Science and Engineering Research Board

(a statutory body of the Department of Science & Technology, Government of India)

5 & 5A, LGF, Vasant Square Mall Sector-B, Pocket-5, Vasant Kunj New Delhi 110070

Brief report of the National conference on Condition Monitoring 2019(NCCM 2019)

(Financial Assistance to Seminar / Symposia)

Date: 21-09-2019

SERB Sanction / File No:SSY/2019/000628

1. Name of Academic Institution / University / Society etc. under whose auspices the Seminar / Conference / Workshop / Symposium etc. was organized:

koneru Lakshmaiah Education Foundation, Vaddeswaram Guntur Dt, Andharapradesh State, INDIA

2. Title of the Seminar / Conference / Workshop / Symposium etc.: <u>National conference on Condition Monitoring</u>
2019(NCCM 2019)

- 3. Duration / Period of the organized event: 20-09-2019 to 21-09-2019
- 4. Grant Sanctioned: Rs 50,000-00
- 5. Summary of the event (Max. 1000 Words):

The main aim of this conference is to propagate the technology utilization for Condition Monitoring of Machinery, Equipment ,Systems in Industry and to make a bridge between academia and industry.

The crudest method for operating machines is to run them until they fail, and then to try and repair them in order to make them fit for further service. This method of operation can be very expensive in terms of lost output and machine destruction, and in addition can involve hazards to personnel. It is now well recognized that, particularly in the case of large and expensive plant, it is more economical and operationally satisfactory to carry out regular maintenance. This involves the maintenance of the machine or its various components at regular intervals, to reduce the likelihood of failure during a time when the machine is required to be available for use. The problem in planning this type of maintenance lies in the choice of an appropriate maintenance interval for the machine, because the actual running time before maintenance is really needed is not constant, but varies from one occasion to another, due to differences in the operation of the machine in the behaviour of its components.

A more satisfactory compromise in terms of maintenance strategy is to carry out preventive maintenance at what may be irregular intervals, but to determine these intervals by the actual condition of the machine at the time. For such condition-based maintenance to be possible, it is essential to have knowledge of the machine condition and its rate of change with time. The main function of condition monitoring is to provide this knowledge about machines health.

There are two main methods used for condition monitoring, and these are trend monitoring and condition checking. Trend monitoring is the continuous or regular measurement and interpretation of data, collected during machine operation, to indicate variations in the condition of the machine or its components, in the interests of safe and economical operation.

Condition monitoring system(CMS) is an essential part for annual maintenance and reliability. CMS scope usually consists of vibration analysis and lube oil analysis to predict the failure or proactively work to avoid failure. It contains the periodic maintenance plans to capture vibration data and lube oil analysis to monitor and trend. The monitoring is done to proactively to catch potential breakdowns before they occur. CMS provided us a system to catch the potential failures well ahead of time to avoid breakdowns. It is evident that the breakdown is usually three to four times higher than the proactive maintenance. This conference given a brief note on condition monitoring systems

Most of the conference papers are from industries and IIT. Delegates from good industries like NSTL, VSP, HPCL, Jindal, GTTT Mumbai were actively participated and shared their experiences. Eminent speakers from IISc Bangalore, IIT Guawahati delivered key note speech which will be helpful to present PG Students and leading industries. The PG students from Gayathri vidya Parishath, Visakhapatnam Faculty from Alighar University Uttarpradesh participated and presented the paper. A total of 200 members participated in the conference and actively involved in these 2 days. Most of the participants expected that it could be most better if it is extended furthermore of 2 days. Management supported well in all aspects for making the conference a grand success.

