

BIO-DATA

Dr Sanjeev Kr Singh Yadav
Professor
Department of Mechanical Engineering
Harcourt Butler Technical University
KANPUR-208002



Personal Details

Mobile: 8808208333
E-mail: sksyadav@hbtu.ac.in
Father's Name: Sri. S.N.S. Yadav
Place of Birth: Dist. Allahabad, Uttar Pradesh

Work Experience

Sl.No.	Name of Institute/University	From the date	To Date	Designation
1.	H.B.T.U Kanpur	19/01/2022	Till Date	Professor 10,000/- AGP
1.	H.B.T.U Kanpur	19/01/2019	18/01/2022	Associate Professor, 9000/-AGP
2.	H.B.T.U Kanpur	19/01/2016	18/01/2019	Assistant Professor, 8000/- AGP
3.	H.B.T.I Kanpur	19/01/2012	18/01/2016	Assistant Professor, 7000/- AGP
4.	H.B.T.I Kanpur	19/01/2007	18/01/2012	Assistant Professor, 6000/- AGP
5.	Dr. B.R.A. University, Agra	July 2004	18/01/2007	Lecturer

Research Paper Publications (117)-International Journals (52 Papers)

International Conferences (44 Papers), National Conferences (21 Papers)

Award /Appreciation

1. Received financial assistance from CSIR New Delhi for paper presentation in International Conference at Singapore in 2011.
2. Received Best Paper award for engineering stream at All India Seminar on Advanced in Engineering and Technology for Sustainable Development at G.B. Pant University, PANTNAGAR during June 12-13, 2015.
3. Received Certificate of Appreciation by Director, HBTI for good conduction and management in State Level Faculty Interaction Seminar held during 8-9 June, 2015 at HBTI Kanpur.
4. Received Young Scientist Project from DST, SERB in 2016.
5. Received Research Excellence Award 2024 by Hon'ble Governor of UP.

Design Patent (03)

1. IPR ID 41489-001 dated 05/07/2024, A wire cutting fixture for Electrical Discharge Machining.
2. IPR ID 402247-001 dated 15/12/2023, A Solar Powered Waste Plastic Brick Manufacturing Machine.
3. IPR ID 410489-001, dated 14/03/2024, A versatile attachment of electrical discharge machining.

Research Projects (10)

S. N.	Project Titled	Sponsored by	Cost	Duration
1.	Development, Experimental study and Multi-Objective Optimization of Electrical Discharge Drilling (EDD) Process, 2016	DST, SERB New Delhi (Under Young Scientist)	27 Lac 78 thousand six hundred	Three Years
2.	Experimental Study of Drilling Electro-Chemical Spark Machining (ECSM) setup, 2015	UPCST, Lucknow	7 Lac 98 thousand	Three Years
3.	Development of Experimental Setup for Machining and Finishing of Biocompatible Materials for Dental Implant, 2017	IIT Kanpur, (MHRD)	9 Lac 50 thousand	One Year
4.	Development of Vibration Assisted Hybrid Machining Setup (Ph.D Student) 2016	TEQIP-II	2 Lac 47 thousand	Two Year (Completed)
5.	Development of Electrical Discharge Diamond Face grinding setup on ZNC Electrical Discharge Machining. 15/11/2014	TEQIP-II	1.10 Lac	One Year (Completed)
6.	Development and Experimental study of electro-chemical discharge machining (ECDM) setup, 10/06/2015	TEQIP-II	2 Lac	One Year (Completed)
7.	Development of MMC setup, 2015	TEQIP-II	1 Lac	One Year (Completed)
8.	Development of Portable type Oxy- acetylene gas Welding setup (Completed in 2007)	TEQIP-I	15,000	One Year (Completed)
9.	Processing and Characterization of Carbon-Carbon Composite Materials (Collaboration with IIT K) 2018	TEQIP-III	1 Lac 80 thousand	One Year (Completed)
10	Development of portable Electro Discharge Machining Setup for Micro Machining 2019	TEQIP-III	2 Lac	One Year (Completed)

Students Research Projects (4)

