





## **DEPARTMENT OF MECHANICAL ENGINEERING**

# National Level Technical Symposium

# **MECH STORM 2K22**

on 16th September 2022

# **Symposium Report**

Organized by

Department of Mechanical Engineering,

Kings College of Engineering,

Punalkulam-613303, Pudukkottai Dt.

Website: www.kingsengg.edu.in

#### **REPORT**

Department of Mechanical Engineering of our college has organized a NATIONAL LEVEL TECHNICAL SYMPOSIUM "MECH STORM 2K22" on 16<sup>th</sup> September 2022. This Technical Symposium has provided a platform for Engineering and polytechnic students to share and exchange ideas about the Technical & Non-Technical events and the various research topics in the fields such as Manufacturing, Energy and Thermal Engineering.

The Symposium began with the formal prayer song "Tamil Thai Valzthu". Welcome address was given by Dr.T.Pushparaj, HOD/Mechanical, Kings College of Engineering. The symposium was inaugurated with lighting the lamp by the dignitaries. Dr.R. Rajendran, Secretary, KCE, honoured the chief guest by shawl and memento. Presidential address was delivered by Dr.R. Rajendran, Secretary, KCE, symposium proceedings was relished by Dr.S.Mahendran HOD/Mech UCE, Thirukkuvalai and received by Dr.R. Rajendran, Secretary, KCE, Dr.S. Sivakumar, Vice Principal, KCE and Dr.T. Pushparaj. HOD/Mech, KCE.

Mr.V.Aravind,Assistant Professor, Department of Mechanical Engineering, KCE, one of the coordinator of symposium, introduced the chief guest. Inaugural address was delivered by Dr.S.Mahendran HOD/Mech UCE,Thirukkuvalai, in the field of Manufacturing Engineering, and Composite materials. His topic covered the advances manufacturing techniques. Dr.T.Pushparaj. HOD/Mech, KCE felicitated the symposium.



Dr.S.Mahendran,HOD/Mech,UCE,Thirukkuvalai lighting the kuthuvizhakku



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



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



Dr.T.Pushparaj. HOD/Mech lighting the kuthuvizhakku.



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



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



Chiefguest introduction by Mr.V.Aravind AP/Mech



Inagural address by Dr.S.Mahendran HOD/Mech UCE,Thirukkuvalai



Out of 25 technical papers 14papers were selected and presented in the paper presentation session. The session was chaired by Dr.T.Pushparaj, HOD/Mech and Dr.P.P.Shantharaman Asso.Prof/Mech. They reviewed and selected 3 best papers.

Three non-technical events namely, photo fest, Connection and meme creation were conducted by students. All students actively participated in all the events.

Finally the valedictory function was started with a video presentation by final Mech students that showed the latest innovations in Automobile field. Mr.V.Aravind,AP/Mech gave the summary of symposium. Dr.T.Pushparaj HOD/Mech distributed the prizes for the winners and also issued participation certificates to all the participants. Mr.N.Magesh,AP/Mech, Mr.M.Melwin J Sridhar AP/Mech and Mr.V.Aravind AP/Mech coordinated the entire symposium. Mr.V.Aravind AP/Mech delivered vote of thanks. The symposium was successfully finished with national anthem.

### LIST OF RESEARCH ARTICLES

National Level Technical Symposium

### "MECH STORM 2K22"

TECHICAL SESSION	
MECH STORM 01	Mitigation of NOx and noise in CRDI Diesel engine using multiple injection technique fuelled by Biodiesel with suitable additives.
	C.Manikandan, Syed Aalam C, Dr.S.G.Shelvaraju
MECH STORM 02	Experimental investigation on Petung Bamboo and Bagasee fibre with reinforced concrete
	B.Sriram prasad ,A.Balaji,M.Srilasri, N.Priyanka
MECH STORM 03	Performance Studies of Composite Materials
	N.Priyanka ,M.Srilasri, B.Sriram prasad
MECH STORM 04	Solar energy and its improvement of efficiency by solar panel using different methods
	M.Srilasri, Dr.N.Stalin
MECH STORM 05	Alkaline treated paddy straw fiber reinforced polyester composites and die design for tube light frame
	Aananth R, Logesh S, Dhinesh kumar M, Boobalan NP, Prabhakaran J
MECH STORM 06	Performance enhancement of solar photovoltaic/thermal(pv/t) collector using Cuo Nano fluid
	Gokul M, Harish A, Sathya Narayanan S.S,Ragul A, Prabhakaran JS
MECH STORM 07	Comparative investigation of mechanical properties al -metal matrix spur gear with various reinforcements
	Deepan Raj S, Ragul G, Manikandan P, Krishna Kumar G, Radhika T
MECH STORM 08	Investigation on Mechanical Behaviour of mild steel welded joints and effect of welding variables
	J .Danielakash, M.Deepakraj, V.Ssarabeshwaran, S.Naveenraj, D.Nachimuthuraja
MECH STORM 09	Post welding heat treatment strength evaluation and Optimization of OHNS Steel with Taguchi Design
	S. Selva, S. Naveen, A. Deepak

MECH STORM 10	Fabrication and Properties of Magnesium Hybrid Nano Metal matrix composites using powder metallurgy
	Shantharaman.P.P, Alagesan.K, Bharath.M, Infantraja.S, Karan.K
MECH STORM 11	Composite Material of bullet proof jackets using STF without using ballistic plates
	Prasath C, Rahulkumar K, Ragavan R, Pugazhendhi K,Vetrivel S
MECH STORM 12	Reinforcement of Aluminium Matrix Composite With E-Glass Fiber
	Abinash S, Sankarganesh V,Vasanth V,Vasanthakumar K,Veerapandian K
MECH STORM 13	Conventional heat transfer design of a steam condenser for once through Super Critical Boiler, by two shell pass and multiple tube pass
	Dr.S.Kamatchi Sankaran , K.Gunaseelan,P.Iniyan, T.Ferose Khan, R.Lakshmanan
MECH STORM 14	Influence of a Non-Patterned and patterned insert on Characterization of 410 Stainless Steel in a hard turning process
	T.Prabakaran

Coordinator HOD PRINCIPAL