



KINGS
COLLEGE OF ENGINEERING
(NAAC Accredited Institution)
(Approved by AICTE, New Delhi, Affiliated to
Anna University, Chennai)



National Conference on Recent Advances in Mechanical Engineering – 2019

NCRAME-19

16th March 2019

POST CONFERENCE REPORT

Organised by

Department of Mechanical Engineering
Kings College of Engineering
Punalkulam-613303, Pudukkottai Dt.
Website: www.kingsindia.net

PROGRAMME SCHEDULE

National Conference on
Recent Advances in Mechanical Engineering

Date: 16.03.2019

Venue : Pallava Hall

Timing	Programme schedule
8.45 am – 9.45 am	Registration
9.45 am – 10.35 am	Inauguration function of NCRAME -19
10.35 am – 10.50 am	Tea break
10.50 am – 11.15 am	Invited Talk
11.15 am – 1.00 pm	Technical Session - I
1.00 pm – 1.45 pm	Lunch break
1.45 pm – 3.50 pm	Technical Session - II
3.50 pm – 4.00 pm	Tea break
4.00 pm – 4.40 pm	Valedictory function

POST CONFERENCE REPORT OF NCROME- 19

The Department of Mechanical Engineering organized a one-day National Conference on Recent Advances in Mechanical Engineering – 2019 on 16th March 2019. This conference has provided a platform for researchers and academicians to share and exchange ideas on the various research topics in the fields such as Manufacturing, Energy and Thermal Engineering.

The conference had two sessions spread over entire day with expert's invited talks and interactive discussions. The total number of participants who has sent their willingness through mail to attend the conference was 60. Among them, 29 participants from various universities and institution across the country presented papers in the conference.

Dr.N. L. Parthasarathi, Scientific Officer E, Materials Development and Technology Division, IGCAR, Kalpakkam, inaugurated the conference, and delivered the keynote address to the academicians and researchers

On March 16th 2019, by 09:30 am., inauguration of the conference started with tamil thai vazhthu . The welcome address was given by Conference Chair Dr.T. Pushparaj, HOD/Mech.,KCE with a warm welcome and pleasant speech which has given a spark to the one day national conference.



Dr.T. Pushparaj, HOD/Mech, Welcomes the gathering.



Chief guest Dr.N. L. Parthasarathy inaugurating the conference by lighting of kuthuvillakku, beside him Dr.J.Arputha Vijaya Selvi, Principal along with them conference chair Dr.T.Pushparaj, and organizing secretary Prof.S.Giridharan.



Dr.N. L. Parthasarathy, Scientific Officer E, IGCAR receiving a memento from Dr.T.Pushparaj, HOD/Mech. KCE.



Dr.J.Arputha Vijaya Selvi, Principal, KCE., giving presidential address

The presidential address to the gathering was given by Dr.J.Arputha Vijaya Selvi, Principal, Kings College of Engineering. During her speech, she highlighted the following,

- Importance of the conferences is narrated from olden day to recent day..
- Various recent developments in Manufacturing, Energy sectors etc.,
- The words of the Principal gave so much of energy and motivated the students, faculties and the researchers to think innovatively in the field of Energy sectors.



Proceedings of the conference was released by Dr.N. L. Parthasarathy, Scientific Officer E, IGCAR. alongwith them Dr.T.Pushparaj, HOD/Mech. KCE, Prof.S.Giridharan, AP/Mech. KCE.

After the presidential address, our honorable chief Guest Dr.N. L. Parthasarathy released the proceedings of the National Conference on Recent Advances in Mechanical Engineering – 2019 and the first copy was received by the Dr.T.Pushparaj. This National conference has been considered as a knowledge hub for all the researchers from the various institutions across the country.

Chief guest Dr.N. L. Parthasarathy was introduced by Prof.S.Giridharan, AP/Mech. KCE. About his career track , awards and achievements received by him. And also he pointed various posts held by him in the course of his career, the present post in detail, and the role played by him in his present capacity.



Chief guest Dr.N. L. Parthasarathy giving the inaugural speech



Chief guest Dr.N. L. Parthasarathy delivering the Invited talk

The chief guest, in his inaugural address to the gathering, pointed out that the new technology regarding robotics, especially that of underwater, its applications and the future trends. The power point presentation included the R&D being conducted around the world on under water robots, the results obtained and how these are being used in defence, underwater exploration and other fields.



Juries of the Technical sessions



Technical presentation by participants

TECHNICAL SESSION

NCRAME 01	To Investigate Mechanical Characterization of Aluminum Metal Matrix Composites
	Dr.S.Mahendran
NCRAME 02	Performance and Emission of C.I Engine Using Biofuel With Additives
	H.Agilan, S.Rajeev, S.Srinath And M.Venkateshan
NCRAME 03	Finite Element Analysis Of Material Constitutive Modeling in the Machining Of Ti-6al-4v Alloy
	Little Prasanna Soundari A, Gobivel K
NCRAME 04	Design and Fabrication of Thermo Acoustic Refrigeration System
	Livingston.V, Naveen Kumar.A, Parthasarathi.K, Dheena Dhayalan.H
NCRAME 05	Design and Concoction of Eco – Recycle, Lightweight Bicycle Composition of Ochlandra Travancorica With Epoxy Resin
	G.Padmanabhan, B. Sathish Kumar, Joseph Arockiam, M. Sivaranjan
NCRAME 06	Mechanical Properties Of Reinforced Fiber Metal Laminates
	P.P.Shantharaman, G.Siddharthan, P.Venkateshkumar, V.Vijay, R.Sivasurya
NCRAME 07	Optimum Design And Analysis Of Bistable Compliant Mechanism Using Flexure Hinges
	Pavan Kumar K B, Gopal V
NCRAME 08	Grey Relational Analysis To Determine the Optimum Process Parameters For Cylindrical Grinding Process on Ohns (AISI 0-1)
	M.Melwin Jagadeesh Sridhar
NCRAME 09	Design And Experimental Analysis of Kevlar Clutch Plate In Two Wheeler
	Bharanitharan.V.M, S.K.Veerapandiyan

