

RESUME



Prof. Rajesh Kumar Verma

Ph.D., Jadavpur University Kolkata, India

C.Eng. (Mechanical Engineering)

Professor

Department of Mechanical Engineering

Harcourt Butler Technical University (HBTU) Kanpur

(UP Govt. Technical University)

Kanpur- 208002 (U.P.) India

Contact No.: +91-8400444068

Email: rkyme@hbtu.ac.in

Alternate Email: rajeshverma.mmmut@gmail.com

Personal web-links:

Orcid ID: 0000-0002-3973-4779

BRIEF SUMMARY

SCI/SCIE	Scopus/ESCI/SCImago	Book Chapter(s)	Patents	Copyright Documents	Conference Paper(s)
30	34	18	09	04	71

Govt. sponsored R&D project	As Project Principal Investigator (PI)	As Co-PI
Ongoing/Completed		
09	05	04



**SCI RESEARCH PUBLICATIONS (BEST FIVE ONLY)
(CORRESPONDING AUTHOR)**



1. Prakhar Kumar Kharwar and **Rajesh Kumar Verma** “*Exploration of Nature Inspired Grey Wolf Algorithm and Grey Theory in Machining of Multiwall Carbon Nanotube/Polymer Nanocomposites*” **Engineering with Computers, Springer Publications** Volume 38, 1127-1148, July 2020, **SCI(IF 7.963)**
2. Jogendra Kumar, **Rajesh Kumar Verma** and Kishore Debnath, “*A new approach to control the delamination and thrust force during drilling of polymer nanocomposites reinforced by graphene oxide/carbon fiber*” **Composite Structures, Elsevier Publications** Volume 253, 112786, December 2020, **SCI(IF 5.407)**
3. Shivi Kesarwani and **Rajesh Kumar Verma**, “*Ant Lion Optimizer (ALO) algorithm for Machinability assessment during Milling of Polymer composites modified by Zero-dimensional Carbon Nano onions*” **Measurement, Elsevier Publications** Volume 187, 110282, **SCI(IF 3.927)**
4. Jogendra Kumar and **Rajesh Kumar Verma**, “*A novel methodology of Combined Compromise Solution and Principal Component Analysis (CoCoSo-PCA) for machinability investigation of Graphene nanocomposites*” **CIRP Journal of Manufacturing Science and Technology, Elsevier Publications**, Volume 33, 143-157, May 2021, **SCI(IF 3.602)**
5. Jogendra Kumar and **Rajesh Kumar Verma**, “*Experimental investigation for machinability aspects of graphene oxide/CFRP nanocomposites and predictive modeling using hybrid approach*” **Defence Technology, Elsevier Publications** 2020, Volume 17 (5), 1671-1686, October 2021, **SCI(IF 3.172)**



COURSES TAUGHT AT :

UG LEVEL: ALL COURSES RELATED TO MATERIALS AND MACHINING.

PG/PH. D LEVEL: MACHINING SCIENCE, ADVANCE MATERIAL AND CHARACTERIZATION

- **ADVANCE MATERIALS (UG EME-425)**
- **ADVANCE MANUFACTURING PROCESS (PG EME540)**

FEW WORKS IN ACADEMIC AND RESEARCH

Achievements:



- **Developed Materials and Morphology laboratory at MMMUT Gorakhpur from R&D sponsored project fund Cost Rs. 38.73 Laacs**
- Research project **Ranked Second** in Uttar Pradesh- Pollution Control Board (UPPCB) Gombi Nagar, Lucknow in a Hackathon “Beat Plastic Pollution” on 02/10/2018, out of total six hundred ninety-nine (699) project entries, ranked **second with Rupees Fifteen Thousand (Rs. 15000/-) cash prize.**
- **Qualified GATE**

Awards:



- **Two Best Research Paper Awards** in 12th International Conference on Materials, Processing & Characterization (ICMPC-2021), 06th-09th October 2021, NITTTR Chandigarh, INDIA.
- **Best Research Paper Award** in International Conference on Progressive Research in Industrial & Mechanical Engineering (PRIME - 2021), 5th-7th August 2021, organized by NIT, Patna.
- **Journal paper selected as best paper** in the volume and Published as **Vol. front Cover page** in WSPC publications.

Letter of Recognition letters / Appreciation :



- **01 no. Appreciation letter from Hon'ble Vice Chancellor MMMUT** for cooperation as a member of the committee to reform the academic structure in **NEP-2020.**
- **05 nos. of Recognition letters from Hon'ble Vice Chancellor MMMUT** for presenting diligent work towards research and development project work and academic responsibilities.
- **02 Commendation from Govt. of India**

PROFESSIONAL ACHIEVEMENTS BRIEFLY:

- **Best Research Paper Award** in International Conference on Progressive Research in Industrial & Mechanical Engineering (PRIME - 2021), 5th -7th August 2021, organized by NIT, Patna.
- **Two Best Research Paper Awards** in 12th International Conference on Materials, Processing & Characterization (ICMPC-2021), 06th-09th October 2021, NITTTR Chandigarh, INDIA.
- Research project **ranked second** in Uttar Pradesh- Pollution Control Board (UPPCB) Gomti Nagar, Lucknow in a Hackathon “Beat Plastic Pollution” on 02/10/2018, out of total six hundred ninety-nine (**699**) project entries, ranked *second with Rupees Fifteen Thousand (Rs. 15000/-) cash prize.*
- Received recommendation certificate from Hon’ble Vice chancellor, MMMUT for **remarkable work done in NAAC 2022**
- **Guest of Honour/Prime dignitary** in Various academic and research event at State govt./Govt of India and NIT Patna

R&D Project Fellow:

S.No.	Name of the candidate	Project Area	Status/Remarks	Role
1.	Shri Shivi Kesarwani	<i>Reduced GO modified polymer nanocomposites</i>	Sponsored R& D Project fellow	Project PI
2.	Shri Balram Jaiswal	<i>Structural composites material from carpet waste</i>	Sponsored R& D Project fellow	Project PI
3.	Shri Kuldeep Kumar	<i>MWCNT reinforced laminated polymer composites</i>	Sponsored R& D Project fellow	Project PI

DETAILS OF RESEARCH GUIDANCE (Ph.D/M.Tech/B.Tech)

Dr. Rajesh Kumar Verma as *Sole/ Principal Supervisor*: -

S.No.	Name of the candidate	Broad Area/Thesis title	Status/Remarks
1.	Shri Prakhar Kumar Kharwar (Registration no. 2017058003)	<i>Development and Experimental Investigation of Carbon Nanoparticle Reinforced Polymer Nanocomposites</i>	Awarded 2020
2.	Shri Jogendra Kumar (Registration no. 2018058003)	<i>Development of polymer nanocomposites reinforced by graphene oxide/carbon fiber: Machinability evaluation and damage control module</i>	Awarded 2021
Ph.D. Supervised as <i>Principal/Co Supervisor</i>			
3	Shri Devendra Kumar Singh (Full Time)	<i>Bio-material based Polymeric composite for artificial bio bearing applications (ABB)</i>	*Permission granted for thesis submission
4	Shri Balram Jaiswal (Full Time)	<i>Structural composites material from carpet waste</i>	Sponsored R& D Project fellow *Permission granted for thesis submission
5	Shri Kuldeep Kumar (Full Time)	<i>MWCNT reinforced laminated polymer composites</i>	Sponsored R& D Project fellow *Permission granted for thesis submission
6	Shri Shivi Kesarwani (Full Time)	<i>Reduced GO modified polymer nanocomposites</i>	Sponsored R& D Project fellow *Permission granted for thesis submission

Ph.D Ongoing:

S.No.	Name of the candidate	Broad Area/Thesis title	Status/Remarks	Role
1.	Shri Virat Mani Vidhyasagar (Registration no. 2021058005) Full Time	<i>Stacking analysis of polymer composites in different configuration</i>	Ongoing Registered at MMMUT Gorakhpur on 17/11/2021	Co-Supervisor*
2.	Shri Shailesh Kumar Gupta (Registration no. 220310007) Part Time	<i>Advanced machining of nanocomposites</i>	Ongoing Registered at HBTU Kanpur on 20/09/2022	Supervisor

M. Tech. thesis Awarded:			
S.No.	Name of the student(s)	Broad Area	Academic Year
1.	Rajneesh Kumar M. Tech. (Registration no. 2016053118)	Spring back Analysis of Work-Hardening Material under Axial and Torsional Loading.	2017-18
2.	Ajay Kumar Yadav M. Tech. (Registration no. 2017053103)	Machining of Graphite Reinforced Composites	2018-19
3.	Sashmit Yadav M. Tech. (Registration no. 2017053112)	Electric Discharge Machining of Inconel X-750	2018-19
4.	Vikas Sahani M. Tech. (Registration no. 2017053118)	Machining performance optimization of Graphite Reinforced Composites	2018-19

5.	<i>Kuldeep Kumar</i> (Registration no. 2018053108)	Fabrication and Investigation on Machining of MWCNT Doped Epoxy/GFRP composite: Some Case Experimental Research	2019-20
6.	<i>Puranjay Pratap Singh</i> (Registration no. 2018053111)	Experimental Investigation on Milling of Polymer Nanocomposites	2019-20
7.	<i>Som Nath Pandey</i> (Registration no. 2018053115)	Development of composites using carpet waste for light weight applications	2019-20
8.	<i>Umang Dubey</i> (Registration no. 2019053122)	Development and Characterization of PMMA Based Bio-nanocomposite	2020-21
9.	<i>Ankit Dhar Dubey</i> (Registration no. 2019053104) <i>(Topper & Gold Medalist)</i>	Analysis of Thrust, Torque and Delamination during drilling operation on hybrid composite using multiple optimization techniques	2020-21
10.	<i>Virat Mani Vidhyasagar</i> (Registration no. 2019053123)	Development and characterization of Hydroxyapatite and multi-walled carbon nanotube reinforced pmma bone cement nanocomposite for orthopedics applications	2020-21
11.	<i>Shivam Dubey</i> (Registration no. 2020053114)	Development and characterization of polymer nanocomposites reinforced by graphene oxide/carbon fiber	2021-22
12.	<i>Taufeeq Ahmad</i> (Registration no. 2020053115)	Development and characterization of polymer nanocomposites reinforced by graphene oxide/carbon fiber	2021-22
13.	<i>Uma Dutt Choubey</i> (Registration no. 2020053116) <i>(Topper & Gold Medalist)</i>	Fabrication and characterization of HDPE based polymer nanocomposites reinforced by SiC nanoparticle	2021-22

COURSES TAUGHT:

Theory Courses

UG Level (B.Tech)

1. Quality Management
2. Engineering Materials
3. Energy Management
4. Manufacturing Science and Technology
5. Engineering Mechanics
6. Industrial Manufacturing Processes
7. Non-Conventional energy Resources
8. Textile Mechanics and Machinery
9. Elements of Mechanical Engg.
10. Total quality management

Laboratory/Practical

1. Engineering Mechanics Lab
2. Workshop Technology
3. Elements of Mechanical Engg.
4. Engineering Materials Lab.

M.Tech /Ph.D level

1. Metal cutting and Tool design
2. Machining Science
3. Design of Experiments

AREA OF RESEARCH:

Production Engineering, Manufacturing Processes, Carbon nano materials reinforced composites, FRP Composite Material, Modelling and Optimization of Production Processes

ADMINISTRATIVE RESPONSIBILITIES FROM 2018 TO JUNE 2022 (MMMUT)

S.No.	Duration	Administrative Role
1.	2018, April -Feb. 2020	NSS Coordinator, MMM university of Technology Gorakhpur
2.	2018-Cont	PGS & R Convener Mechanical Engineering Department, MMMUT Gorakhpur
3.	July 6-8, 2018	MRC Department level activities in charge for Malaviya Research conclave (MRC2018) MMMUT Gorakhpur
4.	July 2018	Officer In-charge (O/c) Machine Design (computer) laboratory
5.	23-24 August 2018	Coordinator, Convocation related departmental

		activity
6.	02-21 August 2018	Member of Discipline and security committee in IPNS 2018
7.	03, 06, 07 August 2018	Coordinator of different activities in IPNS- 2018
8.	01/10/2018	Coordinator , Swachh Bharat Abiyan (SBA) University level
9.	02/10/2018	Coordinator , Cleanness Drive University level
10.	23/10/2018	Coordinator , Expert Talk 23/10/2018, MED MMMUT
11.	02/10/2018	Coordinator , Unnat Bharat Abiyan (UBA)
12.	31/10/2018	Coordinator Rashtriya Ekta Diwas (Unity Day) and Rashtriya Sankalp Diwas
13.	16-17 November 2018	Coordinator Academic Audit, MED MMMUT
14.	2018	Coordinator NIRF, MED MMMUT
15.	16/12/2018	Coordinator RSD-2018
16.	17-23 December 2018	Coordinator STTP AME-2018
17.	01-02 Feb. 2019	Executive committee member , 56 th Annual Sports Meet (ASM), MMMUT
18.	01-02 Feb. 2019	Jury of various events of 56 th Annual Sports Meet (ASM), MMMUT
19.	01 Feb. 2019	BoS MED, MMMUT
20.	28-29 March 2019	Organising Secretary National Conference FME-2019
21.	23/07/2019-30/07/2019	Workshop on Jal Shakti- A initiative of AICTE, Govt. of India
22.	05/08/2019-08/08/2019	Three days seminar on “Role of NSS in student life”
23.	01/09/2019-15/09/2019	Workshop and seminar on single use plastic
24.	10/12/2019 to 26/12/2019	Technical workshop under Unnat Bharat Abiyan-A initiative of MHRD Govt. of India
25.	30/12/2019	Blood donation camp at MMMUT Gorakhpur
26.	14/02/2020 to present	Vice-chairman, Council of student activities (CSA)
27.	February 2020	Deputy Coordinator Malaviya Research Conclave (MRC-2020)

28.	May 2020 to June 2022	Coordinator, Nodal centre Virtual lab-MMMUT supported by IIT Kanpur
29.	April 2021 to June 2022	Associate Dean Undergraduate Studies (AD-UG), MMMUT

COURSE DEVELOPMENT:

1. NEP 2020 reform committee member at MMMUT Gorakhpur
2. Prepared course structure and syllabi for B.Tech (Mechanical Engineering) and M.Tech (Computer integrated manufacturing) Program during Jan2018 to July 2018.
3. B. Tech and M. Tech subject's modification related to Production engineering, TQM, Engineering Materials, Machining Science, Design of Experiments (DoE), CAPP, Advanced Material and Characterization etc.

