

Dr. RAKESH BHATIA

Name : **Dr. Rakesh Bhatia**

Designation : **Assistant Professor (Mechanical)**

Department : **Yadavindra College of Engineering**

Qualification : **Ph.D**

Official Address : **Yadavindra College of Engineering, Punjabi University
Guru Kashi Campus, Talwandi Sabo (Distt. Bathinda)
Punjab India - 151302**

E-mail : **rakesh.bhatia_75@yahoo.in**

Contact No. : **+91-9988096160**

Areas of Specialization : **Manufacturing Engg., Hot Corrosion,
Industrial Engineering, Surface Engineering,
Thermal Spray Coatings**

Total Experience (Years) : **22 Teaching Experience: 21 Industry Experience: 01**



Employment History:

Designation	Name of Employer	Date of Joining		Major Job Responsibilities and Nature of Experience
		Joining	Leaving	
Assistant Professor	Punjabi University, Patiala	30-10-2008	Till Date	Teaching and Research
Assistant Professor/ Reader	PTUCSMT, Kapurthala	17-1-2008	29-10-2008	Teaching and Research
Assistant Professor/ Sr. Lecturer/ Lecturer	LIT, Phagwara	27-07-2003	16-1-2008	Teaching and Research
Lecturer	MIMIT Malout	11-1-2001	20-6-2003	Teaching and Research
Lecturer	SBS Polytechnic Patti	5-7-2000	10-1-2001	Teaching
Lecturer	LLRIET Moga	3-10-1998	30-6-2000	Teaching
Astt. Engineer	Shree Ram Engineers Pvt. Ltd.	20-10-1997	3-09-1998	Production Engineer

Academic Qualification

Sr. No.	Degree	Year	University	% of Marks	Division	Subjects
1.	Ph.D	2013	Punjabi University	DEVELOPMENT OF EROSION-CORROSION RESISTANT HVOF SPRAYED CR ₃ C ₂ -NiCr COATINGS FOR BOILER TUBE STEELS OPERATING AT ELEVATED TEMPERATURES		
2.	M.Tech	2007	Punjab Technical University	70%	First	Industrial Engineering
3.	B.Tech	1997	Punjab Technical University	75%	First	B.Tech Mechanical Engineering (Spl. Manufacturing Engg.)

Faculty Research Profile

Google Scholar ID	bhatiarakesh75@gmail.com		
Impact Factor	9.52	Citation Index	108
h-Index	6	I10-index	5
SNIP	-----	SJR	-----
No. of Candidates (Completed PhD)	01	No. of Candidates (Ongoing PhD)	04
PG Thesis guided	09	PG Thesis Ongoing	04
Research Projects Completed	02	Research Projects Ongoing	-----
Research Projects Submitted	-----		
Research Grant received	62.82 Lacs		
Names of Foreign Countries Visited for Academic Purpose	-----		
Papers in International Journals	36	Papers in National Journals	03
Papers in International Conferences	22	Papers in National Conferences	01
International Conferences Attended	10	National Conferences Attended	03
Books Published as Single Author	-----	Books Published as Joint Author	03
Edited Books	-----	Book Chapters	-----

International Conferences/ Workshops/ Seminars /STCs/ FDPs organized	06	National Conferences/ Workshops/ Seminars/ STCs/ FDPs organized	05
Total International Conferences/ Workshops/ Seminars /STCs/ FDPs attended	10	Total National Conferences/ Workshops/ Seminars/ STCs/ FDPs attended	33
Memberships of International Professional Bodies	02	Memberships of National Professional Bodies	02
Total International Medals/ Awards/ Honors/ Scholarships Received	-----	Total National Medals/ Awards/ Honors/ Scholarships Received	-----
Editor/ Reviewer of International Journals	04	Editor/ Reviewer of National Journals	-----
Session Chair/Invited Talks/Seminars/Expert Lecture in International Conferences	06	Session Chair/Invited Talks/Seminars/ Expert Lecture in National Conferences	05

Membership of Professional Bodies/Organization:

1. Founder Member SOMME
2. Life Member ISTE (LM)
3. Senior Member of Universal Association of Mechanical and Aeronautical Engineers
4. Member of International Association of Engineers