S.N.	Project Titled	Sponsored by	Cost	Duration
1.	Development of drone based Ornithopter for surveillance purpose	UPCST Lucknow in 2023	20,000	1 year
2.	Development of Agriculture Drone for farm Monitoring	UPCST Lucknow in 2023	20,000	1 year
3.	Natural gas pipes leakage detection	Incubation Hub, HBTU	19,830	1 year
4.	Agricultural drone	Incubation Hub, HBTU	30,000	1 year

Session Chair in Conference

1. Session Chaired in All India seminar on Advances in Materials and Material Selection in Design, Institution of Engineers (India) Kanpur local centre, H.B.T.I. Kanpur during 24-25 August 2012.
2. Session Chaired All India Seminar on Advanced in Engineering and Technology for Sustainable Development at G.B. Pant University, Pantnagar during June 12-13, 2015.
3. Session Chaired in International Conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods organized by MED, HBTU Kanpur during March 27-29, 2017.

4. Session Chaired in International Conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods organized by MED, HBTU Kanpur during March 27-29, 2017.
5. Session Chaired in International Conference on Precision, Meso, Micro and Nano Engineering (COPEN 10) Organized by IIT Madras during December 07-09 2017.
6. Session Chaired in International Conference on Recent Innovation in Biomaterials and tissue engineering 06-07 Dec. 2024

Ph.D Supervision -10 (3 Awarded, 1 Submitted, 6 Ongoing)

Sl.No.	Name	Thesis Topic	Status	Enroll.
1.	Gaurav Kumar Pandey (AKTU)	Modeling and Multi - objective optimization of Vibration Assisted Electrical Discharge Drilling Process	Awarded	2016
2.	Sunil Kumar Yadav (AKTU)	Experimental analysis of micro–Electro chemical diamond Grinding Process for titanium alloy and Ni alloy	Awarded	2016
3.	Arpit Srivastava (HBTU)	Experimental Study and multi objective optimization of Milling Electrochemical Spark machine	Submitted	2017
4.	Mayank Shekhar (HBTU)	Development and Experimental Study of Electro Chemical Diamond Drilling Process.	Awarded	2018
5.	Versha Nigam (HBTU)	Experimental Analysis and Optimization of Magnetic field assisted Electrical Discharge Face Grinding Process.	Pursuing	2019
6.	Vivekanand Singh (MMMUT GKP)	Nano Composites	Pursuing	2020
7.	Vandana Yadav (HBTU)	Solor materials and heat storage system	Pursuing	2022
8.	Anurag (HBTU)	Composite Materials	Pursuing	2023
9.	Nandani (HBTU)	Advanced Manufacturing Processes	Pursuing	2023
10.	Shivendra Srivastava	Advanced Manufacturing Processes	Pursuing	2024

Short term courses/Workshops attended (46)

Invited Lectures (28)

1. A lecture delivered in AICTE sponsored staff development program on Advanced Manufacturing Processes during March 12-23, 2007 at MNNIT, Allahabad.
2. A special lecture delivered on the Topic “Computer Controlled Manufacturing Processes” on 15th Nov 2011 at DMSRDE Kanpur.
3. A special lecture delivered on the topic “Hybrid Manufacturing Processes” at All India seminar on Advances in Materials & Material selection in design Aug. 24-25, 2012 at Institution of Engineers, Kanpur Local Centre.
4. A lecture delivered in Faculty Development Programme on ENGINEERING EDUCATION: Opportunities, Challenges & Future Directions, March 7-12, 2014, at HBTI, Kanpur
5. A lecture delivered on Abrasive based Hybrid Micromachining Processes in short term course on Micro-manufacturing: Materials, Processes and Systems at MNNIT, Allahabad, June 17-21, 2014
6. A special lecture delivered on Manufacturing Processes at Ordnance Factories Institute of Learning, Kanpur, 23 -17 June 2014