LAB MODERNIZATION:

Materials and Morphology lab. Developed through Govt. sponsored project (UPCST, CRS, AICTE, MoT Govt of India agencies) at MED, MMMUT Gorakhpur, India

TECHNICAL MEMBERSHIP:

1. Life Associate Member of International Association of Engineers (IAENG)
Membership Number: 114989
2. Life Associate Member of International Association of Computer Science and Information Technology, Mechanical Engineering Society (MES) **Membership Number: 80347235**
3. Senior member of Universal Association of Mechanical and Aeronautical Engineers (UAMAE) **Membership Number: SNM1005741**
4. Member of DAAAM International Vienna, **Membership Number: DPN64046**
5. Academic Society of Science Engineering and Technology (ASSET), Annual Member ID- AM1809F05
6. Life Member of Institution of Engineers (India) (MIE): **M-1727995**

INVITED TALKS/EXPERT LECTURES

1. Delivered invited talk (Three hours) on the topic "*Theory of cutting tools*" and "*Basics of machining*" dated-17/07/2017, invited by Programme Coordinator of course ID

- CU51, Department of Mechanical Engineering, **NITTTR Kolkata**, Under MHRD, Govt. of India, Salt Lake City, Kolkata – 700106
2. Delivered expert lectures (Three hours) on the topic “**Basics of machining**” dated-18/07/2017 respectively invited by **NITTTR Kolkata**, Under MHRD, Govt. of India, Salt Lake City, Kolkata – 700106
 3. Delivered expert talk of one hour duration on “**Optimization methods used in manufacturing technology**” on 04/10/2017 invited by Head of Department (HoD), Department of Mechanical Engineering Ashoka Institute of Technology & Management Varanasi – 221007
 4. Delivered expert talk on “**NSS- its role & objective in student life**” on 04 August 2018 in Induction program for new students (IPNS 2018)
 5. Delivered guest lecture on “**Machining of composite and metals**” on 04/10/2017 invited by Ashoka Institute of Technology & Management Varanasi – 221007
 6. Delivered expert lecture on “**Machining performance optimization in drilling and turning of composites materials**” on 24/03/2018, short term training program (STTP), Computational and Manufacturing Challenges in Mechanical Engineering (CMCME-2018) organised by MED, MMMUT Gorakhpur UP
 7. Delivered expert lecture on “**Machining of GRRP composite**” on 26/6/2018 in Faculty Development Program (FDP) on “Modern Optimization Techniques for Engineering and Scientific Applications” from 25th June to 29th June, 2018, organised by Department of Mechanical Engineering, Ashoka Institute of Technology & Management Varanasi – 221007
 8. Delivered expert lecture on “**Multi-response Optimization modules in manufacturing engineering**” on 26/6/2018 in Faculty Development Program (FDP) on “Modern Optimization Techniques for Engineering and Scientific Applications” from 25th June to 29th June, 2018, organised by Ashoka Institute of Technology & Management Varanasi – 221007 .
 9. Delivered expert lecture on “**Taguchi based Multi-response Optimization**” on 22/12/2018 in “Short Term Training Programme (STTP)” on “Advancements in Mechanical Engineering (**AME-2018**)” during December 17-23, 2018, sponsored by TEQIP-III, MMMUT Gorakhpur, India.
 10. Delivered expert lecture On Machining of FRP (Epoxy) composites: A multi-objective optimization approach on 30-03-2019 in Short Term Course On the “Recent Advances

and Industrial Applications of Advanced Machining Processes” (RAIAMP-2019)” during March 26-30, 2019, Organised by Mechanical Engg. Department, BIET Jhansi UP.

11. Delivered expert talk on Processing and characterization of composite materials at Department of Mechanical Engineering, SVNIT Surat on dated 11/10/2019.
12. Delivered expert lecture On Synthesis, functionalization and Machinability of polymer composites on 24-03-2020 in TEQIP-III Sponsored One Week Short Term Course On Advanced Trends In Manufacturing & Material Characterization (TMMC-2020) during 24th Feb - 28th Feb 2020, organised by Department of Mechanical Engineering Institute of Engineering & Technology, Bundelkhand University, Jhansi.
13. Delivered expert lecture on “Polymer composites and its machining behaviour” on 25-06-2020 in TEQIP-III Sponsored One Week Online Faculty Development Program on Advances in Mechanical Engineering during 22nd June - 26th June 2020, organised by Department of Mechanical Engineering, Lok Nayak Jai Prakash Institute of Technology, Bihar State Govt. Institute, Chapra, Bihar.
14. Delivered expert lecture on “Virtual labs for Engineering Institution” on 25-06-2020 in TEQIP-III Sponsored Five Days National Workshop on Practical Learning Through Virtual Lab during 20th July - 24th July 2020, Jointly Organized by Department of Mechanical Engg. & Department Of Civil Engg., Institute of Engineering & Technology, Dr. Rammanohar Lohia Avadh University, Ayodhya, Uttar Pradesh.
15. Delivered expert lecture on “Role of Novel Polymer Nano-Composites Reinforced by MWCNT/Go for Emerging Engineering Applications” on 21-07-2020 in One Week Online Faculty Development Program on Emerging Trends, Issues and Chalages in Next Generation Technology 21st July - 25th July 2020, organised by Department of Mechanical Engineering, Rama University, Private Deemed to be University, Kanpur, Uttar Pradesh.
16. Delivered expert lecture on “Machining of Polymer Nanocomposites” in TEQIP-III Sponsored One Week Online short-term course On Advances in Design Manufacturing Engineering 03rd August - 07th August 2020, organised by Department of Mechanical Engineering, National Institute of Technology, Patna, Bihar.
17. Delivered expert lecture on “Tools for graph, data plotting and designing” in TEQIP-III Sponsored One Week Online short-term course On Tools and Scientific Communication for Research Article and Proposal Writing 19th September – 23rd

September 2020, organised by Department of Mechanical Engineering, G B PANT Institute of Engineering & Technology, Pauri (An Autonomous Institute of Uttarakhand Technical University, Government of Uttarakhand), Uttarakhand

18. Delivered expert lecture on “Polymer composites and its machining behaviour” in TEQIP-III Sponsored One Week Online short-term course On Advanced Manufacturing Processes – 2020 (AMP-2020) 16th November – 20th November 2020, organised by Department of Mechanical Engineering, Department of Mechanical Engineering National Institute of Technology Manipur, Langol, Imphal.
19. Delivered expert lecture on “Polymer Nano-Composites: Machining and Machinability” on 12-02-2021 in One Week Online Faculty Development Program on “Novel Materials”, Sponsored by AICTE Training and Learning (ATAL) Academy, 08th February - 12th February 2021, organised by Department of Mechanical Engineering, National Institute of Technology Patna, Bihar.
20. Delivered expert lecture on “Polymer Nanocomposites Reinforced by Carbon nano materials (CNMs) for Sustainable Engineering Applications” on 28-05-2021 in Two days International Conference on Sustainable Innovation in Mechanical Engineering (ICSIME-2021), 28th May - 29th May 2021, organised by Department of Mechanical Engineering, Rama University, Private Deemed to be University, Kanpur, Uttar Pradesh.
21. Delivered online expert talk on topic “Machining of MWCNT/Polymer nanocomposites” on 5 June 2021, at Faculty of Engineering, Shri Rawatpura Sarkar University Raipur, Chhattisgarh, India
22. Delivered expert lecture on “Polymer nanocomposites modified by graphene” in Online Faculty Development Program on Green Technology & Sustainability Engineering, Sponsored by AICTE Training and Learning (ATAL) Academy during 10 – 14 January, 2022 organised by Department of Mechanical Engineering, National Institute of Technology Manipur, India
23. Delivered expert lecture on “Novel Polymer Nano Composites for Structural Application” on 01/05/2023, in Two weeks online Short-Term Course (STC) on “Recent Advances in Mechanical Engineering (RAME-2023)” organized by the Department Mechanical Engineering, NIT-Patna, India during 01-10 May, 2023 in hybrid mode.

**SESSION CHAIR IN INTERNATIONAL / NATIONAL CONFERENCE/
POSTER/SEMINAR**

1. International Conference on Energy, Environment; Material Sciences (ICE2M), IEEE conference 1st -3rd December 2019 Organized by Department of Mechanical Engineering, Madan Mohan Malaviya University of Technology, Gorakhpur, Uttar Pradesh
2. International Conference on “Recent Advances in Manufacturing” (RAM-2020) 03rd – 05th July 2020 Organized by Department of Mechanical Engineering, S. V. National Institute of Technology, Surat, Gujrat
3. International Conference on “Recent Advances in Manufacturing” (RAM-2021) 10th – 12th June 2021 Organized by Department of Mechanical Engineering, S. V. National Institute of Technology, Surat, Gujrat
4. International Conference on Progressive Research in Industrial & Mechanical Engineering (PRIME - 2021), 5th -7th August 2021, organized by NIT, Patna

ACADEMIC INTERACTION WITH OTHER UNIVERSITIES/ ORGANISATIONS:

1. IIT Delhi, DTU Delhi, D.I.T.E Govt. of NCT Delhi, JNU New Delhi.
2. NIT Rourkela, NIT Meghalaya, NIT Patna, NIT Bhopal, MNNIT Allahabad
3. Jadavpur University Kolkata, NITTTR Kolkata, Under MHRD, Salt Lake City, Kolkata – 700106, West Bengal
4. HBTU Kanpur UP, BIET Jhansi UP
5. Bundelkhand University, Jhansi-284001, MJP Rohilkhand University Bareilly
6. Ashoka Institute of Technology & Management Varanasi – 221007, SR Group of Institutions Jhansi, KIT Varanasi.

OTHER ASSIGNMENT(S):

1. **Technical committee member** of IEEE Sponsored 2nd International Conference on Control Computing Communication and Materials (ICCCCM-2016) 21st– 22nd October, 2016 jointly Organized by United College of Engineering & Research, Allahabad And Asian Institute of Technology, Thailand.
2. **Research paper reviewer** of IEEE Sponsored International Conference (IEEE Conference ID – 39191)
3. **Research paper reviewer of Textile Research Journal of sage publications** (<http://www.sagepublications.com/>)

4. **Research paper reviewer of *Int. J. of Business Intelligence and Data Mining***, Inderscience Publishers Ltd. (<https://indersciencesubmissions.com/>)
5. **Research paper reviewer of International Journal of Engineering Technology, Management and Applied Sciences (IJETMAS)** ISSN 2349-4476. (<http://conferenceinfo.org/aboutus.php>)
6. **Research paper reviewer of International Journal of Engineering, Technology, Science and Research (IJETSR)** ISSN 2394-3386. (www.conferenceinfo.org)
7. **Research paper reviewer & Technical Member of International Conference ICIF-2018**, organized by IITRAM Ahmedabad, Gujrat from 18-19 May 2018
8. **Research paper reviewer & Technical Member International Conference IC-RIDME-2018**, organized by NIT Shillong Meghalaya from 8-10 Nov. 2018.

