

Profile Page



Name : Dr Rajeev Verma

Designation : Assistant Professor Grade-i

Department : Industrial & Production Engg.

Qualification : PhD Surface Engineering (Punjab Engineering College Chandigarh)
ME Production & Industrial Engineering (Punjab Engineering College Chandigarh)
PGDBA Operations Research (Symbiosis Pune)
B Tech Mechanical Engineering

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Research Interests :

Thermal Spray Coatings, Superhydrophobic Surfaces, Laser Surface Texturing & Optimization

Other Profile Links :

Google Scholar Link :

Dr Rajeev Verma [Click Here](#)

Journal Publications :

Year	Journal	Publication
2022	International Journal of Heavy Vehicle Systems, Inderscience	Verma, R., Jagjit Singh Randhawa, Durgaprasad Pitcha, Jawed Ali, Design Optimization of Interference Limits for Cup-Plug Installation in HHP Cylinder Head, (Accepted)
2022	International Journal of Surface Engineering and Interdisciplinary Materials Science (IJSEIMS)	Khatkar, S. K., Verma, R., Kant, S., & Suri, N. M. (2022). Effect of Reinforcements on the Sliding Wear Behavior of Self-Lubricating AZ91D-SiC-Gr Hybrid Composites, 10(1), 1-19.
2021	Surface Topography: Metrology and Properties.	Kumar, V., Verma, R., Sharma, V., & Sharma, V. S. (2021), 'Recent Progresses in Super-Hydrophobicity and Micro-Texturing for Engineering Applications', (Published Online)
2021	Materials Today Communications, 26, 101736	Kumar, V., Verma, R., Kango, S., & Sharma, V. S. (2021). Recent progresses and applications in Laser-based surface texturing systems.
2021	Surface Topography: Metrology and Properties, 9(1)	Sharma, N., Verma, R., Sharma, S., & Kango, S. (2021). Qualitative potentials of surface textures and coatings in the performance of fluid-film bearings: A critical review.

2021	Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology.	Singh, S., Kango, S., Sharma, N., & Verma, R. (2021). Recent advances in the mechanical durability of superamphiphobic surfaces: A review. 235(11), 2474–2499
2021	Arabian Journal for Science and Engineering, 46, 11671–11685 (2021).	Minhas, N., Thakur, A., Mehlwal, S., Verma, R., Sharma, V. S., & Sharma, V. Multi-variable Optimization of the Shot Blasting of Additively Manufactured AlSi10Mg Plates for Surface Roughness Using Response Surface Methodology
2020	Transactions of The Indian Institute of Metals	Kumar, V., Verma, R., Kango, S., Development of super-hydrophobic surfaces on micro-textured WC-10Co-4Cr coated ASTM A479 steel, 73, 1015–1026.
2020	Silicon 45, 9449-9470	Khatkar, S. K., Verma, R., Kharb, S. S., Thakur, A., & Sharma, R. Optimization and Effect of Reinforcements on the Sliding Wear Behavior of Self-Lubricating AZ91D-SiC-Gr Hybrid Composites.
2020	Arabian Journal for Science and Engineering, 45(11), 9449-9470	Naseem, M., Verma, R., & Kango, S. Thermo-mechanical Evaluation of Slurry-Sprayed Multi-layered Coatings.
2019	Arabian Journal for Science and Engineering, 44.2	Rajeev Verma, Suman Kant, and Narendra Mohan Suri. "Process Optimization of Slurry Spray Technique Through Multi-attribute Utility Function."
2019	International Journal of Computational Materials Science and Surface Engineering, 8(3-4), 269-289	Das, D., Verma, R., & Pathak, V. K., Thermo-mechanical evaluation of plasma sprayed YSZ-based multi-layered thermal barrier coatings
2019	International Journal of Surface Engineering and Interdisciplinary Materials Science, 7.1: 37-54	Das, Debasish, Rajeev Verma, and Vipul Pathak. "Plasma Sprayed WC-12% Co-Coatings for TBC Applications on Diesel Engine Piston."
2019	Arabian Journal for Science and Engineering, 44:5897–5919	Verma, Rajeev, Jagjit Singh Randhawa, Suman Kant, and Narendra Mohan Suri, "Characterization studies of slurry sprayed mullite-nickel coatings on ASTM 1018 steel."
2016	Proc IMechE Part E: J Process Mechanical Engineering, ISBN: 0954-4089, 2016, Vol. 230(2), pp. 87-96, DOI: 10.1177/0954408915595948	Rajeev Verma, Suman Kant, Narendra M Suri, Adhesion Strength optimization of slurry sprayed mullite-based coating using Taguchi method
2016	Journal of Thermal Spray Technology 25.7 (2016): 1289-1301 DOI: 10.1007/s11666-016-0437-1.	Rajeev Verma, Narendra Mohan Suri, and Suman Kant. "Parametric Appraisal of Slurry-Sprayed Mullite Coatings for Coating Thickness."
2016	Materials and manufacturing processes, 32.4 (2016): 416-424 DOI: 10.1080/10426914.2016.1221090	Rajeev Verma, Narendra Mohan Suri and Suman Kant, "Effect of Parameters on Adhesion Strength for Slurry Spray Coating Technique",