R &D Projects Completed: 02

Sr. No.	Title	Agency	Period (Years)	Grant/Amount Mobilized (Rs. Lakh)
1	Technological Innovations to Improve Degradation Resistance of Pulverized Coal Burner Nozzle (PCBN)	Department of Science and Technology, New Delhi	03	24.12
2	Development of Cr ₃ C ₂ –NiCr Corrosion and Erosion Resistant HVOF Sprayed Coatings for Boiler Tube Steels Operating at Elevated Temperatures.	Department of Science and Technology, New Delhi	02	38.7

Ph.D. Students guided/under guidance (Details):

01 Awarded

04 Registered

Khushdeep Goyal: (2018), “HIGH TEMPERATURE DEGRADATION BEHAVIOUR OF THERMAL SPRAYED CARBON NANOTUBES REINFORCED COATINGS ON BOILER STEEL”

M.Phil./ M.Tech. Students guided:

09 Awarded

04 Under Guidance

List of Books Published:

1. Rakesh Bhatia, S.B. Singh, Harpeet Kaur, "Organizational Development: Comparative Study of Engineering Colleges" LAP Lambert academic Publishers, 2014, ISBN: 978-3-659-63053-8
2. Sandeep Kumar, Rakesh Bhatia, "Experimental Investigation of Cryogenic and Heat Treated H11 Die Steel" LAP Lambert academic Publishers, 2016, ISBN:978-3-659-93667-8
3. Gurjot Singh, Khushdeep Goyal, Rakesh Bhatia, "Erosion Corrosion Behaviour of plasma sprayed boiler steel coatings" Lambert Academic Publishing, 2016, ISBN:978-3-659-94005-7.

Papers Published in Journals

Year	Authors	Title of Research Paper and Name of Journal
2010	Rakesh Bhatia, Sukhpal S. Chatha, Hazoor S. Sidhu, Buta S. Sidhu	"Erosion-Corrosion Resistance of Carbide Based Thermal Spray Coatings: A Review", Indian Journal of Engineering, Science, and Technology, Vol. 4(4), pp.57-62, ISSN:0973-6255
2010	Sukhpal S. Chatha, Rakesh Bhatia, Hazoor S. Sidhu, Buta S. Sidhu	"High temperature corrosion behaviour of Ni-based thermal spray coatings: A Review," Indian Journal of Engineering, Science & Technology, Vol. 4(4), pp.72-77, ISSN: 0973-6255
2010	Hazoor S. Sidhu, Kumar Gaurav, Rakesh Bhatia	"Life Enhancement of Single Point Cutting Tool by Hard Facing and Cryogenic Treatment", Indian Journal of Engineering, Science & Technology Vol.4(1), pp.19-23. ISSN: 0973-6255
2011	Sukhjeet Singh, Harpreet Singh, Jasbir Singh, Rakesh Bhatia	"Effect of Composition of Powder Mixed Dielectric Fluid on Performance of Electric Discharge Machining", International Journal of Materials Science And Engineering Vol. 2(1-2), pp. 91-98. ISSN:0976-6243
2011	Sukhjeet Singh, Manish Dhawan, Rakesh Bhatia	Use of Composites in Space Vehicles: A Review" International Journal of Materials Science and Engineering, Vol. 2(1-2), pp. 133-139. ISSN:0976-6243
2011	Vipan Bansal, Harwinder Singh, Rakesh Bhatia	"A Comparative Study of Cellular Service Provider Operating in Bathinda", International Journal of Computing and Corporate Research Vol. 1(3) pp. 1-14. IS(Online) 2249-054 X
2012	Vipan Bansal, Rakesh Bhatia	A study on Choice Criteria of Mobile Phone Service Users Operating in Mohali", MAIMT- Journal of IT and Management Vol. 5(2), pp. 1-15 ISSN:0974-066X
2012	Rakesh Bhatia, Hazoor Singh, Buta Singh Sidhu	"Characterisation of 80% Cr3C2-20% (Ni-20Cr) Coating and Erosion Behaviour", Asian Journal of Engineering and Applied Technology Vol.1(2), pp.5-12, ISSN:2249-068X
2012	Rakesh Bhatia, Hazoor Singh, Buta Singh Sidhu	"Characteristic Parameters and Erosion Behaviour of 65% Cr3C2-35% (Ni-20Cr) Coating", International Journal of Surface Engineering and Materials Technology, Vol.2(2), pp.39-47, ISSN:2249-7250
2013	Sandeep Kumar, Rakesh Bhatia	"Experimental Analysis of Surface Roughness for Heat Treated H-11 Die Steel by WEDM", International Journal of Research in Mechanical Engineering and Technology, , Vol. 3(2), pp. 109-

