

2nd International Conference on Futuristic Trends in Materials and Manufacturing 2019 (ICFTMM 2019)

IOP Conference Series: Materials Science and Engineering
Volume 802

Greater Noida, India
8 - 9 November 2019

Editors:

**Kuldeep Panwar
Inderdeep Singh**

**Pramendra Kumar Bajpai
Satyendra Singh**

ISBN: 978-1-7138-2673-6
ISSN: 1757-8981

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution 3.0 International Licence.
Licence details: <http://creativecommons.org/licenses/by/3.0/>.

No changes have been made to the content of these proceedings. There may be changes to pagination and minor adjustments for aesthetics.

Printed with permission by Curran Associates, Inc. (2021)

For permission requests, please contact the Institute of Physics
at the address below.

Institute of Physics
Dirac House, Temple Back
Bristol BS1 6BE UK

Phone: 44 1 17 929 7481
Fax: 44 1 17 920 0979

techtracking@iop.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

MODELING OF ICE SLURRY FLOW THROUGH BEND PIPE	1
<i>K. S. Rawat, A. Verma, A. Uniyal, H. P. Gangwar, A. K. Pratihar</i>	
NUMERICAL INVESTIGATION ON CRITICAL VELOCITY OF ICE SLURRY FLOW	13
<i>K. S. Rawat, A. Verma, A. K. Pratihar, A. K. Singh, P. Maheshwari</i>	
EVALUATION OF INFLUENCE OF FINISH LINE DESIGN ON MARGINAL DISCREPANCY OF ALL-CERAMICS LITHIUM DISILICATE CROWN RESTORATIONS USING μ -CT.....	22
<i>Yajvinder, Vishal Gulati, Ashish Agrawal, Balwant Singh</i>	
THE EFFECT OF ALUMINA ON MECHANICAL BEHAVIOR OF AL 6064 ALLOY.....	31
<i>Abhishek Kumar, Paras Kumar, R C Singh</i>	
EFFECT OF TIO ₂ ADDITIVE VOLUME FRACTION IN LUBRICANT OIL ON THE PERFORMANCE OF HYDRODYNAMIC JOURNAL BEARING.....	39
<i>Anurag Singh, Neeraj Verma, Aman Chaurasia, Alok Kumar</i>	
SIMULATION OF COFRP ANALYTICAL AND COMPUTATIONAL MODEL FOR VARIOUS FIBER VOLUME FRACTION AND INVESTIGATION OF THE LOCAL STRESSES FOR DIFFERENT FIBER ORIENTATION ANGLE.....	46
<i>Peeyush Maheshwari, Anadi Misra, Ashtosh Kumar Singh, Kamal Singh Rawat, Ankur Verma, Kavita Singhal</i>	
EFFECT OF SURFACE TREATMENT ON TRIBOLOGICAL CHARACTERISTIC OF FERRITE NANOPARTICLES EPOXY COMPOSITES	52
<i>Ashtosh Kumar Singh, M. G. H. Zaidi, Rakesh Saxena, Rajeev Suman, Peeyush Maheshwari, H. P Gangwar, K. S. Rawat, A. Verma</i>	
COMPARISON OF A CLASSICAL CYCLONE SEPARATOR AND PROTRUDING SURFACE CYCLONE SEPARATOR USING CFD SOFTWARE.....	59
<i>Vinay Sati, Shivasheesh Kaushik, Rahul Kshetri, Kuldeep Panwar, Rahul Pandey</i>	
COMPARATIVE STUDY FOR THERMAL AND FLUID FLOW PECULIARITIES IN CASCADING SPIRAL INNER TUBE HEAT EXCHANGER WITH OR WITHOUT DIVERSE INSERTS OVER SPIRAL TUBE.....	67
<i>Shivasheesh Kaushik, Satyendra Singh, Nikhil Kanojia, Kuldeep Rawat, Kuldeep Panwar</i>	
INFLUENCE OF FRICTION STIR WELDING PARAMETERS ON MECHANICAL PROPERTIES OF DISSIMILAR AA 7475 TO AISI 304	75
<i>Pankul Goel, Ankit Kumar Saxena, Mohd Atif Wahid, Sachin Rathore, Nidhi Sharma, Radha Kant Mishra</i>	
A SHORT REVIEW ON MACHINING WITH ULTRASONIC MQL METHOD	83
<i>Rahul Katna, Narayan Agrawal, M. Suhaib</i>	

Author Index