Conference Publications :

Year	Conference	Publication
2021	2nd International conference on 'The Congress on Advances in Materials Science and Engineering (CAMSE-2021)', organized by NIT Jalandhar and Shobhit Deemed University, Saharnpur,	Kundankumar Chauhan, Rajeev Verma, and Vijay Kumar, Fabrication of highly Water-Repellent surface on AISI 304 stainless steel substrate using combination of laser surface texturing and candle soot, July 17-19, 2021

2019	7th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering; IIT Ropar, December 5-7, 2019.	Kumar V., R Verma, Recent Progresses in Super-Hydrophobicity and Micro-Texturing for Mitigating Problems in Engineering Applications: A Review'
2019	6th International Conference on Production and Industrial Engineering (CPIE-2019; ISBN-13978-93-83893-09-6)	Kumar V., and Verma, R., "Development of Durable Superhydrophobic Surface On Wc-Co-Cr Coated ASTM A988 Stainless Steel Substrate"
2019	6th International Conference on Production and Industrial Engineering (CPIE-2019; ISBN-13978-93-83893-09-6), NIT-Jalandhar, June 8-10, 2019.	Muhammed Naseem, O., and Verma, R., "Experimental Validation Of Thermal Conductivity On Composite Thermal Barrier Coating"
2019	6th International Conference on Production and Industrial Engineering (CPIE-2019; ISBN-13978-93-83893-09-6)	Vipin P., Kant, S., Jawalkar, C.S., Verma, R., "Application Of Artificial Neural Network For Modeling Surface Roughness In Machining Process- A Review",
2019	7th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering; IIT Ropar, December 5-7, 2019.	Kumar V., R Verma, "Recent Progresses in Super-Hydrophobicity and Micro-Texturing for Mitigating Problems in Engineering Applications: A Review",
2018	3rd International Conference on Soft Computing: Theories and Applications (SoCTA - 2018), NIT-Jalandhar, December 21-23, 2018	S. K. Khatkar, R. Verma*, S. Kant, N. M. Suri, "Optimization of wear behavior of AZ91D-SiC-Gr hybrid composites using Taguchi experimental design"
2018	5th International Conference on Production and Industrial Engineering (CPIE-2018), Bangkok, 26-29 June 2018.	Vipin, S. Kant, C. S. Jawalkar, R. Verma*, "Influence of Process Parameters on Surface Roughness Hole Diameter Error and Burr Height in Drilling of 304L Stainless Steel",
2016	National Conference on Statistical and Analytical Methods in Production & Industrial Engineering (SAMPIE-2016), PEC Chandigarh, March 11-12, 2016, pp. 241-247.	Rajeev Verma, Narendra Mohan Suri, Suman Kant, "Study of the Slurry Spray Coating Technique",
2016	National Conference on Enhancing National Competitiveness: Role of Industrial Engineering and Technology Management (NITIE-NCIETM-2016), NITIE Mumbai, 17th -19th Nov., 2016, pp. 335-343 (ISBN 9789386256157).	Rajeev Verma, Narendra Mohan Suri, Suma Kant, "Coating Density Optimization of Slurry Sprayed Mullite-based Coating with Perceived Confounding Variable",
2016	4th International Conference on Production and Industrial Engineering (CPIE-2016), NIT-Jalandhar, 19-21 December 2016. (ISBN-978-93-5267-403-9)	Rajeev Verma, Narendra Mohan Suri, Suri Kant, "Slurry Spray Coating Technology with the Aid of Sintering Additive
2014	4th International Conference on Advances in Engineering and Manufacturing Technology (AMMT-14), Chitkara University, Punjab, October 3-4, 2014, pp. 263-271.	Rajeev Verma, Suman Kant, Narendra Mohan Suri, "Parametric Study of Slurry Sprayed Mullite Coatings Using Taguchi",
2013	3rd International Conference on Production and Industrial Engineering (CPIE-2013, ISBN 978-81-920453-1-3), NIT-Jalandhar, 29-31 March 2013, pp. 283-287	Rajeev Verma, Narendra Mohan Suri, "Effect of process parameters of Gas Metal Arc Welding on temperature in Heat Affected Zone,"
2013	3rd International Conference on Production and Industrial Engineering (CPIE-2013, ISBN 978-81-920453-1-3), NIT-Jalandhar, 29-31 March 2013, pp. 288-297.	Rajeev Verma, Narendra Mohan Suri, "Finite Element Modeling and measurement of temperature distribution in Gas Metal Arc Welding,"