		111, ISSN : 2249-5762 (Online)
2013	Rakesh Bhatia, Hazoor Singh, Buta Singh Sidhu	“Hot Corrosion Studies of HVOF-Sprayed Coating on T-91 Boiler Tube Steel at Different Operating Temperatures”, Journal of Materials Engineering And Performance, Vol. 23(2), pp. 493–505, ISSN: 1059-9495
2014	Rakesh Bhatia, Hazoor Singh, Buta Singh Sidhu	“Characterization of HVOF Sprayed 75% Cr ₃ C ₂ – 25% NiCr Coating for Erosion-Corrosion Resistance”, Journal of Emerging Trends in Engineering, Science and Technology, Vol. 1(1), pp. 76-85, ISSN: 2394-5354
2014	Sandeep Kumar, Rakesh Bhatia	“Investigation of Effect of Process Parameters on Surface Roughness of H-11 Die Steel”, Journal of Emerging Trends in Engineering, Science and Technology, Vol. 1(1), pp.86-92 ISSN: 2394-5354
2015	Rakesh Bhatia, Hazoor Singh, Buta Singh Sidhu	“High Temperature Behavior of Cr ₃ C ₂ --NiCr Coatings In The Actual Coal-Fired Boiler Environment”, Metallurgical And Materials Transactions E, Vol. 2(1), pp 70-86, ISSN:2196-2936
2015	Khushdeep Goyal, Hazoor Singh, Rakesh Bhatia,	“Thermally Sprayed Carbon Nanotubes Reinforced Coatings – A Review” , International Journal on Mechanical Engineering and Robotics, Vol. 3(5), pp. 25-29, ISSN: 2321-5747
2015	Gagandeep Kaur, Rakesh Bhatia, Hazoor Singh	“Hot Corrosion Behaviour of T-91 Boiler Tube Steel at Different Operating Temperatures”, International Journal of Manufacturing Science and Technology Vol. 6(1), pp. 179-187 , ISSN:0976-6812
2015	Veerpal Kaur, Rakesh Bhatia, Hazoor Singh	Evaluating Oxidation Resistance of Boiler Tube Steel at Elevated Temperatures, Journal of Emerging Trends in Engineering, Science and Technology, Vol.2(1), pp.54-60, ISSN: 2394-5354
2015	Rakesh Bhatia, Hazoor Singh, Buta Singh Sidhu	“Characterization of HVOF Sprayed 90% Cr ₃ C ₂ – 10% NiCr Coating For High Temperature Erosion-Corrosion Resistance”, International Journal of Surface Engineering and Materials Sciences, Vol 5(1), pp.54-61, ISSN: 0974-584X
2015	Rakesh Bhatia, Hazoor Singh, Buta Singh Sidhu	“Erosion Resistance of Cr ₃ C ₂ -25% (Ni-20cr) Coating at Different Temperatures”, Journal of Emerging Trends in Engineering, Science and Technology, Vol. 3(2), pp.42-55, ISSN: 2394-5354
2015	Rakesh Bhatia, Hazoor Singh, Buta Singh Sidhu	“Effect of Compositional Variation of Cr ₃ C ₂ –NiCr Coating on Corrosion Behaviour at 550°C”, International Journal of Surface Engineering And Materials Technology, Vol. 5(1), pp. 54-61, ISSN: 2249-7250
2015	Sandeep Kumar, Rakesh Bhatia	“Comparative Analysis of Surface Roughness of Untreated H-11 Die Steel and Deep Cryogenic Treated Steel Machined by WEDM” International Journal on Mechanical Engineering and Robotics, Vol. 3(5), pp. 30-35, ISSN: 2321-5747
2016	Sandeep Kumar, Rakesh Bhatia	“Effect of Input Parameters on Surface Roughness of Wire-Cut EDM of AISI EN 31 Tool Steel”. Journal of Experimental & Applied Mechanics, Vol. 7(3): pp. 43–49, ISSN: 2230-9845(online), ISSN: 2321-516X (print)
2016	Khushdeep Goyal, Hazoor Singh, Rakesh Bhatia	“Current Status of Thermal Spray Coatings for High Temperature Corrosion Resistance of Boiler Steel”, Journal of Materials and Metallurgical Engineering, Vol. 6(1), pp. 29–35, ISSN: 2231-3818(online), ISSN: 2321-4236(print)