TRAINING PROGRAMME/STC/WORKSHOP/SEMINAR ORGANIZED:

1. **File Sanction No. I-15011/9(29)/HRD/2008/1504 Dated 25/11/2013**
Name of Project: Two nos. of Training programme under component “training through established institution” under Human Resource Development Scheme (HRD) scheme of Ministry of Textiles.
Sponsored by: Ministry of Textiles, Govt. of India
Cost of Workshop: 13, 90,000 (Thirteen lakhs nineteen thousand only)
Two Nos. workshops organized as under:
 One month duration total No. of Candidates trained: One hundred twenty candidates (120) From 01/11/2014 to 30/11/2014
 Four-month Duration total No. of Candidates trained: Forty candidates (40) From 01/11/2014 to 15/03/2015
2. **Organising Secretary (Centre Incharge) for one day seminar on 14 April 2017**
Name of Seminar: “BHIM app and its application”
File no. 12012/3/2013-General, Dated 31/03/2017
Sponsored by: Ministry of Textiles.
3. **Coordinator of seven days “Short Term Training Programme (STTP)” on “Advancements in Mechanical Engineering (AME-2018)” during December 17-23, 2018, sponsored by TEQIP-III, MMMUT Gorakhpur, India.**

4. **Coordinator** of one day technical event Research Scholar Day (**RSD-2018**) on 16 Dec. 2018, Mechanical Engineering Department, sponsored by TEQIP-III, MMMUT Gorakhpur, India.
5. **Organising Secretary** of **National Conference** on Futuristics in Mechanical Engineering (FME-2019) during March 28-29, 2019 sponsored by TEQIP-III, MMMUT Gorakhpur, India.
6. **Deputy Coordinator** of **National level seminar** in the series of Fourth malaviya research conclave (**MRC-2020**) during Feb. 22-24, 2020 sponsored by TEQIP-III, MMMUT Gorakhpur, India.

WORKSHOP/SHORT-TERM COURSES ATTENDED:

1. QIP short term course on “Emerging Trends in Carbon Nanotechnology”, November 07-12th, 2011 organized by Department of Mechanical Engineering, Indian Institute of Technology **IIT-Kanpur**, Kanpur-208016, UP, INDIA (Sponsored by QIP-AICTE)
2. Quality Improvement & Continuing Education Programme (QIP-CEP), Short Term Course on “Advanced Steel Design (October 8-12, 2012)” organized by Department of Civil Engineering Indian Institute of Technology **IIT-Delhi**, Delhi Hauz Khas, New Delhi-110016 INDIA (Sponsored by QIP-AICTE)
3. Short Term Course on “Multi-Objective Optimization Methods and Applications in Manufacturing (MOOMAM-2014)” held during June 6-8, 2014, organized by Department of Mechanical Engineering, National Institute of Technology (**NIT**), Rourkela-769008
4. Short Term Course on “Numerical and optimization Technique (NOT-2015)” from September 30th to October 4th, 2015, organized by Department of Civil Engineering Motilal Nehru National Institute of Technology (**MNNIT**), Allahabad UP, INDIA
5. Short Term Course on “advances in Design & Manufacturing (ADM-2016)” (Sponsored by TEQIP II) from July 04-10, 2016 organised by Mechanical Engineering Department, Madan Mohan Malaviya University of Technology(**MMMUT**) Gorakhpur-273 010, (U.P.)
6. Workshop on “Opportunities and Challenges for Industry- Institute interface” from 23-24 July 2016, organized by Indian Institute of Carpet Technology (IICT) Bhadohi Under Ministry of Textiles, Govt. of INDIA, Chauri Road, Bhadohi-221401 UP
7. Short term course on “Technological Advancement of Polymer Nanocomposites” from 04-08 April 2019, organized by Center for Development of Technical Education, Indian Institute of Technology (IIT) Kanpur, UP

8. Workshop on “Panel of Conference Organizers (POCO-2019)” on 25 September 2019, organized by IEEE-UP Section (INDIA) at Madan Mohan Malaviya University of Technology, Gorakhpur, UP
9. Short term course on “Research Method and Data Analysis Using SPSS & AMOS” from 27-31 January 2020, organized by Madan Mohan Malaviya University of Technology, Gorakhpur, UP
10. One Week Pedagogical Training Program on “Curriculum design, Delivery and Assessment for Outcome Based Education” from 11-16 May 2020, organized by Internal Quality Assurance Cell (IQAC), Madan Mohan Malaviya University of Technology, Gorakhpur, UP

List of Publications

SCI/SCIE	Scopus/ESCI/SCImago	Book Chapter(s)	Patents	Copyright Documents	Conference Paper(s)
30	34	18	09	04	71

National/International Patents

1. **Indian Patent 202111012813:** "Method for Synthesis of Carbon Nano Onions (CNOs)", March 24, 2021: **Published**
2. **Indian Patent 202111025285:** " Graphene Oxide and Carbon Fiber Reinforced Nanocomposite Material ", June 20, 2021: **Published**
3. **Indian Patent 202111032430:** " Method of Fabrication of a Polymer Composite from Polyester Carpet", July 20, 2021: **Published**
4. **Indian Design Patent 356986-001:** " Tiles", January 19, 2022: **Accepted**
5. **Indian Design Patent 361488-001:** " EMF Reduction Box", March 29, 2022: **Accepted**
6. **Indian Design Patent 361489-001:** " Electromagnetic Field Reduction Box Cap ", March 29, 2022: **Accepted**
7. **Indian Design Patent 365180-001:** " Modified Acetabular Cup Liner Without Fastening Mechanism ", 2022: **Accepted**
8. **Indian Design Patent 366426-001:** " Multi-Row Paddy Transplanting Machine", 2022: **Accepted**
9. **Indian Design Patent 381036-001:** “Anti-Topple FRP Road Safety Barriers” , March 07, 2023: **Accepted**.

National/International Copyrights

1. **Diary No.:** 11514/2021-CO/L, **Registration Number:** L-107279/2021, **Title:** MWCNT/Epoxy Nanocomposites, **Author:** Dr. Rajesh Kumar Verma, **Status:** Registered, **Dated:** 03/09/2021

2. **Diary No.:** 11506/2021-CO/L, **Title:** Structural Composite Material Developed from discarded Carpet, **Author:** Dr. Rajesh Kumar Verma, **Status:** Registered, **Dated:** 22/05/2021
3. **Diary No.:** 13755/2021-CO/L, **Title:** MWCNT-HA-PMMA bone cement Nanocomposites, **Author:** Dr. Rajesh Kumar Verma, **Status:** Submitted, **Dated:** 22/06/2021
4. **Diary No.:** 3790/2022-CO/L, **Title:** Structural Nanocomposite Developed From Discarded Jute Carpet And MWCNT Nanomaterial., **Author:** Dr. Rajesh Kumar Verma, **Status:** Submitted, **Dated:** 21/02/2022

Books/Chapter contributed to reputed publishers

1. **Rajesh Kumar Verma**, Prakhar Kumar Kharwar, Arpan Kumar Mondal, Kumar Abhishek and Jogendra Kumar, (2020) Exploration of MOORA Based Hybrid Taguchi Method for Multi-response Optimization—A Case Study, *Advances in Mechanical Engineering*, Lecture Notes in Mechanical Engineering, pp 515-525 **First Online:** 17 January 2020, **Online ISBN** 978-981-15-0124-1, **Print ISBN** 978-981-15-0123-4, **DOI:** https://doi.org/10.1007/978-981-15-0124-1_47, **Publisher Name:** Springer, Singapore.
2. Vikas Kumar, **Rajesh Kumar Verma**, (2020) “Utility Theory Embedded Taguchi Optimisation Method in Machining of Graphite Reinforced Polymer Composites (GRPC)” *Advances in Intelligent Systems and Computing* book series (AISC, volume 979), **First Online-08** April 2020, **Print ISBN** 978-981-15-3214-6, **Online ISBN** 978-981-15-3215-3, **DOI:** https://doi.org/10.1007/978-981-15-3215-3_43, **Publisher Name:** Springer, Singapore
3. Vikas Kumar, **Rajesh Kumar Verma**, (2020) “PCA-GRA Coupled Multi-Criteria Optimization Approach in Machining of Polymer Composites” *Advances in Intelligent Systems and Computing* book series (AISC, volume 979), **First Online-08** April 2020, **Print ISBN** 978-981-15-3214-6, **Online ISBN** 978-981-15-3215-3, **DOI:** https://doi.org/10.1007/978-981-15-3215-3_47, **Publisher Name:** Springer, Singapore
4. Jogendra Kumar, **Rajesh Kumar Verma** and Prateek Khare (2020) “Graphene functionalized Carbon/Glass fiber reinforced polymer nanocomposites: Fabrication and Characterization for manufacturing applications”, in Handbook Of Functionalized Nanomaterials: Environmental Health and Safety , **Publisher Name:** Elsevier Inc. Publication, **DOI:** 10.1016/B978-0-12-822415-1.00011-1
5. Prasanth Kottapalli, Rahul Narkhede, Harshit K. Dave, Himanshu V. Patel, **Rajesh Kumar Verma** (2021) “Experimental and Simulation Study on Permeability of Hybrid Composite”, in *Advances in Manufacturing Processes. Lecture Notes in Mechanical Engineering*. **Publisher Name:** Springer, Singapore. **DOI:** 10.1007/978-981-15-9117-4_29
6. Shivi Kesarwani, Vinay Kumar Patel, Vijay Kumar Singh and **Rajesh Kumar Verma**, Prakhar Kuma Kharwar (2022) “Recent trends in the manufacturing of reduced Graphene oxide modified epoxy nanocomposites as advanced functional material”, in Trends in

Fabrication of Polymers and Polymer composites, **Publisher Name:** AIP Publications, USA, **DOI:** 10.1063/9780735423916_009

7. Prakhar Kumar Kharwar, **Rajesh Kumar Verma** and and Abhishek Singh (2022) “Synthesis of catalyst-free Carbon Nano Onions (CNOs) for advanced functional materials”, in Trends in Fabrication of Polymers and Polymer composites, **Publisher Name:** AIP Publications, USA, **DOI:** 10.1063/9780735423916_008
8. Sanjeev Kumar, Vinay Kumar Patel and **Rajesh Kumar Verma** (2020) “Importance of Chemical Treatments of Natural Fibers in Fabrication of High-Performance Natural Fiber-Reinforced Polymer Composites”, in Trends in Applications of Polymers and Polymer composites, **Publisher Name:** AIP Publications, USA, **DOI:** 10.1063/9780735423916_010
9. Umang Dubey, Shivi Kesarwani, Panagiotis Kyratsis and **Rajesh Kumar Verma**, “Development of modified Polymethyl methacrylate and Hydroxyapatite (PMMA/HA) Biomaterial composite for Orthopaedic products” In Advances in Product Design Engineering, **PP.** 159–178, **Publisher Name:** Springer Nature, **DOI:** 10.1007/978-3-030-98124-2_7
10. Jogendra Kumar, Shivi Kesarwani, Balram Jaiswal, Kaushlendra Kumar, Devendra Kumar Singh, Kuldeep Kumar, Rahul Vishwakarma and **Rajesh Kumar Verma** (2022) “Study on Drilling behavior of Polymer Nanocomposites modified by Carbon nanomaterial with Fiber: A Case study” in Computational Intelligence in Manufacturing, **PP.** 87–109, **Publisher Name:** Elsevier Inc. Publication, **DOI:** 10.1016/B978-0-323-91854-1.00004-2
11. Shivi Kesarwani, **Rajesh Kumar Verma**, Prakhar Kuma Kharwar (2022) “Basalt fiber reinforced polymer composites and its significance in the future of composites”, in Trends in Applications of Polymers and Polymer composites, **Status-In Press**, **Publisher Name:** AIP Publications, USA
12. Jogendra Kumar, Prakhar Kumar Kharwar and **Rajesh Kumar Verma** (2022) “The machining potential and damage modeling of carbon/polymer composites for high-performance applications”, in Trends in Applications of Polymers and Polymer composites, **Status-In Press**, **Publisher Name:** AIP Publications, USA
13. Kuldeep Kumar, Jogendra Kumar, Vijay Kumar Singh, Rajesh Kumar Verma and Abhishek Singh. "A novel approach for optimization of Machining characteristics of polymer nanocomposites", CIMS 2020, July 2022 in Optimization of Industrial Systems [DOI:10.1002/9781119755074.ch28](https://doi.org/10.1002/9781119755074.ch28) **Publisher Name:** Wiley, Online ISBN: 9781119755074.
14. Shivi Kesarwani., Prakhar Kumar Kharwar., and **Rajesh Kumar Verma** (2023). “Artificial Neural Network (ANN) for Parametric Appraisal and Milling Efficiency Evaluation of Carbon/Epoxy Nanocomposites”. In: Jain, P.K., Ramkumar, J., Prabhu Raja, V., Kalayarasan, M. (eds) Advances in Simulation, Product Design and Development. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-4556-4_14 **Publisher Name:** Springer, Singapore, Online ISBN 978-981-19-4556-4.

15. Devendra Kumar Singh and Rajesh Kumar Verma (2023) “Realizing the Application Potential of Graphene-Modified Bionanocomposites for Prosthesis and Implant Applications”. In: Bhattacharyya, B., Mathew, J., Saravanakumar, N., Rajeshkumar, G. (eds) Advances in Micro and Nano Manufacturing and Surface Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-4571-7_29 **Publisher Name:** Springer, Singapore, Online ISBN 978-981-19-4571-7.
16. Kuldeep Kumar, and Rajesh Kumar Verma (2023) “Combined Compromise Solution for Machining Performance Optimization of Modified Polymer Composite”. In: Dixit, U.S., Kanthababu, M., Ramesh Babu, A., Udhayakumar, S. (eds) Advances in Forming, Machining and Automation. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-3866-5_17 **Publisher Name:** Springer, Singapore, Online ISBN 978-981-19-3866-5.
17. Rahul Vishwakarma, Rajesh Kumar Verma and Kishore Debnath (2023). “Investigation on Micro Electric Discharge Machining of Polymer Nanocomposites Modified by Graphene Nanoplatelet”. In: Dixit, U.S., Kanthababu, M., Ramesh Babu, A., Udhayakumar, S. (eds) Advances in Forming, Machining and Automation. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-3866-5_28 **Publisher Name:** Springer, Singapore, Online ISBN 978-981-19-3866-5.
18. Jogendra kumar, Balram jaiswal, Kuldeep kumar, Kaushlendra kumar, and Rajesh kumar Verma (2023) “Reuse of waste carpet into a sustainable composite: a case study on recycling approach” In: Khanna, N., Gajrani, K.K., Giasin, K., & Davim, J.P. (Eds.). (2023). Sustainable Materials and Manufacturing Technologies (1st ed.). <https://doi.org/10.1201/9781003291961> **Publisher Name:** CRC Press. Online ISBN: 9781003291961.

