

7th International Multidisciplinary Conference on Current Research Trends-2023

7th IMCCRT 6th & 7th January 2023



IMCCRT © 2023 INC. ALL RIGHT RESERVED

Organised By - IIKR, Research Circle, CSRfirst
Research Consultancy and IT partners Varshyl
Technologies Pvt.

**7th Virtual International Multidisciplinary Conference on Current
Research Trends**

-2023 (IMCCRT-2023 6th and 7th January 2023

PROCEEDING BOOK

Copyright © 2023

ISBN: 978-81-961093-4-9

Publication Date: 2023

All rights reserved. The right to publish this book belongs to Virtual International Multidisciplinary Conference on Current Research Trends-2023 (IMCCRT-2023). No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without permission. This Proceeding Book has been published as an electronic publication (e-book). Citation cannot be shown without the source, reproduced in any way without permission.

Authors are responsible for the contents of their papers.

Webpage: www.imcrt.in

E-mail ID: imcrt2022.in@gmail.com

WELCOME MESSAGE FROM THE MANAGING EDITOR

The Sixth Virtual International Multidisciplinary Conference on Current Research Trends-2022 (IMCCRT-2022) was successfully held on 17th – 18th October 2022. The aim objective of “The Seven Virtual International Multidisciplinary Conference on Current Research Trends-2023 (7th IMCCRT-2023)” was to bring leading academicians, researchers, scholars as well as industrial professionals together from all over the world to exchange and share their experiences and research results about all aspects of biological and chemical sciences and to discuss the practical challenges encountered and the solutions adopted. In this context, we welcomed precious scientists and the greatest appreciation goes to all participants whose contributions have made this conference a success. I would like to thank the organizing committee, the scientific board and conference secretariat providing this intense and quality scientific environment embracing biological and chemical sciences. I believe that the The Virtual International Multidisciplinary Conference on Current Research Trends-2023 (IMCCRT-2023) has made important contributions to you at large and hope to see you at the Upcoming Virtual International Multidisciplinary Conference on Current Research Trends-2023 (IMCCRT-2023).

Dr Hishan S Sanil
Managing Editor
(IMCCRT-2023)

OUR TEAM

Chief Editor

Professor. Dr. Pavitar Parkash Singh

Professor & Associate Dean

School of Social Sciences and languages, Mittal School of Business.

Managing Editor

Dr. Hishan S Sanil

Azman Hashim International Business School

Univeriti Teknologi Malaysia

Our Keynote Speakers /Session Chairs

Sr No	Keynote Speaker	Details
1	Dr. Deepak Shripat Mane	Research Opportunities in Artificial Intelligence
2	Dr. Jericho D. Ecija	Utilization of Research Findings
3	Dr. Paresh Shah	Ways of Being Multidisciplinary in Research

EDITORIAL TEAM

Name	Affiliation
Professor. Dr. Nimisha Beri	Department of Education, LPU, India
Professor. Dr. Vijay Kumar	Department of Education, LPU, India
Professor.Tirtha Prasad Mukhopadhyay	Digital Arte y Empresa, Universidad de Guanajuato, Campus Irapuato-Salamanca, Mexico.
Prof. Jayanthi S	Former professor, Rajeev Gandhi University of health Sciences.(RGUHS) India
Prof. Dr. I Gust Ayu Ketut Rachmi Handayani, SH.MM.	Dean Faculty of Law, Universitas Sebelas Maret Surakarta Indonesia
Prof. Dr. Guntur Hamzah, SH. MH.	Sekjend Mahkamah Konstitusi Republik Indonesia
Prof. Dr. Yuliandri, SH, MH	Rector Universitas Andalas Padang
Prof. Nur Naha Abu Mansor	Dean,Azman Hashim International Business School,Universiti Teknologi Malaysia
Associate Prof.Dr. Froilan D. Mobo, Ph.D. (ip), DPA, MBA, MSCS, CPT, DSSE, LPT, FRIEdr	Assistant Director, Department of Research and Development,Philippine Merchant Marine Academy
Dr. Lego Karjoko, SH. MH	Lecturer Faculty of Law Universitas Sebelas Maret Surakarta Indonesia
Associate Prof. Dr. Suresh Ramakrishnan	Deputy Dean (Research, Innovation, Development & Alumni), UTM, Malaysia
Associate Prof. Dr Jaiprakash M	Asst.professor, Department of Biochemistry MAHSA university, Kuala Lumpur Malaysia
Dr Heethal Jaiprakash	International Medical University, School of Medicine,Bukit Jalil, Kuala Lumpur, Malaysia
Associate Prof. Dr. Prajna Barke	Associate Professor and Course Director Department of Physiology St. Matthew's University School of Medicine Cayman Islands
Dr Navin Satyanarayan	Assistant Professor Department of Biochemistry Gulbarga Institute of Medical Sciences, Gulbarga.India
Dr.Girish M. Bengalorkar	Asst.professor pharmacology. ESI MEDICAL COLLEGE & PGIMSR. Rajajinagar. Bangalore 560010. India