2016	Nimratjot Singh, Khushdeep Goyal, Rakesh Bhatia	“Effect of Input Parameters on Surface Roughness of Wire - Cut EDM of AISI EN 31 Tool Steel. Journal of Experimental & Applied Mechanics. Vol. 7(3), pp. 43–49. ISSN: 2230-9845 (online), ISSN: 2321-516X (print)
2017	Saurav Bedi, Khushdeep Goyal, Charanjit Singh, Rakesh Bhatia	“The Effect of process parameters on the performance characteristics of wire electrical discharge machining of AISI D3 tool steel”, IUP Journal of Mechanical Engineering (ICFAI), Vol. X(4), pp. 20-34, ISSN: 0974-6536.
2017	Nimratjot Singh, Khushdeep Goyal, Rakesh Bhatia	“Effect of Process Parameters on Material Removal Rate of Wire-Cut EDM of AISI EN 31 Tool Steel”, Journal of Materials & Metallurgical Engineering, Vol.7(2), pp. 35-41, ISSN: 2321–4236
2017	Khushdeep Goyal, Hazoor Singh, Rakesh Bhatia	“Carbon Nanotubes: A Potential Reinforcement Material for Composites”, Nano Trends: A Journal of Nanotechnology and Its Applications; Vol. 19(2), pp. 42–49, ISSN: 0973-418X
2017	Gurmaheshinder Singh Sandhu, Khushdeep Goyal, Deepak Kumar Goyal, Rakesh Bhatia	“Slurry Erosion Behaviour of D-Gun Sprayed Cr3C2-25NiCr and WC-12Co Coatings on CA6NM Turbine Steel Material”, Journal of Thin Films, Coating Science Technology and Application, Vol. 4(2), pp. 8-17, ISSN: 2455-3344
2018	Khusheep Goyal, Hazoor Singh, Rakesh Bhatia	“Hot corrosion behaviour of carbon nanotubes reinforced chromium oxide composite coatings at elevated temperature”, Materials Research Express, Vol. 5(11): 116408, ISSN: 2053-1591
2018	Khusheep Goyal, Hazoor Singh, Rakesh Bhatia	“Cyclic High Temperature corrosion studies of carbon nanotubes- Cr2O3 composite coatings on boiler steel at 9000C in molten salt environment”, Anti-Corrosion Methods and Materials, Vol. 65 (6), pp. 646-657, Emerald UK
2018	Khusheep Goyal, Hazoor Singh, Rakesh Bhatia	“Experimental investigations of carbon nanotubes reinforcement on properties of ceramic-based composite coating”, Journal of the Australian Ceramic Society, Vol. 55(2), pp. 315-322, ISSN: 2510-1560 (print version), ISSN:2510-1579 (electronic version)
2018	Khusheep Goyal, Hazoor Singh, Rakesh Bhatia	“Effect of Carbon Nanotubes on Properties of Ceramics Based Composite Coatings”, Advanced Engineering Forum, Vol. 26, pp. 53-66, Transtech, Switzerland, ISSN: 2234-991X
2018	Khusheep Goyal, Hazoor Singh, Rakesh Bhatia	“Mechanical properties of carbon nanotubes reinforced composites: a review”, Journal of Emerging Technologies and Innovative Research, Vol. 5(8), pp.1012-1016.
2018	Gurjot Singh, Khushdeep Goyal, Rakesh Bhatia	“Hot Corrosion Studies of Plasma Sprayed Chromium Oxide Coatings On Boiler Tube Steel At 850°C In Simulated Boiler Environment”, Iranian Journal of Science and Technology, Transactions of Mechanical Engineering, Vol. 42(2), pp. 149-159, Print ISSN 2228-6187, Online ISSN 2364-1835
2018	Khusheep Goyal, Hazoor Singh, Rakesh Bhatia	“Mechanical and microstructural properties of carbon nanotubes reinforced chromium oxide coated boiler steel”, World Journal of Engineering, Vol. 15(4), pp. 429-439, Emerald UK, ISSN: 1708-5284