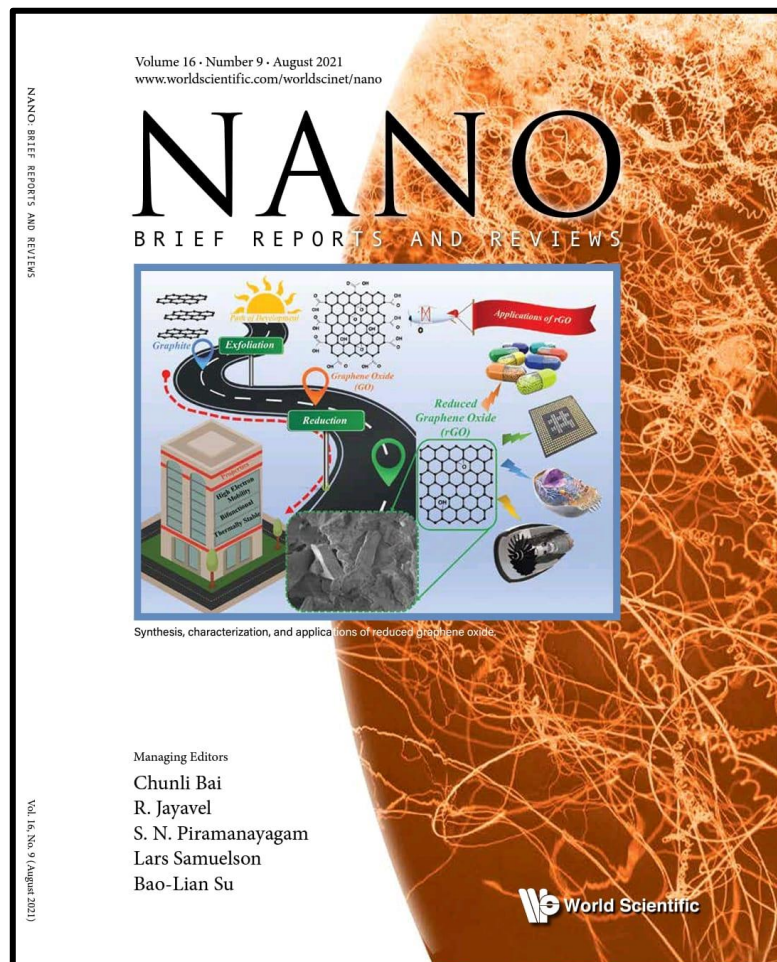
Publications in International Journals

LIST OF SCI JOURNALS

1. Prakhar Kumar Kharwar, Rajesh Kumar Verma “Exploration of Nature Inspired Grey Wolf Algorithm and Grey Theory in Machining of Multiwall Carbon Nanotube/Polymer Nanocomposites” Engineering with Computers, Springer Publications, Volume 38, 1127-1148, July 2020, **DOI:** 10.1007/s00366-020-01103-x, **SCI (IF 7.963)**
2. Jogendra Kumar, Rajesh Kumar Verma and Kishore Debnath, “A new approach to control the delamination and thrust force during drilling of polymer nanocomposites reinforced by graphene oxide/carbon fiber” Composite Structures, Elsevier Publications, Volume 253, 112786, December 2020, **DOI:** 10.1016/j.compstruct.2020.112786, **SCI (IF 5.138)**
3. Shivi Kesarwani and Rajesh Kumar Verma, “Ant Lion Optimizer (ALO) algorithm for Machinability assessment during Milling of Polymer composites modified by Zero-

dimensional Carbon Nano onions” Measurement, Elsevier Publications, Volume 187, 110282, **SCI (IF 3.364)**

4. Jogendra Kumar and **Rajesh Kumar Verma**, “A novel methodology of Combined Compromise Solution and Principal Component Analysis (CoCoSo-PCA) for machinability investigation of Graphene nanocomposites” CIRP Journal of Manufacturing Science and Technology, Elsevier Publications, Volume 33, 143-157, May 2021, **SCI (IF 3.602)**
5. Balram Jaiswal, **Rajesh Kumar Verma** and Sanjay Mishra “Use of discarded carpet material in the development of polymer (epoxy) composites for structural functions” The Journal of the Textile Institute, Taylor & Francis Publications, **Status- Online, DOI: 10.1080/00405000.2021.2025302**, January 2022, **SCI/SCIE (IF 1.880)**
6. Shivi Kesarwani and **Rajesh Kumar Verma**, “A critical review on synthesis, characterization and multifunctional applications of reduced Graphene oxide (rGO)/composites” Nano, World Scientific Publications, Volume 16 No. 9, August 2021, **DOI: 10.1142/S1793292021300085, SCI (IF 1.556)**



7. Prakhar Kumar Kharwar, **Rajesh Kumar Verma** (2020) Machining performance optimization in drilling of multiwall carbon nano tube/epoxy nanocomposites using GRA-PCA hybrid approach, Measurement Elsevier, Vol. 158, pp1-14, 2020 **DOI: <https://doi.org/10.1016/j.measurement.2020.107701>, SCI (IF 3.364)**
8. Jogendra Kumar, Kuldeep Kumar, Balram Jaiswal, Kaushlendra Kumar, and **Rajesh Kumar Verma**, “Investigation on the physio-mechanical properties of carpet waste polymer

- composites incorporated with Multi-wall carbon nanotube (MWCNT)*” The Journal of the Textile Institute, Taylor & Francis Publications, **Status-** Online, **DOI:** 10.1080/00405000.2022.2062860, **SCI/SCIE (IF 1.880)**
9. Jogendra Kumar, Kaushlendra Kumar, Kuldeep Kumar, Balram Jaiswal, and **Rajesh Kumar Verma**, “Development of waste carpet (jute) and Multi-wall carbon nanotube incorporated epoxy composites for lightweight applications” Progress in Rubber Plastics and Recycling Technology, SAGE Publications, **Status-** Online, **DOI:**10.1177/14777606221110252, **SCI/SCIE (IF 2.171)**
 10. Jogendra Kumar and **Rajesh Kumar Verma**, “Experimental investigation for machinability aspects of graphene oxide/CFRP nanocomposites and predictive modeling using hybrid approach” Defence Technology, Elsevier Publications, 2020, Volume 17 (5), 1671-1686, October 2021, **DOI:** 10.1016/j.dt.2020.09.009, **SCI (IF 3.172)**
 11. Shivi Kesarwani and **Rajesh Kumar Verma**, “Investigation on Interface Temperature and Parametric Optimization During Machining of Reduced Graphene Oxide Nanoflakes Dispersed Polymer-based Carbon Fiber Reinforced (rGO/CF) Nanocomposites”, Silicon, Springer Publications, (2022) **Status-** Online, **DOI:** 10.1007/s12633-022-01844-y, **SCI (IF 2.670)**
 12. Anastasios Tzotzis, Nikolaos Tapoglou, **Rajesh Kumar Verma** and Panagiotis Kyratsis, “3D-FEM Approach of AISI-52100 Hard Turning: Modelling of Cutting Forces and Cutting Condition Optimization” Machines, MDPI Publications, Vol.10(2), 74, **DOI:** 10.3390/machines10020074, **SCI/SCIE (IF 2.428)**
 13. Shivi Kesarwani and **Rajesh Kumar Verma** “A novel hybridization of Seagull algorithm and Combined Compromise Solution (SOA-CoCoSo) in Drilling investigation of Carbon Nano Onions modified polymer composites for structural application” Surface Review and Letters, World Scientific Publications, **Status-** Online, **DOI:** 10.1142/S0218625X22500548, **SCI/SCIE (IF 1.152)**
 14. Umang Dubey, Shivi Kesarwani and **Rajesh Kumar Verma**, “Incorporation of Graphene nanoplatelets/Hydroxyapatite in PMMA Bone cement for characterization and enhanced mechanical properties of Biopolymer composites”, Journal of Thermoplastic Composite Materials, SAGE Publications, **Status-** Online, **DOI:** 10.1177/08927057221086833, **SCI (IF 3.330)**
 15. Shivi Kesarwani, **Rajesh Kumar Verma** and Kishore Debnath “Modified JAYA Algorithm for machinability assessment and conflicting response optimization during Milling of nanostructured Carbon onions reinforced epoxy composites” Experimental Techniques, Springer Publications, January 2022, **Status-** Online, **DOI:** 10.1007/s40799-021-00543-4, **SCI/SCIE (IF 1.19)**

16. Prakhar Kumar Kharwar and **Rajesh Kumar Verma**, “Nature instigated Grey Wolf Algorithm for parametric optimization during Machining (Milling) of Polymer Nanocomposites”, Journal of Thermoplastic Composite Materials, SAGE Publications, February 2021, **DOI:** 10.1177/0892705721993202, **SCI (IF 1.529)**
17. Jogendra Kumar, **Rajesh Kumar Verma**, A.K. Mondal and Vijay Kumar Singh, “An integrated approach to control the machining performances during Milling of polymer nanocomposites reinforced by Graphene oxide/Carbon fiber” Polymers and Polymer Composites, SAGE Journals, August 2021, **DOI:** 10.1177/09673911211046789, **SCI (IF 2.00)**
18. Jogendra Kumar and **Rajesh Kumar Verma**, “A new criterion for Drilling Machinability evaluation of Nanocomposites modified by Graphene/Carbon fiber@ epoxy matrix and Optimization using Combined Compromise Solution (CoCoSo)” Surface Review and Letters, World Scientific Publications, Vol. 28, No. 09, 2150082, April 2021, **DOI:** 10.1142/S0218625X21500827, **SCI/SCIE (IF 0.748)**
19. Rahul Vishwakarma and **Rajesh Kumar Verma**, “Micro Electric discharge machining (μ -EDM) of polymer nanocomposites modified by Graphene nanoplatelets/Carbon using rotating electrode tool” Journal of Micromechanics and Microengineering, IOP Publishing Ltd, July 2021, **DOI:** 10.1088/1361-6439/ac11cb **SCI/SCIE (IF 1.881)**
20. Shivi Kesarwani and **Rajesh Kumar Verma**, “Weighted Aggregated Sum Product Assessment (WASPAS) Method for Correlated Response Optimization During Drilling of Nano Onions Structured Carbon Reinforced Polymer Composites” International Journal of Industrial Engineering: Theory, Applications, and Practice, Volume 28, 425-450, **DOI:** 10.23055/ijietap.2021.28.4.7529, **SCI/SCIE (IF 0.444)**
21. Prakhar Kumar Kharwar, **Rajesh Kumar Verma** and Abhishek Singh “Neural network modelling and Combined Compromise Solution (CoCoSo) method for optimization of Drilling Performance in polymer nanocomposites”, Journal of Thermoplastic Composite Materials, SAGE Publications, June 2020, **DOI:**10.1177/0892705720939165, **SCI (IF 1.529)**
22. Jogendra Kumar, **Rajesh Kumar Verma**, A.K. Mondal, “Taguchi- Grey Theory Based Harmony Search Algorithm (GR-HSA) for Predictive Modeling and Multi-Objective Optimization in Drilling of Polymer Composites” Experimental Techniques, Springer Publications, December 2020, **DOI:** 10.1007/s40799-020-00428-y, **SCI (IF 1.058)**