2013	International Conference on Smart Technologies for Mechanical Engineering (STME-2013, ISBN: 978-93-83083-35-0), DTU-Delhi, 25-26 October 2013, pp. 690-697.	Rajeev Verma, Narendra Mohan Suri, Suman Kant, “An overview of Functionally Graded Thermal Barrier Coatings,”
2013	International Conference on Smart Technologies for Mechanical Engineering (STME-2013, ISBN: 978-93-83083-35-0), DTU-Delhi, 25-26 October 2013, pp. 736-743.	Rajeev Verma, Narendra Mohan Suri, Suman Kant, “Liquid Phase Sintering of mullite composites – A Review,”

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Book Chapter	Smart Magnetorheological (MR) Finishing Technology and Its Applications.	Springer, Singapore.	Vaishya R., Sharma V., Kumar V., Verma R.	https://doi.org/10.1007/978-3-030-73495-4_46 .	2022
Book Chapter	Application of Artificial Neural Network for Modeling Surface Roughness in Machining Process—A Review.	Springer, Singapore.	Pahuja V., Kant S., Jawalkar C.S., Verma R.	https://doi.org/10.1007/978-981-15-4550-4_38	2021
Book Chapter	Effect of Slip on Hydrodynamic Textured Parallel Plate Bearings.	Springer, Singapore.	Nimbolkar, P. G., Kango, S., Sharma, N., & Verma, R. (pp. 381-391).	https://doi.org/10.1007/978-981-16-0942-8_37	2021
Book Chapter	Development of Durable Superhydrophobic Surface On Wc-Co-Cr Coated ASTM A988 Stainless Steel Substrate	Springer, Singapore	Kumar V., and Verma, R.	Print ISBN: 978-981-15-4618-1, Electronic ISBN: 978-981-15-4619-8	2020
Book Chapter	Experimental Validation of Thermal Properties on Composite Thermal Barrier Coating.	Springer, Singapore	Naseem O M., Verma R.	Print ISBN: 978-981-15-4618-1, Electronic ISBN: 978-981-15-4619-8	2020
Book Chapter	Optimization of Wear Behavior of AZ91D-SiC-Gr Hybrid Composites Using Taguchi Experimental Design. In Soft Computing: Theories and Applications (pp. 1151-1163). DOI https://doi.org/10.1007/978-981-15-0751-9_106	Springer, Singapore	Khatkar, S. K., Verma, R., Kant, S., & Suri, N. M. (2020).	Print ISBN 978-981-15-0751-9	2020

Book Chapter	"Influence of Process Parameters on Surface Roughness Hole Diameter Error and Burr Height in Drilling of 304L Stainless Steel." pp. 117-135.	In Manufacturing Engineering. Springer, Singapore	Pahuja, Vipin, Suman Kant, Chandrashekhar S. Jawalkar, and Rajeev Verma.	ISBN 978-981-13-6286-6	2019
Book Chapter	Slurry Sprayed Mullite Coatings and Their Corrosion Performances. In Production, Properties, and Applications of High Temperature Coatings (pp. 187-214).	IGI Global, USA	Rajeev Verma, Narendra Mohan Suri, & Suman Kant	ISSN:2327-5448, EISSN:2327-5456	2018

Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
P-I	Seed Grant for Innovative R&D Project	“Development and Evaluation of Durable Micro-Textured Superhydrophobic Surfaces,	TEQIP Phase-III, vide order no. NITJ/TEQIP-III/7719	03.12.2018	05.6.2020	3.85 Lac.	Completed	Saurabh Kango. Nitin Sharma, Varun Sharma
PI	Industry Oriented R&D Project	“Development of Superhydrophobic coating on W-Co-Cr and glass substrate”	under (TEQIP) Phase-III, vide order no. NITJ/TEQIP-III/7776	09.01.2019	1.8.2020	48,000/-	Completed	

Events Organized :

Category	Type	Title	Venue	From	To	Designation
Conference	National	National Conference on Statistical and Analytical Methods in Production & Industrial Engineering (SAMPIE-2016)	Punjab Engineering College, Chandigarh	11.03.2016	12.03.2018	Organizing Secretary
Conference	International	6th International Conference on Production and Industrial Engineering (CPIE-2019)	NIT-Jalandhar	08/06/2019	10/06/2019	Convener
Conference	International	International Conference on ‘Industrial and Manufacturing Systems (CIMS - 2020)	NIT Jalandhar	09/10/2020	11/10/2020	Convener

Summer Internship Program	National	Self-Sponsored Six-week's Summer Internship Program on 'CAD/CAM & Industrial Automation' using various commercial software packages	Department of Industrial and Production Engineering, NIT Jalandhar	June 1, 2019	July 13, 2019	Coordinator
STC	National	TEQIP sponsored STC on 'Advances in Operations Management for Manufacturing Systems'	NIT Jalandhar	Dec 2, 2019	Dec 6, 2019	Convener
STC	National	TEQIP sponsored STC on 'Advancements in Manufacturing and Material Processing – AMMP'	NIT Jalandhar	January 2, 2020	January 6, 2020	Coordinator
STC	National	TEQIP sponsored STC on 'Contemporary Material Technologies'	NIT Jalandhar	September 8, 2020	September 12, 2020	Coordinator
STC	National	TEQIP sponsored STC on 'Computational & Experimental Studies on Failure of Materials'	NIT Jalandhar	September 13, 2020	September 17, 2020	Coordinator

Professional Affiliations :

Designation	Organization
Life Member	Society of Materials and Mechanical Engineering
Member	Life Membership: The Institution of Engineers (India). Membership No: M-1750555

PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Vijay Kumar (19505213)	Development of graphene premixed WC-Co-Cr coatings utilizing laser surface texturing for improved wear and corrosion behaviour	Ongoing		-

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Kundankumar Baldevbhai Chauhan (19205204)	Evaluation of HVOF Sprayed Graphene Mixed WC-10Co-4Cr Coating On Laser Textured AISI 304 Stainless Steel	Awarded	2021	Dr Rakesh Kumar
Harish Kumar Bairwa	Development of Super-hydrophobic Surfaces on ASTM A420 Steel by Direct Laser Texturing	Awarded	2020	Dr Rakesh Kumar
Alla D V S Prasad	Estimation of lattice strain and Analysis of various parameters on WC-10Co-4Cr coated AISI-420 substrate	Awarded	2020	Dr Kapil Kumar Goyal

Vijay Kumar	Development of Superhydrophobic Surfaces WC-10Co-4Cr coated ASTM A479 Steel, 2019	Awarded	2019	-
Muhammed Naseem. O	Thermo-mechanical Evaluation of Mullite based Multi-Layered Coatings	Awarded	2019	-

Admin. Responsibilities :

Position Held	Organization	From	To
Hostel Warden	Dr B R Ambedkar National Institute of Technology Jalandhar	31.1.19	Present
Coordinator - Institute Newsletter	Dr B R Ambedkar National Institute of Technology Jalandhar	December 2018	Present
Coordinator - Institute Brochure	Dr B R Ambedkar National Institute of Technology Jalandhar	December 2018	January 2020

Award and Honours :

Title	Activity	Given by	Year
‘Outstanding Faculty In Industrial And Production Engineering’	for the contribution and achievement in the discipline of engineering	by 7th Venus International Science and Technology Awards – VISTA 2021, Venus International Foundation, India.	2021
Appreciation letter with cash award	Development of CAM programme through DELCAM 10.0	M/s Morgardshammar India Limited, Meerut.	2010