2018	Malwinder Singh, Khushdeep Goyal, Rakesh Bhatia	“An Experimental Investigation of Mechanical and Microstructural Properties of Friction Stir Welded Dissimilar joints of aluminum Alloys with square tool pin profile”, IUP Journal of Mechanical Engineering, Vol. XI(1), pp. 40-50, ISSN: 0974-6536.
2019	Khusheep Goyal, Hazoor Singh, Rakesh Bhatia	“Behaviour of carbon Nanotubes-Cr ₂ O ₃ thermal barrier coatings in actual boiler”, Surface Engineering, Taylor and Francis, Vol. 36(2), pp.124-134, Print ISSN: 0267-0844 Online, ISSN: 1743-2944
2019	Khusheep Goyal, Hazoor Singh, Rakesh Bhatia	“Investigating hot corrosion behaviour of CNT-Cr ₂ O ₃ coated ASTM-SA213-T22 steel in molten salt environment at 700°C”, International Journal of Minerals, Metallurgy, and Materials, Vol. 26(3), pp. 337-344. ISSN: 1674-4799 (print version)ISSN: 1869-103X (electronic version)
2020	Sandeep Kumar, Rakesh Bhatia, Hazoor Singh	Hot corrosion behaviour of CNT-reinforced zirconium yttrium composite coating at elevated temperature, Materials Today: Proceedings (Accepted for Publication)

Papers Presented in Conferences:

Title of the Paper Presented	Conference
Impact of added titanium dioxide in dielectric of EDM on surface characteristics and MRR	National Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering February 19-20, 2010, Yadavindra college of Engg., Talwandi Sabo.
Economic Impact of Corrosion in Various Industries	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, January 6-7, 2012, Punjab Technical University Kapurthala
Potential and Future Trends of Electro Discharge Process: A review	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, January 6-7, 2012, Punjab Technical University Kapurthala
Role of Friction Stir Welding in Manufacturing Industry-A Review	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, January 6-7, 2012, Punjab Technical University Kapurthala
A Review on Current Emerging Trends in Wire Electric Discharge Machining	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, October 3-6, 2013, Punjab Technical University, , Kapurthala
Effects of Deep Cryogenic Treatment on Wear Behavior of H-11 Die Steel	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, October 3-6, 2013, Punjab Technical University, Kapurthala
High Temperature Degradation of Boiler Tubes by Erosion Corrosion	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 16-18 October 2014, Punjab Technical University, Kapurthala
Vibration Damping Coatings : A Review	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 16-18 October 2014, Punjab Technical University, Kapurthala
Structural Analysis of Cryo-treated and Untreated H-11 die steel by WEDM	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 16-18 October

	2014, Punjab Technical University, Kapurthala
Erosion of Boiler Tubes: Prediction and Prevention	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 16-18 October 2014, Punjab Technical University, Kapurthala
HVOF Coatings and their applications for valve components: A Review	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 16-18 October 2014, Punjab Technical University, Kapurthala
Sol Gel Protective Coatings: A Review	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 16-18 October 2014, Punjab Technical University, Kapurthala
Effect of Corrosion on Boiler Tube Failure and its Prevention	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 16-18 October 2014, Punjab Technical University, Kapurthala
Oxidation Behaviour of T-91 Boiler Tube Steel at Different Operating Temperatures	International Conference on Innovative Research in Engineering Science, Information & Communication Technology, 30-31 July 2015, LLRIET Moga
Thermally Sprayed Carbon Nanotubes Reinforced Coatings – A Review	International Conference on Innovative Research in Engineering Science, Information & Communication Technology, 30-31 July 2015, LLRIET Moga
Erosion-Corrosion Behaviour of HVOF Sprayed Cermet Coatings on Boiler Tube Steel in Simulated environment	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, February 25-27, 2016, BFCET Bathinda
Slurry Erosion Control and Hardness of 13 Cr 4Ni Steel by different Coatings and Surface Treatments: A Review	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, February 25-27, 2016, BFCET Bathinda
Increasing the Hot Corrosion Resistance of Boiler Tube Steel by Thermal Spraying Technique	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, February 25-27, 2016, BFCET Bathinda
Slurry Erosion Behaviour of Hydropower Turbines: A Review	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, February 25-27, 2016, BFCET Bathinda
Erosion Corrosion Behaviour of HVOF Sprayed Coatings on Boiler Tube Steel: A Review	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, February 25-27, 2016, BFCET Bathinda
Erosion Corrosion Resistance of ZrO ₂ -Y ₂ O ₃ Coatings: A Review	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, February 25-27, 2016, BFCET Bathinda
Surface Roughness Analysis of H-11 Die Steel Machined by Wire EDM Process	International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, February 25-27, 2016, BFCET Bathinda
Mechanical properties of carbon nanotubes reinforced composites: a Review	International conference on Science, Technology & Management (ICSTM-2018), August 12, 2018, Indian Council of Social Science Research, North West Regional Centre, Punjab University Campus Chandigarh