INDEX

SR. NO.	IMCCRT ID NO	TITLE	PAGE NO.
1	IMCCRT-2023-4002	FUTURE HUMAN RESOURCES, TECHNOLOGICALLY ENGAGED	1
2	IMCCRT-2023-4006	EXPERIMENTAL STUDY OF THE IMPACT OF VARIOUS BIO BASED CUTTING FLUID USING MULTIPLE MACHINING CHARACTERISTICS DURING SHAPING OPERATION	2
3	IMCCRT-2023-4007	A STUDY OF GENDER STEREOTYPES IN GENDER INEQUALITY	3
4	IMCCRT-2023-4008	EXPERIMENTAL STUDY OF DIFFERENT BIO BASED CUTTING FLUID USING MULTIPLE MACHINING CHARACTERISTICS DURING TURNING OPERATION	4
5	IMCCRT-2023-4009	EXPERIMENTAL STUDY OF CASTING USING LOOSE PIECE PATTERN (DOVTAIL)	5
6	IMCCRT-2023-4011	SCRUTINIZING THE IMPACTS OF STUDY ABROAD PROGRAMS WITHIN MOROCCO ON AMERICAN STUDENTS	6
7	IMCCRT-2023-4012	INCLUSIVE EDUCATION: A STEP TOWARDS DEVELOPMENT OF RIGHT BASED SOCIETY	7
8	IMCCRT-2023-4013	OPTIMIZATION OF TURNING PROCESS PARAMETERS FOR SURFACE ROUGHNESS AND MATERIAL REMOVING RATE BY USING TAGUCHI METHOD	8
9	IMCCRT-2023-4014	EXPLORING THE TEACHERS' ROLES IN SCHOOLS FROM A SOUTH AFRICAN PERSPECTIVE	9
10	IMCCRT-2023-4015	MINORITY WOMEN EMPOWERMENT THROUGH GOVERNMENT AND NON-GOVERNMENT ORGANIZATION	10
11	IMCCRT-2023-4016	RECENT ADVANCEMENT IN SAVONIUS WIND TURBINE- A REVIEW	11
12	IMCCRT-2023-4018	STUDY OF THE PERFORMANCE OF WIRE EDM ON TITANIUM ALLOY USING TAGUCHI METHOD	12
13	IMCCRT-2023-4022	CLIMATE CHANGE AND SUSTAINABLE RURAL LIVELIHOODS: CONSTRAINTS AND ADAPTATION STRATEGIES	13
14	IMCCRT-2023-4024	AN EFFECTUAL MODEL FOR EARLY PREDICTION OF ACADEMIC PERFORMANCE USING ENSEMBLE CLASSIFICATION	14
15	IMCCRT-2023-4027	QUANTUM CAPACITANCE AND FERMI LEVEL CHANGE IN GRAPHENE NANORIBBONS DUE TO GAS SENSING	15
16	IMCCRT-2023-4029	FINANCIAL PERFORMANCE EVALUATION OF INDIAN FARMERS FERTILIZER COOPERATIVE LIMITED (IFFCO)	16
17	IMCCRT-2023-4030	HYDROLOGICAL MODEL EVALUATION OF GROUND, GPM IMERG, AND CHIRPS PRECIPITATION DATA FOR SHABELLE BASIN IN ETHIOPIA	17

Experimental Study of Casting Using Loose Piece Pattern (Dovetail)

Shashi Kant Tiwari¹, Nikhil Kumar Rawani², Uttam Kumar³, Manoj Kundu⁴

^{1,2,3}*B. tech Student, Mechanical Engineering. Dr.B.C. Roy Engineering College, Durgapur, West Bengal,*

⁴*Assistant professor, Mechanical Engineering Department, Dr. B.C. Roy Engineering College, Durgapur West Bengal*

Email: ¹shashitiwaribang@gmail.com, ²nikhilrawani1383888@gmail.com, ³kumaruttam067@gmail.com, ⁴manoj.kundu@bcrec.ac.in

ABSTRACT: Casting is one of the earliest metal-shaping methods known human being. It generally means pouring molten metal into a refractory mold with a cavity of the shape to be made, and allowing it to solidify. When solidified, the desired metal object is taken out from the refractory mold either by breaking the mold or by taking mold apart. Loose piece pattern is used when the contour of the part is such that withdrawing the pattern from the mold is not possible. It is a process which leads to some defects which gives the chipper quality of the desired product to increase the quality and productivity of the any organization the casting defects should be reduced.

KEYWORDS: Casting, Refractory, Loose Piece Pattern, Defects and Remedies.