23. Din Bandhu, Ashish Thakur, Rajesh Purohit, **Rajesh Kumar Verma** and Kumar Abhishek,(2018) Characterization & evaluation of Al7075 MMCs reinforced with ceramic particulates and influence of age hardening on their tensile behavior” *Journal of Mechanical Science and Technology* Vol. 32(7), PP 3123-3128 (2018) ISSN: 1976-3824, 09/8/2018 DOI: [10.1007/s12206-018-0615-9](https://doi.org/10.1007/s12206-018-0615-9) , SCI/SCIE (IF: 1.734)
24. Devendra Kumar Singh, **Rajesh Kumar Verma** and Sanjay Mishra (2023) “Effect of Zirconia and Graphene Nanoparticles Loading on Thermo-Mechanical Performance of Hybrid Polymer Nanocomposite” Archives of Metallurgy and Materials. (Manuscript ID: AMM-00313-2022-01) SCI (IF: 0.633) Status: Accepted.
25. Shivi Kesarwani and **Rajesh Kumar Verma** (2023), “Investigation of physiochemical and mechanical properties of reduced Graphene Oxide (rGO) modified Carbon fiber Polymer composites" The Journal of the Textile Institute (JOTI). SCI/SCIE (IF 1.770). Status: Accepted.
26. Ankit Dhar Dubey, Jogendra Kumar, Panagiotis Kyratsis and **Rajesh Kumar Verma** (2023) “Stacking effect of Carbon/Glass fiber during Drilling operation of laminated polymer composite” *Archives of Metallurgy and Materials*.(AMM-00268-2022-02) Status Accepted.
27. Shivi Kesarwani, **Rajesh Kumar Verma** and S.C. Jayswal(2023) "Evaluation of the cutting force, burr formation, and surface quality during the machining of carbon nanoparticle modified polymer composites for structural applications" Materials Today Communications, Elsevier Publication, Volume 34, March 2023, 105375. DOI: <https://doi.org/10.1016/j.mtcomm.2023.105375> Status Published (SCI/SCIE: 3.662)
28. Devendra Kumar Singh and **Rajesh Kumar Verma** (2023) “Development of reduced Graphene oxide modified Ultrahigh molecular weight polyethylene (rGO/UHMWPE) based Nanocomposites for Biomedical Applications” *Journal of Thermoplastic Composite Materials* Online ISSN: 1530-7980 Status Published. DOI:[10.1177/08927057221129486](https://doi.org/10.1177/08927057221129486), SCI/SCIE (IF: 3.027)
29. Arpita Tripathi, Rajesh K. Yadav, Satyam Singh, Rehana Shahin, Dilip K. Dwivedi, Navneet Kumar Gupta, Tae W. Kim, **Rajesh Kumar Verma**, Kuldeep Kumar (2023), “A donor-acceptor self-assembled graphitic carbon nitride based EB-T photocatalytic system for generation and regeneration of C(sp³)F bond and NADH under sunlight”, *Diamond and Related Materials*, May 2023, 109998,ISSN0925-9635, DOI:<https://doi.org/10.1016/j.diamond.2023.109998>, Status: Published, SCI/SCIE (3.806)

30. Devendra Kumar Singh, **Rajesh Kumar Verma** and Sanjay Mishra (2023) “Enhancement in Physiomechanical, Thermal and Morphological Characteristics of Zirconia and reduced Graphene oxide modified Hybrid Polymer Nanocomposites for Orthopedic Application” **Journal of Inorganic and Organometallic Polymers and Materials**. (Manuscript ID: 91d14c7d-9bc2-417f-9f73-9954635006b9) **SCI (IF: 3.518) Status: Accepted**.

LIST OF SCOPUS/SCIMAGO/UGC JOURNALS

Publications in International Journals (SCI/Scopus)

1. **Rajesh Kumar Verma**, Kumar Abhishek, Saurav Datta, Siba Sankar Mahapatra, “*Fuzzy Rule Based Optimization in Machining of FRP Polyester Composites*”, **Turkish Journal of Fuzzy Systems, TJFS** An Official Journal of Turkish Fuzzy Systems Association: ISSN 1309-1190. Vol. No. 2, PP. 99-121,2011, **DOI: tjfsjournal.com/vol-1-to-5** , **Scopus**
2. **Rajesh Kumar Verma**, Kumar Abhishek, Saurav Datta, Pradip Kumar Pal, Siba Sankar Mahapatra (2015) *Multi-Response Optimization in Machining of GFRP (Epoxy) Composites: An Integrated Approach*, **Journal of Manufacturing Science and Production**, ISSN: 2191-0375, Vol. 15, Issue 3, PP. 267–292. 30/06/2015, **DOI: 10.1515/jmsp-2014-0054**, **ESCI/Scopus**
3. **Rajesh Kumar Verma**, Prashant Dwivedi, Srijia Sinha, (2017) Simultaneous optimization in quality characteristics of machine-made tufted carpets, “*Melliand International Textile technology journal*” (Melliand Textilberichte) Melliand InternationalMelliand Textilberichte- Deutscher Fachverlag GmbH, Volume 23, Issue 3, September2017, Pages159-161, ISSN: **[0947-9163](http://www.tib.eu/en/search/id/BLSE%3ARN612809640/Simultaneous-optimization-in-quality-characteristics/)**, **DOI: www.tib.eu/en/search/id/BLSE%3ARN612809640/Simultaneous-optimization-in-quality-characteristics/** , **Scopus**
4. **Rajesh Kumar Verma**, Anupam Agarwal, Piyush Srivastava, Sanjay Kumar Giri, Taguchi technique to identify significant factors affecting Compression Behaviour of Machine Made Carpets, “(Melliand Textilberichte) Melliand International” ISSN: **[0375-9350](http://www.tib.eu/en/search/id/BLSE%3ARN612809640/Simultaneous-optimization-in-quality-characteristics/)** **SCI Mago/Scopus**
5. Himansu Shekhar Mohapatra, **Rajesh Kumar Verma**, (2017) Indian Handmade Carpet- A Millennium Floor Covering, Journal of Textile Association (JTA), Vol.03, PP 157-162 (2017) ISSN: 0368-4636, **Scopus**

6. **Rajesh Kumar Verma** and Prakhar Kumar Kharwar (2019) Grey Embedded Artificial Neural Network (ANN) Based Hybrid Optimization Approach in Machining of GFRP epoxy composites, FME Transactions, Faculty of Mechanical Engineering, Belgrade. Vol.47 No.3, PP 641-648, ISSN- 14512092, 10/01/2019, **DOI:** 10.5937/fmet1903641P, **SCI Mago/Scopus**
7. Vikas Kumar, Prakhar Kumar Kharwar and **Rajesh Kumar Verma** (2019), “Fabrication and Machining aspects in NGRP Composite Materials” International Journal of Applied Engineering Research ISSN 0973-4562 Volume 14, Number 2, pp. 292-300, 15/01/2019. **DOI:**10.37622/000000, **SCI Mago/Scopus**
8. Ajay Kumar Yadav, Prakhar Kumar Kharwar and **Rajesh Kumar Verma** (2019),“Graphite Reinforced Polymer Composites: A review” International Journal of Applied Engineering Research, ISSN-**0973-9769** Volume 14, Number 2, PP.285-291. 27/01/2019 **DOI:**10.37622/000000, **SCI Mago/Scopus**
9. Sasmit Yadav and **Rajesh Kumar Verma** (2019), “Multi Objective Optimization Modules in Electrical Discharge Machining processes, International Journal of Applied Engineering Research ISSN 0973-4562 Volume 14, Number 2, PP.162-168. ISSN- 09734562, 18/02/2019 **DOI:**10.37622/000000 **SCI Mago/Scopus**
10. Somnath Pandey, Sasmit Yadav, Jogendra Kumar, **Rajesh Kumar Verma** “A Combined Approach of Nature-Inspired Firefly Algorithm and Weighted Principal Component Analysis in Machining of Inconel X-750” FME Transactions, Vol. 48,No.2 pp 439-446, 2020,ISSN-14512092, 01/02/2020, **DOI:**10.5937/fme2002439P **SCI Mago/Scopus**
11. Prakhar Kumar Kharwar, **Rajesh Kumar Verma** “Grey embedded in artificial neural network (ANN) based on hybrid optimization approach in machining of GFRP epoxy composites " FME Transactions journal, Vol. 47 No 3, pp 641-648, 2020., ISSN-14512092, 20/03/2020, **DOI:**10.5937/fmet1903641p **SCI Mago/Scopus**
12. Puranjay Pratap, Jogendra Kumar, **Rajesh Kumar Verma** “Experimental investigation and optimization of process parameters during electric discharge machining of Inconel X-750” Journal Multiscale and Multidisciplinary Modeling, Experiments and Design, Springer, vol. 3, No.1, pp.1-16, 2020., 11/03/2020, ISSN-2520-8179, **DOI:** 10.1007/s41939-020-00069-z, **SCI Mago/Scopus**
13. Jogendra Kumar, **Rajesh Kumar Verma** “Experimental Investigations and Multiple criteria Optimization during Milling of Graphene Oxide (GO) doped epoxy/CFRP Composites Using TOPSIS-AHP hybrid Module" FME Transactions journal, Vol. 48 No 3,

pp1-6, 2020., ISSN-14512092, 20/03/2020, DOI:10.5937/fme2002439P **SCI Mago/Scopus**

14. Prakhar Kumar Kharwar, **Rajesh Kumar Verma** “Multiple Machining Performance Optimization in Drilling of MWCNT /epoxy nanocomposites using TOPSIS and grey theory” *Journal of Advanced Manufacturing System*, Vol. No.1, pp1-20, 2020, ISSN-1793-6896, **ESCI**
15. Prakhar Kumar Kharwar, **Rajesh Kumar Verma** and Abhishek Singh “Simultaneous optimization of quality and productivity characteristics during machining of multiwall carbon nanotube/epoxy nanocomposites”, *Australian Journal of Mechanical Engineering*, Taylor & Francis Publications, July 2020, DOI: 10.1080/14484846.2020.1794511, **ESCI**
16. Jogendra Kumar, **Rajesh Kumar Verma** and Arpan Kumar Mondal “Predictive modeling and machining performance optimization during drilling of polymer nanocomposites reinforced by graphene oxide/carbon fiber.” *Archive of Mechanical Engineering*. 2020, Vol. 67 Issue 2, p229-258. 30p, DOI: 10.24425/ame.2020.131692, **SCI Mago/Scopus**
17. Prakhar Kumar Kharwar, **Rajesh Kumar Verma**, Nirmal Kumar Mandal and Arpan Kumar Mondal “Swarm intelligence integrated approach for experimental investigation in milling of multiwall carbon nanotube/polymer nanocomposites”, *Archive of Mechanical Engineering*. Vol. 67, Number 3, September 2020, DOI: 10.24425/ame.2020.131698, **SCI Mago/Scopus**
18. Jogendra Kumar, **Rajesh Kumar Verma** “An integrated module for Predictive modeling and Machinability appraisal during Milling of modified Graphene/Epoxy nanocomposites”, *Australian Journal of Mechanical Engineering*, Taylor & Francis Publications, April 2021, DOI: 10.1080/14484846.2021.1913854, **ESCI/SCIMago**
19. Balram Jaiswal, Sanjay Mishra and **Rajesh Kumar Verma**, “Application of PA carpet waste for the development of polymer composites: investigations on compression behavior” *Melliand International Journal*, **Status- Online, SCIMago/Scopus**
20. Balram Jaiswal, **Rajesh Kumar Verma** and Sanjay Mishra, “Investigation on Impact and Flexural behavior of polymer composite developed from discarded carpet” *Journal of Textile and Apparel, Technology and Management*, Wilson College of Textiles, NC State University, Vol. 12, Issue 02 (2021), DOI: <https://ojs.cnr.ncsu.edu/index.php/JTATM/article/view/18785/8787>, **SCIMago/Scopus**
21. Kuldeep Kumar, Jogendra Kumar, Vijay Kumar Singh and **Rajesh Kumar Verma**, “An integrated module for machinability evaluation and correlated response optimization

- during Milling of Carbon Nanotube/Glass fiber modified polymer composites.” Multiscale and Multidisciplinary Modeling, Experiments and Design, Springer, July 2021, DOI: 10.1007/s41939-021-00099-1, **SCI Mago/Scopus**
22. Kuldeep Kumar, Jogendra Kumar and **Rajesh Kumar Verma**, “Experimental Investigations in Electric Discharge Machining of Inconel-X 750 Using Hybrid Optimization Approach” International Journal of Modern Manufacturing Technologies, ISSN 2067–3604, Vol. XIII, No. 1 / 2021, Published, **SCI Mago/Scopus**
23. Devendra Kumar Singh and **Rajesh Kumar Verma**, “Contemporary development on the Performance and Functionalization of Ultra High Molecular Weight Polyethylene (UHMWPE) for Biomedical Implants” Nano LIFE, World Scientific Publications, Vol. 11, No. 03, 2130009, July 2021, DOI: 10.1142/S1793984421300090, **ESCI/SCIImago**
24. Ankit Dhar Dubey, Jogendra Kumar, Shivi Kesarwani and **Rajesh Kumar Verma**, “Investigation on Thrust and Torque Generation During Drilling of Hybrid Laminates Composite with Different Stacking Sequences Using Multiobjective Optimization Module” Journal of Multiscale Modelling, World Scientific Publications, Vol. 12, No. 03, 2150009 (2021), DOI: 10.1142/S1756973721500098, **SCIMago/Scopus**
25. Umang Dubey, Shivi Kesarwani and **Rajesh Kumar Verma**, “Predictive Modelling and Correlated Response Optimization of Polymethylmethacrylate (PMMA) based Bio-Nano Composite Material using A Hybrid Module” Nano LIFE, World Scientific Publications, Vol. 12, No. 01, 2150005 (2022), DOI: 10.1142/S1793984421500057 **ESCI/SCIImago**
26. Jogendra Kumar and **Rajesh Kumar Verma**, “Delamination Assessment During Machining of Laminated Polymer Nanocomposite” International Journal of Modern Manufacturing Technologies, ISSN 2067–3604, Vol. XIII, No. 2 / 2021, Published, **SCI Mago/Scopus**
27. Jogendra Kumar, Kumar Abhishek, Jinyang Xu and **Rajesh Kumar Verma**, “Experimental Investigation on Machine-Induced Damages during the Milling Test of Graphene/Carbon Incorporated Thermoset Polymer Nanocomposites” Journal of Composites Science, MDPI Publications, March 2022, Vol. 6(3), 77, DOI: 10.3390/jcs6030077, **ESCI/SCI Mago/Scopus**
28. Jogendra Kumar, Sujay Majumder, Arpan Kumar Mondal and **Rajesh Kumar Verma**, “Influence of rotation speed, transverse speed, and pin length during underwater friction stir welding (UW-FSW) on aluminum AA6063: A novel criterion for parametric control”