Invited Talks/Sessions Chaired in Conferences:

Invited Lecturers

“Non Conventional Machining” at Lala Lajpat Rai Institute of Engineering and Technology, Moga, on 19th February, 2016

“Concepts of Industrial Engineering & Ergonomics and their application in Industries” at Lala Lajpat Rai Institute of Engineering and Technology, Moga, on 07th February, 2017

“How to write a ‘Research Proposal’ for funding & various funding agencies” at Lala Lajpat Rai Institute of Engineering and Technology, Moga, on 24th March, 2018

“How to write a ‘Research Proposal’ for funding & various funding agencies” at Ferozpur College of Engineering and Technology, Ferozpur, on 25th March, 2018

Session Chaired in Conference/ Seminar

International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 5th -7th Oct., 2012, PTU Kapurthala

International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 3rd -6th Oct., 2013, PTU Kapurthala

National Conference on Latest Developments in Materials, Manufacturing and Quality Control, 13th - 14th Feb., 2014 GZS Punjab Technical University Campus, Bathinda

International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering, 16th -18th Oct., 2014 PTU Jalandhar

International Advancements and Futuristic Trends in Mechanical and Materials Engineering, 25th -27th Feb., 2016 BFCET Bathinda

International Advancements and Futuristic Trends in Mechanical and Materials Engineering, 2nd -4th November, 2017 at SUSCET Tangori

International Advancements and Futuristic Trends in Mechanical and Materials Engineering, 15th -17th November, 2018 at SSG Regional Centre, Punjab university Campus, Hoshiarpur

STTPs/Workshops/FDPs Attended

1. “Supply Chain: management issues and challenges” AICTE Sponsored Short Term Course, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, 13.07.2009 to 17.07.2009
2. “Patent awareness” PIC PSCST sponsored Workshop, YCoE, Talwandi Sabo, 11-12-2009.
3. “Perspective of Welding Technology” MHRD/AICTE Sponsored Winter School, National Institute of Technology, Jalandhar, 28.12.2009 to 02.1.2010
4. “Welding: Roadmap to Excellence” MHRD/AICTE Sponsored Winter School, National Institute of Technology, Jalandhar, 27.12.2010 to 31.12.2010
5. 90th Orientation Course, ASC, Punjab University, Chandigarh, 10.05.2011 to 06.06.2011.
6. “Web Hacking and Security” Short Term Course, NITTTR, Chandigarh, 28.11.2011 to 02.12.2011
7. “Industrial Tribology” Faculty Development Programme, School of Mechanical, Materials & Energy Engg., IIT Ropar, 03.01.2011 to 08.01.2011
8. “Quality Issues in Technical Education” ISTE Regional Convention, GKU Talwandi Sabo, 30-10-2012 31-10-2012
9. “Research Methodology” Refresher Course, ASC, Punjabi University, Patiala, 19.11.2012 to 8.12.2012