NCRAME 10	Performance And Emission Characteristic Of Icengine Using Cucurbita Pepo L. And Zea Mays Bio Diesel Blend
	B.Vishnu Dr.T.Pushparaj
NCRAME 11	Design and Fabrication of Walking Robot Mechanism
	P Parameswaran, J Ajmal Khan, S Ajith Kumar, P.L.Magzhan
NCRAME 12	Investigation of Space Rover Model In Multi Terrain
	Manikandan. E, A. Arun Kumar
NCRAME 13	Investigation Characteristics of Prosopis Juliflora Oil Blended With Diesel Fuel In a Di Diesel Engine
	M.Arangarajan, Dr.A.Raja
NCRAME 14	A Comprehensive Review On Mgo and Zno Based Nanofluids
	B. Suresh Kumar, R. Vidhya, T. Balakrishnan, S. Nivejitha, M. Pratheep, S. Priya, S. Siva
NCRAME 15	Design And Analysis Of Heat Transfer In Cylinder Block of IC Engine
	Muthukumaresan.A, S.Anbarasu
NCRAME 16	Experimental Investigation and The Predict The GTAW Process Parameter Process on Al 5052
	Mahalakshmi.U, Dr S.Jaisankar
NCRAME 17	An Investigation and Hard Turning By Using CNC With Cryo Inserts on D3 Steel
	S.Dinesh Kumar
NCRAME 18	Optimization of EDM Process Parameters Using Response Surface Method For Inconel 718 Super Alloy
	Elangovan Karthi.P, Dr J.Jeevemalar
NCRAME 19	Design And Fabrication Of Milling Machine For Soft Material
	Ajay Rosario. A, Jayasurya. P, Harini. G, Parthasarathi. S

NCRAME 20	Performance Appraisal Of Cryo Treated Tool by Turning operation
	S. Harirajan, P.Malaiselvaraja
NCRAME 21	Performance and Emission Studies on an Agriculture Engine on Karanja Bio Diesel With Diethyl Ether Additive
	T.Pushparaj
NCRAME 22	Design and Analysis of Rocket Propulsion System Nozzle
	C.Munishkumar, V.Vigneshwaran, Edwin,
NCRAME 23	Design and Fabrication of Grain Size Analysis
	S.Abubakar Siddiq, E.Hari Prasath, R.Karthikeyan, S.Madeshwaran
NCRAME 24	Characterisation study of nicrbsi coating obtained by hvof process
	G.Mathivanan, R.Shankar, G.Leander Infant Raj, R.Madhan, M.Praveen Kumar, R.R.Pravin
NCRAME 25	An Investigation Into Biodiesel Production From Neem Oil And Evaluation Of Performance Using Different Biodiesel Blends
	M.Parthiban
NCRAME 26	Performance And Evaluation of Thermoelectric Refrigeration By Using Peltier Effect
	H.Agilan I, M.Manohari, G. Vidhya, B. Veereshwaran, A. Venkatesh
NCRAME 27	Weld Joint Efficiency Analysis of Pressure Vessel Tube Joints On Sa210 Gr1 With Horizontal Position
	Pradeep .K, Dr S. Jaisankar
NCRAME 28	Cryogenic Rolling And Formability Of Al-Mg Silicon Alloys
	Gowtham.M, S.Bhuvaneshwaran
NCRAME 29	Optimisation of Machining Parameters In Ti-6al-7nb Using Taguchi Based Grey Relation Analysis
	M. Mohamed Salim, L. Mohammed, S. Mohammed Ibrahim, Zeon Irudhyaraj

Valedictory Function

Finally, Vote of Thanks for the Valedictory was given by Mr.R.Shankar, AP/Mechanical, Kings College of Engineering, organizing secretary of the national conference. The one day National Conference on Recent Advances in Mechanical Engineering – 2019 successfully came to an end which provided a resource platform to all the academicians and the researchers with fullest support from the Management, Principal, Organizing committee, Event Management committee and Faculties and all others who has directly or indirectly who helped in organizing this conference. The certificate distribution was done by Dr.T.Pushparaj, HOD-Mech, followed by national anthem.

List of colleges participated:

1. University college of Engineering, Pattukkottai
2. KCG college of Technology, Chennai.
3. K.Ramakrishna College of Technology, Thiruchirappalli.
4. Arasu Engineering College, Kumbakonam.
5. Sir Issac Newton College of Engineering and Technology, Nagapattinam.
6. EGS Pillay Engineering College, Nagapattinam
7. Annamalai University, Chidambaram.
8. Sembodai Rukamani Varatharjan Engineering College, Nagapattinam
9. Star Lion College of Engineering and Technology, Marangorai.