International Journal of Lightweight Materials and Manufacture, Elsevier Publications, Volume 5, Issue 3, PP: 295-305, DOI: 10.1016/j.ijlmm.2022.03.001, ESCI/SCI Mago/Scopus

29. Kuldeep Kumar and **Rajesh Kumar Verma**, “Measurement and evaluation of Delamination factors and Thrust force generation during Drilling of Multiwall carbon nanotube (MWCNT) modified polymer laminates " Archive of Mechanical Engineering, PAS Journals Repository. Volume 69, No. 2, PP: 269-300, 2022, DOI: 10.24425/ame.2022.140417, Scopus/ESCI
30. Jogendra Kumar, Sujay Majumder, Arpan Kumar Mondal and **Rajesh Kumar Verma**, "Investigation on Thermo-mechanical performances of Friction Stir Welding of Aluminum Alloys (AA6063)", Welding International, Taylor & Francis Publications, Status- Online, DOI: 10.1080/09507116.2022.2071132, Scopus/ESCI
31. Shivi Kesarwani, **Rajesh Kumar Verma** and Harshit K. Dave, “An integrated approach of VIKOR and teaching learning based optimization algorithm for milling machinability computations”, Management Science Letters, Growing Science Publications, Volume 12 Issue 4 pp. 263-282,2022, DOI: 10.5267/j.msl.2022.5.001, SCImago/Scopus
32. Kuldeep Kumar and **Rajesh Kumar Verma**, “Nature-inspired grasshopper optimization algorithm (GOA) for predictive modeling and machinability evaluation of laminated polymer nanocomposites " Multiscale and Multidisciplinary Modeling, Experiments and Design. Springer Publications, Status- Online, DOI: 10.1007/s41939-022-00126-9, Scopus/ESCI
33. Jogendra Kumar, Shivi Kesarwani, Prakhar Kumar Kharwar, Mark J. Jackson, and **Rajesh Kumar Verma** “Mechanical Performance and Drilling Machinability Evaluation of Carbon Nano Onions (CNOs) Reinforced Polymer Nanocomposites” International Journal on Interactive Design and Manufacturing (IJIDeM), Springer Publications, Scopus/ESCI
34. Devendra Kumar Singh, **Rajesh Kumar Verma (2023)** "Development of Zirconium modified Polymer nanocomposites for Artificial Bio-Bearing (ABB) Applications”, **International Nano Letters, Springer**. DOI: <https://doi.org/10.1007/s40089-023-00393-5> ESCI

Proceedings of International / National Conference/ Poster/Seminar

1. S. S. Mahapatra, S. Datta and **Rajesh Kumar Verma**, “*Introducing Combined Quality Loss Concept in Taguchi’s Philosophy for Parametric Optimization of Wire EDM*”, Proceedings of the 4th International Conference on Advances in Mechanical Engineering, September 23-25, 2010. S.V. National Institute of Technology, Surat – 395 007, Gujarat, INDIA. (**Paper ID PI-56**), **Page No. 497-501**
2. Saumya Darsan Mohanty, **Rajesh Kumar Verma**, Saurav Datta, Siba Sankar Mahapatra,” *Exploration of Multi-Response Performance Index and CQL Concept in Quality Optimization: A Case Study*”. Proceedings of National Conference on Advances in Mechanical Engineering (NCAME-2010) November 27-28, 2010. Mechanical Engineering Section, Aligarh Muslim University, Aligarh-202002, U.P., INDIA. [**Paper ID PI-52**], **Page No.176-182**
3. Deep Prakash Gupta, **Rajesh Kumar Verma**, Chandra Prakash Gupta, “*Implementation and Strategies of TPM in FMS for Maximum Equipment Productivity*”. Proceedings of National Conference on Advances in Mechanical Engineering (NCAME-2010) November 27-28, 2010. Mechanical Engineering Section, Faculty of Engineering & Technology, Aligarh Muslim University, Aligarh-202002, U.P., INDIA. [**Paper ID PI-59**], **Page No.157-162**
4. Anshuman Dash, **Rajesh Kumar Verma**, Saurav Datta, Siba Sankar Mahapatra, “*A case study to solve multi response optimization problem*”, Proceedings of 2nd International Conference on Production and Industrial Engineering (CPIE 2010), December 3-5, 2010, organized by Department of Industrial and Production Engineering, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar-144011. [**Paper ID: F001**], **Page No. 353-357**
5. Anshuman Mishra, **Rajesh Kumar Verma**, Saurav Datta, Siba Sankar Mahapatra, “*Utility Theory in Taguchi based multi-response optimization: a case study*”, Proceedings of 2nd International Conference on Production and Industrial Engineering (CPIE 2010), December 3-5, 2010, organized by Department of Industrial and Production Engineering, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar-144011. [**Paper ID: F002**], **Page No. 358-361**
6. Deep Prakash Gupta, **Rajesh Kumar Verma**, Chandra Prakash Gupta “*Implementation of TPM in manufacturing companies for zero defects production of parts: An overview*”. Proceeding of International Conference on Practice and Research in Management, for Sustainable Development, February 18-20, 2011 (PRIM 2011), organized by Department of Management, Faculty of Social Sciences, Dayalbagh Educational Institute (Deemed University), Dayalbagh, Agra, UP INDIA.
7. **Rajesh Kumar Verma**, Deep Prakash Gupta, Chandra Prakash Gupta, Ajit Kumar Chauhan, “*Key Success Factors in Knowledge Management for Effective and Efficient Contributions to the System*”. Proceedings of National conference on Management of innovation in

business and technology: new strides, February 19-20, 2011. Organized by School of Management studies, Varanasi-221001, U.P, INDIA.

8. Deep Prakash Gupta, **Rajesh Kumar Verma**, Chandra Prakash Gupta, Ajit Kumar Chauhan, “*Strategic Analysis of Total Productive Maintenance in Flexible Manufacturing System for Maximum OEE*”. Proceedings of International Conference on Recent Trends in Engineering, Technology & Management February 26-27, 2011. Organized by Bundelkhand Institute of Engineering and Technology Jhansi- 284128, U.P., INDIA. [Paper ID ME-129], Page No.829-836
9. **Rajesh Kumar Verma**, Kamal Kanti Goswami, Chandra Prakash Gupta, Arpan Kr. Mandal “*Introducing TPM Technique in Flexible Manufacturing System for Maximum OEE*”. Proceedings of International Conference on Industrial Engineering (ICIE-2011). Organized by Department of Mechanical Engineering”, held on November 17-19, 2011 at S.V. National Institute of Technology, Surat –395 007, Gujarat, INDIA. [Paper ID ICIE-153], Page No. 1155-1160.
10. Bhaskar Chandra Kandpal, **Rajesh Kumar Verma**, Jatinder Kumar, Dewanshu Khatana, Kunal Jain, “Paper- A Review on process capabilities, applications and emerging areas of research in Micro EDM”, Proceedings of International Conference on Materials Processing and characterization, March 8-10, 2012, organized by GRIET, JNT University, Hyderabad, INDIA. [Paper ID ICMPC2012/#0051], Page No. 148-153.
11. **Rajesh Kumar Verma**, K.K. Goswami, Saurav Datta, Arpan Kr. Mandal, Soumya Jyoti Chatterjee, Bhaskar Chandra Kandpal “*Investigative Study on Maximization of Mechanical Properties of HA/HDPE/PEEK Bio-Composites Polymers Using Taguchi DoE*”, International Conference on advances in Manufacturing Technology, June 15-17 2012, Organized by Chennai Institute of Technology Chennai, Tamilnadu, INDIA
12. Kumar Abhishek, **Rajesh Kumar Verma**, Saurav Datta, Siba Sankar Mahapatra, “*Utility concept and Fuzzy rule based optimization in machining glass fiber reinforced epoxy composites*”, 3rd International Conference on Production and Industrial Engineering, CPIE 2013, 29-31 March 2013, organized by Department of Industrial and Production Engineering, NIT Jalandhar, Punjab. Page No. 148-153.1356-1359
13. Kumar Abhishek , Suman Chatterjee , Rajiv Kumar Yadav, **Rajesh Kumar Verma**, Saurav Datta, Siba Sankar Mahapatra, Pradip Kumar Pal, “*A Fuzzy-ICA Based Hybrid Approach for Parametric Appraisal in Machining (Turning) of GFRP Composites*” 6th international conference on “Innovative Trends in Mechanical, Material, Manufacturing, Automobile, Aeronautical Engineering and Applied Physics” (ITMAEAP-2014), 20-21 December 2014, organized by Social Welfare Foundation” In Association With “Krishi Sanskriti” at Jawaharlal Nehru University, New Delhi-110067

14. **Rajesh Kumar Verma**, Saurav Datta, Pradip Kumar Pal (2015) “Machining of Unidirectional Glass Fibre Reinforced Polymers (UDGFRP) Composites -A Review” “International Conference of Advance Research and Innovation (ICARI 2015)”, dated 31st January 2015, at Delhi State Centre, Institution of Engineers (INDIA), (Engineers Bhawan), 2 Bahadur Shah Zafar Marg, New Delhi-110002, INDIA
15. **Rajesh Kumar Verma**, Pradip Kumar Pal, Bhaskar Chandra Kandpal “*Machining performance optimization in Drilling of GFRP composites: A utility theory (UT) based approach*” International Conference on Control Computing Communication and Materials (ICCCCM-2016) 21st and 22nd October, 2016, UCER Allahabad UP (IEEE Conference ID – 39191, paper ID ICCCM- 2016-229) **DOI:** 10.1109/ICCCCM.2016.7918255
16. **Rajesh Kumar Verma**, Prashant Dwivedi “*Investigations on abrasion wear of MMC: Application of experimental design technique*” seminar on second edition of research scholar day, “*Shodarth*” held at NIT Delhi, New Delhi on 15th October 2016. [**Paper ID NITD/RSD/2016/53**]
17. **Rajesh Kumar Verma**, Sanjay Kumar Giri “*Experimental study on machine made carpets for parametric optimal setting*” seminar on second edition of research scholar day, “*Shodarth*” held at NIT Delhi, New Delhi on 15th October 2016. [**Paper ID NITD/RSD/2016/46**]
18. **Rajesh Kumar Verma**, Pradip Kumar Pal “*Parametric appraisal in machining of glass fibre reinforced composites: Exploration of utility-fuzzy rule based Taguchi approach*” National Conference on Design, Manufacturing & Thermal Engineering 10-11 February 2017, organized by Department of Mechanical Engineering, JSPM’s Bhivarabai Sawant Institute of Technology & Research Wagholi, Pune, M.S. 412207. INDIA. [**Paper ID NCDMTE2017- NME 24**]
19. **Rajesh Kumar Verma**, Prashant Dwivedi “*Investigations on abrasion wear performances of Machine made tufted carpets (Acrylic): Exploration of Taguchi optimization philosophy*” National Conference on Design, Manufacturing & Thermal Engineering 10-11 February 2017, organized by Department of Mechanical Engineering, JSPM’s Bhivarabai Sawant Institute of Technology & Research Wagholi, Pune, M.S. 412207. INDIA. [**Paper ID NCDMTE2017- NME 28**].
20. **Rajesh Kumar Verma**, Srijia Sinha “*Parametric appraisal in machine made tufted carpets for quality and productivity improvement*” National Conference on Design, Manufacturing & Thermal Engineering 10-11 February 2017, organized by Department of Mechanical Engineering, JSPM’s Bhivarabai Sawant Institute of Technology & Research Wagholi, Pune, M.S. 412207. INDIA. [**Paper ID NCDMTE2017- NME 29**].
21. **Rajesh Kumar Verma**, Sanjay Kumar Giri “*Application of WPCA based hybrid Taguchi method for quality and productivity characteristics optimization in tufted MMC (Acrylic materials)*” National Conference on Design, Manufacturing & Thermal Engineering 10-

11 February 2017, organized by Department of Mechanical Engineering, JSPM's Bhivarabai Sawant Institute of Technology & Research Wagholi, Pune, M.S. 412207. INDIA. [Paper ID NCDMTE2017- NME 30].