10. "Recent Trends in Materials, Manufacturing and Safety" TEQIP-II sponsored Short Term course, GZS PTU Campus Bathinda 02-12-2013 06-12-2013
11. "Bio-energy Technologies for Power and Environmental Applications" SLIET, Longowal, 16-12-2013 20-12-2013
12. "Entrepreneurship Development" Sponsored by DST, New Delhi and EDI-I Ahmedabad, Conducted by NITCON, YCoE Talwandi Sabo, 14-01-2014 28-01-2014
13. "Thermal Spray Workshop" PTU Kapurthala 15-10-2014
14. "Innovations in Sciences" Workshop, YCoE, Talwandi Sabo, 12-11-2014 14-11-2014
15. "Disaster Management" Refresher Course , ASC, Guru Nanak Dev University, Amritsar, 17-11-2014 08-12-2014
16. "Thermal Spray Technology" National Workshop, GNDTP Bathinda 24-02-2016
17. "Symposium Corrosive Failure Remedies for High Temperature Components" CII Chandigarh, 29-06-2016
18. "Intellectual Property Rights" Workshop, YCoE Talwandi Sabo, 18-11-2016
19. "Engineering Today", Short Term Course YCoE Talwandi Sabo, 21-11-2016 to 25-11-2016
20. "Innovations in Science" 3rd National workshop, YCoE Talwandi Sabo, 06-11-2017 to 07-11-2017
21. "Research Methodology" Short Term Course/Workshop, UGC-HRDC, Punjabi University, Patiala, 24-11-17 to 30-11-17
22. "Engineering Today" Short term course, YCoE Talwandi Sabo, 07-05-2018 to 11-05-2018
23. "Engineering Today" Short term course, YCoE Talwandi Sabo, 07-01-2019 to 11-01-2019
24. "Student Psychology and Prevention of Suicide" Short Term Course, NITTTR Chennai, 26-11-2018 to 30-11-2018
25. "3D Printing of Smart Materials" National workshop on YCoE Talwandi Sabo, 07-02-2019
26. "Mathematical Methods and Computations in Engineering (MMCE-2019)" AICTE Sponsored Short Term Training Programme, SBSSTC Ferozpur, 01-07-2019 to 06-07-2019
27. "Big Data Analytics Using Machine Learning Techniques" AICTE Sponsored Faculty Development Programme, SBSSTC Ferozpur, 09-12-2019 to 20-12-2019

Conferences/Symposium/Workshops organized:

1. Co-organizing Secretary of National Conference on Advancement and Futuristic Trends in Mechanical and Materials Engineering, held at Yadavindra College of Engineering Talwandi Sabo on 19-20 February, 2010.
2. Co-organizing Secretary of National Conference on Advancement and Futuristic Trends in Mechanical and Materials Engineering, held at Punjab Technical University, Kapurthala, on 7-8 October, 2011.

3. Co-organizing Secretary of International Conference on Advancement and Futuristic Trends in Mechanical and Materials Engineering, at Punjab Technical University, Kapurthala, on 5-7 October, 2012.
4. Co-organizing Secretary of International Conference on Advancement and Futuristic Trends in Mechanical and Materials Engineering, at Punjab Technical University, Kapurthala, on 3-6 October, 2013.
5. Co-organizing Secretary of International Conference on Advancement and Futuristic Trends in Mechanical and Materials Engineering, at Punjab Technical University, Kapurthala, on 16-18 October, 2014.
6. Organizing Team Member for “Thermal Spray Workshop” held at PTU Kapurthala on 15-10-2014
7. Organizing Team Member for National Workshop on “Thermal Spray Technology” held at, GNDTP, Bathinda, on 24-02-2016, under the aegis of Society of Materials and Mechanical Engineers (SOMME)
8. Organized International Conference on Advancement and Futuristic Trends in Mechanical and Materials Engineering, at BFCET, Bathinda on 25-27 February, 2016, under the aegis of Society of Materials and Mechanical Engineers (SOMME)
9. Organizing Team Member for Symposium on “Corrosive Failure Remedies for High Temperature Components” held at CII Chandigarh, on 29-06-2016, under the aegis of Society of Materials and Mechanical Engineers (SOMME)
10. Member organizing committee of International Conference on Advancement and Futuristic Trends in Mechanical and Materials Engineering, at SUSCET, on 2-4 November, 2017, under the aegis of Society of Materials and Mechanical Engineers (SOMME)
11. Co-organizing Secretary of International Conference on Advancement and Futuristic Trends in Mechanical and Materials Engineering, at SSG Regional Centre, Punjab University Campus, Hoshiarpur, on 15-17 November, 2018, under the aegis of Society of Materials and Mechanical Engineers (SOMME)