NATIONAL CONFERENCE ON CONDITION MONITORING

(Organised jointly by KL UNIVERSITY)

20-21 SEPTEMBER 2019

Venue: KL UNIVERSITY, Vaddeswaram

PROGRAMME

• • • • • • • • • • • • • • • • • • • •					
20 SEPTEMBER 2019	9 - DAY 1				
REGISTRATION		0830-0930			
INAUGURAL	FUNCTION	0930-1100			
HIGH TEA		1100-1115			
KEY NOTE T	ALK 1 Sh Probal Ghosh, Tata Steel, Jamshed pur				
1115-1145					
TECHNICAL SESSIC Paper 1 Hemant Bari Paper 2 Bhaskaran Paper 3 Karan Banth Paper 4 SR Ganti Paper5 Mahalakshm	1230-1245 1245-1300				
LUNCH		1300-1330			
KEY NOTE	ΓALK 2 Dr Amaresh Chakrabarti, IISc,Bangalore	1330-1400			
TECHNICAL	L SESSION 2:				
Paper 6 Rana Dutta E	Electrosteel Steels Limited, Siyaljoli Dist, Bokaro, Jharkhand	1400-1415			
Paper 7 GRP Singh	CMTI Bangalore	1415-1430			
Paper 8 Manohar	UE Systems IMENA Pvt Ltd	1430-1445			
Paper 9 Udayanand	Naval Science Technological Laboratory, Visakhapatnam	1445-1500			
TEA		1500-1515			
TECHNICAL SESSIO	TECHNICAL SESSION 3:				
Paper 10 Pal Ranjan Sasthry Indian Institute of Technology Kharagpur, Paper 11 Sidra Aligarh Muslim University, Aligarh Paper 12 P.Ganesh Gayathri Vidya Parishath, Vizag Paper 13 Satyajit Indian Institute of Technology, Kharagpur Paper 14 G. Anand Gayathri Vidya Parishath, Vizag EC and GB MEETING		1515-1530 1530-1545 1545-1600 1600-1615 1615-1630 1700-1900			
21 SEPTEMBER 2019 - DAY 2					
TECHNICAL SESSION 4:					
-	Rao Techno Main Salt Lake, Kolkata 700 091 , West Bengal	0930-0945			
Paper 16 Dipankar	Tata Steel Limited, Jamshedpur	0945-1000			
Paper 17 Suraj	GTTT Mumbai	1000-1015			
Paper 18 Bhogi Supriy	1015-1030				

NOTE- CONSOLIDATED REPORT OF THE APPROVED EVENT MAY BE SUBMITTED ONLINE / EMAIL WITH HIGH

RESOLUTION PHOTOGRAPHS PASTED IN THE REPORT OR SUBMITTED DIRECTLY IN JPEG FORMAT.

1030-1045

TEA		1045-1100
KEYNOTE TALK 3	Prof Rajiv Tiwari, IIT (Guwahathi)	1100-1130
KEYNOTE TALK 4	Dr TV Prabhakar, HSc.Bangalore	1145-1215

LUNCH

1230-1300

TECHNICAL SESSION 5:

Paper 20 RR Das Electro steel Siyaljoli Dist, Bokaro, Jharkhand	1300-1315	
Paper 21 Girish Kumar Smart Manufacturing, Precision Machine Tools and Aggregates	1315-1330	
Paper 22 Karan Bhantia(Paper 2) Signasis Technologies Pvt. Ltd., Pune, India	1330-1345	
Paper 23 Kavikant Girinagar, Pune	1345-1400	
Paper 24 Ganesh Kumar Jindal Steel & Power Limited (JSPL), Angul, Odisha,		
Student Quiz: Sh Hemant Bari, M/s Adani	1445-1530	
PANEL DISCUSSION & VALEDICTORY FUNCTION		

HIGH TEA 1630-1700

Participation Information:

S. No	Participation in the event	Nos.
I.	Key-not speakers	5
II.	Senior Scientist	4
III.	Young Scientist	10
IV.	Postgraduate Students	195
V.	Undergraduate Students	10
VI.	Industry persons	50
VII.	Other category (Please specify each category)	10
	Total Number of the Participants	284

HOD-ME
DY ALEXAMENTAL
PROFESSION & MEAD
Department of Mechanical Engineering
KL (Deemed to be University)
Vaddeswaram - 522 502.

(Convener Signature)

Photographs Section: Please paste high resolution photographs in given spaces below or may be submitted directly on online / email in JPEG format.

1. Inaugural Session



2. General Photograph



3. General Photograph



4. General Photograph



HOD-ME
Dr. A. SERICIATH
PROFEDSUAS HEAD
Department of Mechanical Engineerin
KL (Deemed to be University)
Vaddeswaram - 522 502.
(Convener Signature)