22. **Rajesh Kumar Verma**, Pradip Kumar Pal “*PCA- GRA integrated Taguchi approach in machining of GFRP composites: A Multi-objective optimization approach*” International Conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods March 27-29, 2017, organized by Department of Mechanical Engineering, School of Engineering, Harcourt Butler Technical University (HBTU) Kanpur. INDIA.[Paper ID MFN_25]
23. **Rajesh Kumar Verma**, Pradip Kumar Pal “*Parametric appraisal and multi-response optimization in turning of GFRP composites: Exploration of weighted principal component analysis (WPCA)*” 3rd International Conference on Advancements and Recent Innovations in Mechanical, Production and Industrial Engineering (ARIMPIE – 2017) April 21-22, 2017, organized by Department of Mechanical Engineering, ITS Engineering college, Greater Noida. INDIA. [Paper ID ARIMPIE17-P-2]
24. **Rajesh Kumar Verma**, Kumar Abhishek, Pradip Kumar Pal “*Exploration of UT-FIS integrated Taguchi approach for Multi-response Optimization in machining of GFRP Composites materials*” 3rd Indian conference on applied mechanics(INCAM-2017), July 5-7 2017, organized by Applied Mechanics Department, Motilal Nehru National Institute of Technology (MNNIT), Allahabad UP, INDIA [Paper ID INCAM -13]
25. **Rajesh Kumar Verma** “*Application of fuzzy expert system and Imperialist Competitive Algorithm (ICA) for multi response optimization problems*” International Conference on Innovations in Control, Communication and Information Systems (ICICCI-2017) 12th - 13th August, 2017 Organised by UCER Delhi-NCR, Greater Noida, INDIA. (IEEE Conference ID - 40867)
26. **Rajesh Kumar Verma** and Sumit Kumar Singh “*Application of Taguchi based Utility theory for multi-response optimization (MRO) in machine made tufted carpets*” International Conference on Advance Materials, Textiles and Processes (ICAMTP-17), 14-15 October 2017, Organised by Uttar Pradesh Textile Technology Institute(UPTTI), Kanpur India. (Paper ID CPM-7)
27. **Rajesh Kumar Verma**, “*Exploration of WPCA based Taguchi approach for multi-response optimization in Quality characteristics of machine made tufted carpets*” International Conference on Advances in Polymer Science & Technology 23-25 November, 2017 Organised by Indian Institute of Technology **IIT-Delhi**, Delhi Hauz Khas, New Delhi-110016 INDIA (Paper ID - 451)
28. **Rajesh Kumar Verma** and Prakhar Kumar Kharwar” *Machining Aspects of Fiber (Glass/Carbon) Reinforced Polymer Composite: A Review*” International Conference on advances and soft computing applications in design and manufacturing (ASCADM-2018),

June 4-6 2018, Organised by organized by Department of Mechanical Engineering, NIT Patna, Bihar (**Paper ID – ASCADM/133**)

29. **Rajesh Kumar Verma**, Jogendra Kumar Prakhar Kumar Kharwar and Kumar Abhishek, “TOPSIS based Taguchi approach for Multi-criteria optimization in quality and productivity characteristics”, 4th International Conference on Computers and Management (ICCM) 2018 from December 22-23, 2018, organized by G B Pant Govt. Engineering College Okhla Phase-III New Delhi- 110020 India, (**Paper ID - ICCM_2018_paper_60**).DOI-https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3369835
30. **Rajesh Kumar Verma** and Jogendra Kumar, “Exploration of WPCA based hybrid Taguchi approach for Multi-attribute optimization in Machining of Glass Fiber Reinforced polyester Composites” Sixth International Conference on Recent Advances in Composite Materials (ICRACM - 2019) from February 25-28, 2019, Organized by Department of Mechanical Engineering Indian Institute of Technology (BHU), Varanasi-221005, India & The University of British Columbia, Vancouver, Canada & Swinburne University of Technology, Victoria, Australia & Trento University, Trento, Italy (**Paper ID – OP-67**).
31. Sasmit Yadav and **Rajesh Kumar Verma**, “Multi Criteria optimization approaches in Electric Discharge Machining” 9th International Conference of Materials Processing and Characterization, ICMPC-2019 from March 08-10, 2019 organized by Department of Mechanical Engineering, Gokaraju Rangaraju Institute of Engineering and Technology Bachupally, Hyderabad-500090, Telangana, India. (**Paper ID - 914**).
<https://doi.org/10.1016/j.matpr.2019.07.382>
32. Prakhar Kumar Kharwar and **Rajesh Kumar Verma**, “ Carbon Nano Tube in polymer nanocomposites” 9th International Conference of Materials Processing and Characterization, ICMPC-2019 from March 08-10, 2019 organized by Department of Mechanical Engineering, Gokaraju Rangaraju Institute of Engineering and Technology Bachupally, Hyderabad-500090, Telangana, India. (**Paper ID - 1363**).
<https://doi.org/10.1016/j.matpr.2019.07.350>
33. Prakhar Kumar Kharwar, **Rajesh Kumar Verma**, Arpan Kumar Mandol “PCA-TOPSIS Hybrid Taguchi Approach For Multi Attribute Optimisation in Machining of Glass Fibre Reinforced Polyester Composite” in National Conference on Futuristic in Mechanical Engineering, March 28-29, 2019, (UP), India. (**Paper ID-8**).
34. Vikas Kumar, Prakhar Kumar Kharwar, **Rajesh Kumar Verma**, “Appraisal of Harmony Search Algorithm and TLBO Technique for Multi Objective Optimisation” in National Conference on Futuristic in Mechanical Engineering, March 28-29, 2019, (UP), India. (**Paper ID-9**).
35. Jogendra Kumar, **Rajesh Kumar Verma**, Sanjay Mishra “Graphene Reinforced Polymer Composite” in National Conference on Futuristic in Mechanical Engineering, March 28-29, 2019, (UP), India. (**Paper ID-21**).
36. Ajay Kumar Yadav, Prakhar Kumar Kharwar, **Rajesh Kumar Verma** and Shravan Kumar Gupta, “Drilling of Graphite-Epoxy Polymer Composite: A Hybrid Optimisation Approach”

- in National Conference on Futuristic in Mechanical Engineering, March 28-29, 2019, (UP), India. **(Paper ID-37)**.
37. Sasmit Yadav and **Rajesh Kumar Verma**, “Graphene Reinforced Polymer Composite” in National Conference on Futuristic in Mechanical Engineering, March 28-29, 2019, (UP), India. **(Paper ID-38)**.
38. Arindam Dhar, Debtanu Patra, Arpan Kumar Mandol, **Rajesh Kumar Verma**, “PCA-TOPSIS Hybrid Taguchi Approach For Multi Attribute Optimisation in Machining of Glass Fibre Reinforced Polyester Composite” in National Conference on Futuristic in Mechanical Engineering, March 28-29, 2019, (UP), India. **(Paper ID-51)**.
39. Avinash Kumar, Abhinav Prasad, Virendra Chaudhary, **Rajesh Kumar Verma**, “Reuse of Plastic Waste for manufacturing of Paver Block” National Conference on Futuristic in Mechanical Engineering (FME-2019), 28-29 March 2019 organized by Department of Mechanical Engineering MMMUT Gorakhpur-273010 UP, INDIA [**Paper ID FME-2019/25**]
40. Archana Gopal, Shweta Maddhesia, **Rajesh Kumar Verma**, “Utilization of Polymeric Waste into Pavement Block” national conference on Futuristic in Mechanical Engineering (FME-2019), 28-29 March 2019 organized by Department of Mechanical Engineering MMMUT Gorakhpur-273010 UP, INDIA [**Paper ID FME-2019/40**]
41. Sk.Tohidul Box, Arpan Kumar Mondal, Subrata Mondal, **Rajesh Kumar Verma**, “Influence of Chemical Treatment on Mechanical Properties of Pineapple Leaf Fiber Reinforced Polymeric Composites” International Conference on Advancements in Mechanical Engineering (ICAME 2020) 16th - 18th January, 2020 Organized by Department of Mechanical Engineering Aliah University Address: II-A/27, Action Area II, Newtown, Kolkata-700160, India[**Paper ID: ICAME_00130**]
42. Jogendra Kumar, Prakhar Kumar Kharwar, **Rajesh Kumar Verma** “Utility-Taguchi based hybrid Optimization Approach in Machining of Graphite Composites” 2019 International Conference on Energy, Environment & Material Sciences (ICE2M), IEEE conference 1st -3rd December 2019 Organized by Madan Mohan Malaviya University of Technology Department of Mechanical Engineering IEEE conference ID:48764 [Paper Id : 07]
43. Tejendra Kumar, Sanjay Mishra, **Rajesh Kumar Verma**. "Fabrication and tensile behavior of post-consumer carpet waste structural composite", Materials Today: Proceedings, 2020, ICMPC 2020, Feb. 21-23, 2020, GLA University Mathura <https://doi.org/10.1016/j.matpr.2020.02.481>
44. Kuldeep Kumar, Jogendra Kumar, Vijay Kumar Singh, **Rajesh Kumar Verma** and Abhishek Singh. "A novel approach for optimization of Machining characteristics of polymer nanocomposites", CIMS 2020, Oct. 09-11, 2020, Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab, INDIA [**Paper ID: CIMS-2020_00280**]
45. Shivi Kesarwani, Puranjay Pratap, Jogendra Kumar, Vijay Kumar Singh and **Rajesh Kumar Verma** "An integrated approach for machining characteristics optimization of polymer nanocomposites", 11th ICMPC 2020, Dec. 15-17, 2020, IIT Indore, INDIA [**Paper ID: MATPR-D20-11431**]

46. Balram Jaiswal, Sanjay Mishra, Vijay Kumar Singh, and **Rajesh Kumar Verma** " Study on polymer (epoxy) composite using carpet waste for lightweight structural applications: A new approach for waste management ", 11th ICMPC 2020, Dec. 15-17, 2020, IIT Indore, INDIA [**Paper ID: MATPR-D20-21411**]
47. **Rajesh Kumar Verma**, Vijay Kumar Singh, D.K. Singh and Prakhar Kumar Kharwar. "Experimental investigation on surface roughness and circularity error during drilling of polymer nanocomposites", 11th ICMPC 2020, Dec. 15-17, 2020, IIT Indore, INDIA [**Paper ID: MATPR-D20-21327**]
48. Kuldeep Kumar, Prakhar Kumar Kharwar, Shivi Kesarwani, Jogendra Kumar and **Rajesh Kumar Verma**, "Study on milling process of polymer nanocomposites: effect of process parameters", ICERTT 2k21, 14 & 15th May 2021, Bulehora University College of Engineering and Technology, Ethiopia, **Accepted**
49. Jogendra Kumar, Shivi Kesarwani, Kaushlendra Kumar and **Rajesh Kumar Verma**, "Synergistic improvement of Epoxy Derived Polymer Nanocomposites reinforced With Graphene Oxide and Carbon Fiber", ICERTT 2k21, 14 & 15th May 2021, Bulehora University College of Engineering and Technology, Ethiopia, **Accepted**
50. Ankit Dhar Dubey, Jogendra Kumar, Shivi Kesarwani and **Rajesh Kumar Verma**, "Optimization of Thrust, Torque, and delamination during drilling of polymer composites modified by Carbon fiber and Glass fiber", Proceeding of National Conference on Advances in Mechanical Engineering, (NACME- 2021), May 27-28, 2021, A Virtual event under Diamond Jubilee Celebration, SVNIT, Surat, **Accepted**
51. Ankit Dhar Dubey, Kishore Debnath and **Rajesh Kumar Verma**, "Flexural strength analysis of hybrid composites using different stacking sequence of Carbon/Glass fiber layers in polymer composites", International Conference on Progressive Research in Industrial & Mechanical Engineering (PRIME - 2021) 5th -7th August 2021, **Accepted [Submission No.: 355]**
52. Umang Dubey and **Rajesh Kumar Verma**, "Machining Performance Evaluation and Parametric Optimization During Drilling of Bio-Nano Composite", International Conference on Progressive Research in Industrial & Mechanical Engineering (PRIME - 2021) 5th -7th August 2021, **Accepted [Submission No.: 357]**
53. Puranjay Pratap, Radhey Lal, and **Rajesh Kumar Verma**, "Electric discharge machining of Inconel X-750 and parametric appraisal using Grey theory", International Conference on Progressive Research in Industrial & Mechanical Engineering (PRIME - 2021) 5th -7th August 2021, **Accepted [Submission No.: 359]**
54. Virat Mani Vidyasagar and **Rajesh Kumar Verma**, "Drilling performance investigation of Biopolymer nanocomposite modified by Graphene nanoplatelet", International Conference on Progressive Research in Industrial & Mechanical Engineering (PRIME - 2021) 5th -7th August 2021, **Accepted [Submission No.: 383]**
55. Umang Dubey, Jogendra Kumar, Prakhar Kharwar, and **Rajesh Kumar Verma** "Evaluation of Machining Performance and Parametric Optimization During Drilling of Bio-Nanocomposite" APA Bioforum International e-Conference on Polymeric Biomaterials & Bioengineering, August 27-28, 2021, **Accepted**

