anthem.

LIST OF RESEARCH ARTICLES
National Level Technical Symposium
"MECH STORM 2K23"

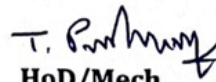
TECHNICAL SESSION	
MECH STORM 01	Optimization of Electric Discharge Machining Process Parameters using Grey Relational Analysis for Incoloy 800HT
	Christo Charles.S ¹ , Abiyuth. A ¹ ¹ St. Joseph College of Engineering & Technology, Thanjavur
MECH STORM 02	The role of computer aided design/computer assisted manufacturing (CAD/CAM) and 3 – Dimensional printing.
	Pagalavan.M ¹ , Gowtham.D ¹ ¹ St. Joseph College of Engineering & Technology, Thanjavur
MECH STORM 03	Thermal and structural analysis on an exhaust manifold by using NX NASTRAN
	Alwis Nirmal.P ¹ , Vignesh.M ¹ ¹ St. Joseph College of Engineering & Technology, Thanjavur
MECH STORM 04	Experimental Investigation of Emission and Performance Characteristics using of Polymer oil and Jojoba Oil with 1 Pentanol in Single Cylinder Diesel Engine
	Agilan.H ¹ , Balaji.S ¹ ¹ Kings College of Engineering, Punalkulam
MECH STORM 05	Experimental Techniques for Mechanical Properties of Geopolymer Coatings, Corrosion Protection of Steel
	Srikanth S K ¹ , Divakar.S ¹ ¹ St. Joseph College of Engineering & Technology, Thanjavur
MECH STORM 06	Enhancement of Efficiency of Solar Panel by Modelling of Photovoltaic Module with Boost Convertors
	Yogaraj.R ¹ , , Divakar.S ¹ ¹ St. Joseph College of Engineering & Technology, Thanjavur
MECH STORM 07	Parametric Modeling and optimization of Polymer Nano composite
	Subash.R ¹ ¹ PRIST University, Vallam
MECH STORM 08	Parametric optimization of process parameter on wear behaviour in Epoxy/HNT nanocomposite
	Mohammed Faizal . M ¹ , Dhivakar.V ¹ PRIST University, Vallam

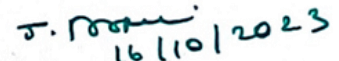
MECH STORM 09	Performance of a CI Engine with Cardnol Bio Fuel Blends
	Pradeep.P ¹ , Ragul.S ¹ P R Engineering college, Vallam
MECH STORM 10	Workability and Corrosion Behavior Studies on Sintered Iron based Hybrid Powder Metallurgy Alloys
	Nelson Raja. S ¹ , Alex. A ¹ , Siva. S ¹ ¹ Kings College of Engineering, Punalkulam
MECH STORM 11	Processing and Mechanical Property Evaluation of Banana Fiber Reinforced Polymer Composites
	Vinoth Raj.D ¹ , Deepak.D ¹ , Karthikeyan.I.M ¹ ¹ Mount Zion College of Engineering and Technology, Pudukkottai
MECH STORM 12	Influence of TiO ₂ on Mechanical and Wear Characteristics of Aluminum Matrix Composites Synthesized by Stir Casting Route
	V. Navaneetha krishnan ¹ , S. Vishvanath perumal ¹ , A. Arunkumar ¹ , G. Gurumoorthi ¹ ¹ E.G.S. Pillay Engineering College, Nagapattinam
MECH STORM 13	Influence of Friction Stir Welding Parameters on Microstructural and Mechanical Properties of Similar AA6063 Alloy Joints
	A. Arunkumar ¹ , V. Navaneetha krishnan ¹ , J. Jeevamalar ¹ , M. Vikneswaran ¹ ¹ E.G.S. Pillay Engineering College, Nagapattinam
MECH STORM 14	Processing Technology and Mechanical Properties of Die-Cast Magnesium Alloy AZ92A-T6
	Chandra Mouli E ¹ Methun Sagar D ¹ S Rathna Raj ¹ S Sakthi Arunachalam S ¹ ¹ Government College of Engineering, Thanjavur
MECH STORM 15	Influence of Aluminium Oxide Additive on The Performance of a Diesel Engine Fueled With Jatropa Oil and Diesel Fuel
	G. Arunkumar ¹ , A. Arsath Sathick ¹ ¹ P.R Engineering College, Thanjavur

LIST OF COLLEGES PARTICIPATED

S. No	Name of the College	Number of Participants
1	Arasu Engineering College Kumbakonam, Tamil Nadu.	16
2	A.R.J College of Engineering & Technology	04
3	Government College of Engineering, Sengipatti	03
4	MAM College of Engineering	01
5	Mount Zion College of Engineering & Technology	03
6	Parisutham Institute of Science & Technology	22
7	Pattukottai Polytechnic College	11
8	Periyar Maniammai Institute of Science & Technology	03
9	PREC, Thanjavur	05
10	PRIST, Thanjavur	20
11	St.Joseph College of Engineering & Technology	14
Total		102


16/10/23
Coordinator


T. P. Mani
HoD/Mech
16/10/23


16/10/2023
Principal