56. Rahul Vishwakarma, **Rajesh Kumar Verma** and Kishore Debnath “Investigation on Micro electric discharge machining (μ EDM) of polymer nanocomposites modified by Graphene Nanoplatelet (GNP)”, 8th International and 29th All India Machine Tool Design and Research Conference (AIMTDR-2021), 9 - 11, December 2021, **Accepted**
57. Kuldeep Kumar, and **Rajesh Kumar Verma** “Combined compromise solution (CoCoSo) for machining performance optimization of modified polymer composite”, 8th International and 29th All India Machine Tool Design and Research Conference (AIMTDR-2021), 9 - 11, December 2021, **Accepted**
58. Shivi Kesarwani, Prakhar Kharwar, and **Rajesh Kumar Verma** “Artificial Neural Network (ANN) for Parametric Appraisal and Milling Efficiency Evaluation of Carbon/Epoxy Nanocomposites”, 8th International and 29th All India Machine Tool Design and Research Conference (AIMTDR-2021), 9 - 11, December 2021, **Accepted**
59. Balram Jaiswal, Sanjay Mishra and **Rajesh Kumar Verma** “Characteristics of discarded polymer composites material: Mechanical properties analysis”, 8th International and 29th All India Machine Tool Design and Research Conference (AIMTDR-2021), 9 - 11, December 2021, **Accepted**
60. Devendra Kumar Singh and **Rajesh Kumar Verma** “A Review of Recent Developments in Graphene/Graphene-based Bio-Nanocomposite Materials for implant application”, 8th International and 29th All India Machine Tool Design and Research Conference (AIMTDR-2021), 9 - 11, December 2021, **Accepted**
61. Virat Mani Vidyasagar, Umang Dubey, Kuldeep Kumar, Shivi Kesarwani and **Rajesh Kumar Verma**, “Machining of Polymethyl-methacrylate (PMMA) bone cement-based nanocomposite using Combined compromise solution (CoCoSo) theory”, 3rd International Conference on Future of Engineering Systems and Technologies, (FEST2021), December 18-19, 2021, **Accepted [Paper ID: 11]**
62. **Rajesh Kumar Verma**, Balram Jaiswal, Rahul Vishwakarma, Kuldeep Kumar and Kaushlendra Kumar, “Water absorption study and characterization of polymer composites developed from discarded nylon carpet”, 3rd International Conference on Future of Engineering Systems and Technologies, (FEST2021), December 18-19, 2021, **Accepted [Paper ID: 21]**
63. Ankit Dhar Dubey, Jogendra Kumar, Shivi Kesarwani and **Rajesh Kumar Verma**, “Flexural properties and Cost evaluation of hybrid polymer composites developed from different stacking sequences of fiber laminates”, 12th ICMPC 2021, Oct. 06-09, 2021, NITTTR Chandigarh, INDIA **[Paper ID: 176]**
64. **Rajesh Kumar Verma**, Balram Jaiswal, Rahul Vishwakarma, Kuldeep Kumar, and Kaushlendra Kumar, “Polymer composite developed from discarded carpet for light weight structural applications: Development and Mechanical analysis”, 12th ICMPC 2021, Oct. 06-09, 2021, NITTTR Chandigarh, INDIA **[Paper ID: 632]**
65. Shivi Kesarwani and **Rajesh Kumar Verma**, “Grey integrated Multiobjective Particle Swarm Optimization (MOPSO) for Machining assessment and predictive modeling of Cutting Forces generated during Polymer nanocomposite Drilling”, 12th ICMPC 2021, Oct. 06-09, 2021, NITTTR Chandigarh, INDIA **[Paper ID: 1108]**

66. Kuldeep Kumar, Prakhar Kumar Kharwar and **Rajesh Kumar Verma**, “Investigation on Flexural strength of Polymer nanocomposites modified by MWCNT and Glass fiber”, 12th ICMPC 2021, Oct. 06-09, 2021, NITTTR Chandigarh, INDIA [**Paper ID: 1115**]
67. Jogendra Kumar, Kuldeep Kumar, Balram Jaiswal, Kaushlendra Kumar and **Rajesh Kumar Verma**, “Mechanical and physical properties analysis of Textile (carpet) waste/polymer composite modified by nanofiller”, AMEIM 2022, Feb. 25-26, 2022, NIT Raipur, INDIA [**Paper ID: 7016**]
68. Uma Dutt Chaubey and **Rajesh Kumar Verma**, “Contemporary development on the mechanical properties of HDPE/Natural fiber composites”, International Conference on Advancements in Interdisciplinary Research (AIR-2022), 6th - 7th May 2022, Organized by Motilal Nehru National Institute of Technology Allahabad, Prayagraj (U.P.), INDIA [**Paper ID: 84**]
69. Shivi Kesarwani and **Rajesh Kumar Verma**, “Machinability Investigation and Optimization during End milling of reduced graphene oxide (rGO) modified laminated nanocomposites”, 20th ISME Conference on Advances In Mechanical Engineering, 19th - 21st May 2022, Organized by Department of Mechanical Engineering, Indian Institute of Technology Ropar, INDIA [**Paper ID: 5850**]
70. Shivam Kumar Dubey and **Rajesh Kumar Verma**, “A critical review on the enhancement of mechanical properties of Carbon fiber reinforced polymer composites using carbon-based nanomaterials (CBNs)”, 20th ISME Conference on Advances In Mechanical Engineering, 19th - 21st May 2022, Organized by Department of Mechanical Engineering, Indian Institute of Technology Ropar, INDIA [**Paper ID: 5566**]
71. Taufeeq Ahmad and **Rajesh Kumar Verma**, “Effect of stacking sequences on the Mechanical Properties of Hybrid Laminated Composites ”, 20th ISME Conference on Advances In Mechanical Engineering, 19th - 21st May 2022, Organized by Department of Mechanical Engineering, Indian Institute of Technology Ropar, INDIA [**Paper ID: 5656**]

Conference / Seminar Attended & Paper Presentation

1. **Presented and Published** a research paper on “*Introducing Combined Quality Loss Concept in Taguchi’s Philosophy for Parametric Optimization of Wire EDM*”, in the Proceeding of “4th International Conference on Advances in Mechanical Engineering”, held on September 23-25, 2010 at S.V. National Institute of Technology, Surat – 395 007, Gujarat, INDIA. [**Paper ID PI-56**], **Page No. 497-501.**
2. **Presented and Published** a research paper on “*A case study to solve multi response optimization problem*”, Proceedings of 2nd International Conference on Production and Industrial Engineering (CPIE 2010), December 3-5, 2010, organized by Department of Industrial and Production Engineering, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar-144011. [**Paper ID: F001**], **Page No. 353-357.**
3. **Presented and Published** a research paper on “*Utility Theory in Taguchi based multi-response optimization: a case study*”, Proceedings of 2nd International Conference on Production and Industrial Engineering (CPIE 2010), December 3-5, 2010, organized by

Department of Industrial and Production Engineering, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar-144011. [Paper ID: F002], Page No. 358-361.

4. **Presented and Published** a research paper on, "*Exploration of Multi-Response Performance Index and CQL Concept in Quality Optimization: A Case Study*". Proceedings of National Conference on Advances in Mechanical Engineering (NCAME-2010) November 27-28, 2010. Mechanical Engineering Section, Aligarh Muslim University, Aligarh-202002, U.P., INDIA. [Paper ID PI-52], Page No.176-182.
5. **Presented and Published** a research paper on "*Implementation and Strategies of TPM in FMS for Maximum Equipment Productivity*". Proceedings of National Conference on Advances in Mechanical Engineering (NCAME-2010) November 27-28, 2010. Mechanical Engineering Section, Faculty of Engineering & Technology, Aligarh Muslim University, Aligarh-202002, U.P., INDIA. [Paper ID PI-59], Page No.157-162.
6. **Presented and Published** a research paper on "*Implementation of TPM in manufacturing companies for zero defects production of parts: An overview*". Proceeding of International Conference on Practice and Research in Management, for Sustainable Development, to be held in February 18-20, 2011 (PRIM 2011), organized by Department of Management, Faculty of Social Sciences, Dayalbagh Educational Institute (Deemed University), Dayalbagh, Agra, UP INDIA. [Paper ID OT:208]
7. **Presented and Published** a research paper on "*Key Success Factors in Knowledge Management for Effective and Efficient Contributions to the System*". Proceedings of National conference on Management of innovation in business and technology: new strides, February 19-20, 2011. Organized by School of Management studies, Varanasi-221001, U.P, INDIA.
8. **Presented and Published** a research paper on "*Strategic Analysis of Total Productive Maintenance in Flexible Manufacturing System for Maximum OEE*". Proceedings of International Conference on Recent Trends in Engineering, Technology & Management February 26-27, 2011. Organized by Bundelkhand Institute of Engineering and Technology Jhansi- 284128, U.P., INDIA. [Paper ID ME-129], Page No.829-836.
9. **Presented and Published** a research paper on "*Introducing TPM in Flexible Manufacturing System for Maximum OEE*". Proceedings of International Conference on Industrial Engineering (ICIE) 2011. Organized by International Conference on Advances in Mechanical Engineering", held on November 17-19, 2011 at S.V. National Institute of Technology, Surat –395 007, Gujarat, INDIA. [Paper ID ICIE-153], Page No. 1155-1160.
10. **Presented and Published** a paper entitled *A fuzzy-ICA based hybrid approach for parametric appraisal in machining (turning) of GFRP composites*, in the 6th International conference on Innovative trends in Mechanical, Material, Manufacturing, Automobile, Aeronautical Engineering and Applied Physics" (ITMAEAP 2014) held during 20th

December, 2014 at School of Social Science Auditorium, Jawaharlal Nehru University (JNU), New Delhi-110067.

11. **Presented and Published** a paper entitled “*Machining performance optimization in Drilling of GFRP composites: A utility theory (UT) based approach*” International Conference on Control Computing Communication and Materials (ICCCCM-2016) 21st and 22nd October, 2016, UCER Allahabad UP (IEEE Conference ID – 39191, paper ID ICCCM- 2016-229)

12. **Presented and Published** a paper entitled “*Parametric appraisal in machining of glass fibre reinforced composites: Exploration of utility-fuzzy rule based Taguchi approach*” National Conference on Design, Manufacturing & Thermal Engineering 10-11 February 2017, organized by Department of Mechanical Engineering, JSPM’s Bhivarabai Sawant Institute of Technology & Research Wagholi, Pune, M.S. 412207. INDIA. **[Paper ID NCDMTE2017- NME 24]**

13. **Presented and Published** a paper entitled “*Investigations on abrasion wear performances of Machine made tufted carpets (Acrylic): Exploration of Taguchi optimization philosophy*” National Conference on Design, Manufacturing & Thermal Engineering 10-11 February 2017, organized by Department of Mechanical Engineering, JSPM’s Bhivarabai Sawant Institute of Technology & Research Wagholi, Pune, M.S. 412207. INDIA. **[Paper ID NCDMTE2017- NME 28].**

14. **Presented and Published** a paper entitled “*Parametric appraisal in machine made tufted carpets for quality and productivity improvement*” National Conference on Design, Manufacturing & Thermal Engineering 10-11 February 2017, organized by Department of Mechanical Engineering, JSPM’s Bhivarabai Sawant Institute of Technology & Research Wagholi, Pune, M.S. 412207. INDIA. **[Paper ID NCDMTE2017- NME 29].**

15. **Presented and Published** a paper entitled “*Application of WPCA based hybrid Taguchi method for quality and productivity characteristics optimization in tufted MMC (Acrylic materials)*” National Conference on Design, Manufacturing & Thermal Engineering 10-11 February 2017, organized by Department of Mechanical Engineering, JSPM’s Bhivarabai Sawant Institute of Technology & Research Wagholi, Pune, M.S. 412207. INDIA. **[Paper ID NCDMTE2017- NME 30].**

16. **Presented and Published** a paper entitled “*PCA- GRA integrated Taguchi approach in machining of GFRP composites: A Multi-objective optimization approach*” International Conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods March 27-29, 2017, organized by Department of Mechanical

Engineering, School of Engineering, Harcourt Butler Technical University (HBTU) Kanpur. INDIA. [Paper ID MFN_25]

17. **Presented and Published** a paper entitled “*Parametric appraisal and multi-response optimization in turning of GFRP composites: Exploration of weighted principal component analysis (WPCA)*” 3rd International Conference on Advancements and Recent Innovations in Mechanical, Production and Industrial Engineering (ARIMPIE – 2017) April 21-22, 2017, organized by Department of Mechanical Engineering, ITS Engineering college, Greater Noida. INDIA. [Paper ID ARIMPIE17-P-2]

18. **Presented and Published** a paper entitled “*Exploration of UT-FIS integrated Taguchi approach for Multi-response Optimization in machining of GFRP Composites materials*” 3rd Indian conference on applied mechanics(INCAM-2017), July 5-7 2017, organized by Applied Mechanics Department, Motilal Nehru National Institute of Technology (MNNIT), Allahabad UP, INDIA [Paper ID INCAM -13]

19. **Presented and Published** a paper entitled “*Application of fuzzy expert system and Imperialist Competitive Algorithm (ICA) for multi response optimization problems*” International Conference on Innovations in Control, Communication and Information Systems (ICICCI-2017) 12th -13th August, 2017 Delhi-NCR, Greater Noida, INDIA. (IEEE Conference ID - 40867) [Paper ID ICICCI-69]

20. **Presented and Published** a paper entitled “*Exploration of WPCA based Taguchi approach for multi-response optimization in Quality characteristics of machine made tufted carpets*” International Conference on Advances in Polymer Science & Technology 23-25 November, 2017 Organised by Indian Institute of Technology **IIT-Delhi**, Delhi Hauz Khas, New Delhi-110016 INDIA (Paper ID - 451)