7. A special lecture delivered on Advanced Manufacturing Processes at Ordnance Factories Institute of Learning, Kanpur, 23 -17 June 2014
8. A expert lecture delivered on Hybrid Machining Processes in short term course organized by Manav Rachana International University, Faridabad on 19/07/2014.
9. A expert lecture delivered on Advanced and Hybrid Machining Processes on 15 Nov. 2014 at PSIT
10. Presented Article Titled "AUTHORITIES ON CHALLENGES IN SUPPLY CHAINS" in Workshop on Supply Chain Management at IIT Kanpur on 6th February, 2015.
11. A expert lecture delivered on the topic of "Hybrid Machining Processes" in one week FDP on Manufacturing Science & Technology on 16/1/ 2016 organized by Azad Technical Campus, Lucknow.
12. A expert lecture delivered in Faculty Development Program at MED, M.J.P. University, Bareilly on 27 April 2016.
13. Delivered a special Lecture on Recent Advancement and Futuristic Trends in Hybrid Machining Process at BBD Lucknow 15 October 2016.
14. Delivered an Expert lecture on Advanced and Hybrid Machining Processes on FDP on recent trends in Mechanical Engineering on March 22, 2017 at BIET Jhansi.
15. Delivered an Expert Lecture on Advanced Hybrid Machining on 14/03/2018 in FDP at BIET Jhansi.
16. A special lecture delivered on Processing and Surface Treatment at Ordnance Factories Institute of Learning, Kanpur, on 8 Oct 2018
17. A lecture delivered on Processing of New Materials in short term course at MNNIT, Allahabad, on 12 Oct 2018.
18. Delivered an expert Lecture on Recent advancement in Manufacturing Processes on 11 July 2019 at United College of Engineering & Management, Allahabad in FDP
19. Delivered an expert Lecture on Advancement in Manufacturing Process on 26/07/2019 at BIET Jhansi in STC on Recent advances in Micro Manufacturing.
20. Delivered an expert lecture on Hybrid based Machine learning in STC on Control and Machine Intelligence during 16/09/2019 to 28/09/2019 organized by Electrical engineering department HBTU Kanpur.
21. Delivered an Expert lecture on heat treatment and advance manufacturing at Small Arms Factory Ordnance Factory Kanpur in Nov. 2020.
22. Delivered an expert lecture on Intelligent control applications in Advanced Manufacturing Sector on 18 August 2021 in FDP organized by Electrical engineering department HBTU Kanpur.
23. Delivered an expert lecture on Soft Computing, Neural Networks in FDP on Optimization Techniques in Engineering during October 4 -8, 2021 in MED HBTU Kanpur
24. Delivered a on-line key note lecture on Industry academia interaction on 8th February 2022 at U.P tech. education, U.P
25. Delivered an Expert lecture at Govt. Polytechnic Kanpur on Drone Technology on 23 April 2022.
26. Delivered an Expert lecture on Research for Benefit of society in one-week STC organized by Mathematics Department HBTU Kanpur during 13-19 October 2022.
27. Delivered a Expert talk on Hybrid Manufacturing Processes in one week short term training programe on Modern trend in Manufacturing & Thermal Sciences organized by MMMUT Gorakhpur during 21-25 Dec. 2022.
28. Delivered an Expert lecture on Quality control in metallic products at UPTTI Kanpur in Feb. 2024.

Consultancy

1. Done Type-II consultancy for M/s Sunder Engineering Works, Kanpur of **Rs- 47000.00** (Forty-seven thousand only) in September 2017.
2. Done Type-I consultancy on Testing of steel tubular poles for Anubha plast Pvt.Ltd., Kanpur, of **Rs-76600.00** (Seventy-six thousand six hundred) in August 2021.

Research Interest

Manufacturing Science Advanced Machining Processes, Production Engineering, Hybrid Machining Processes. Rapid Prototyping, Design of Experiment, Computational Intelligence.

Administrative Experience

1. Held various responsibilities at Dr. B.R.A. University, Agra.
2. Lab In-charge Manufacturing Science Lab from 17 March 2007 to till date.
3. Developed Advanced machining facility through procurement of ZNC EDM, ECM and USM at MED, HBTI Kanpur.
4. Lab In-charge of MMC Lab from Aug 2008 to Aug.2011
5. Organized SEE-10, UPTU Lucknow in 2010 and 2014 as a Center Superintended.
6. Member of Expert Committee at DMSRD Kanpur.
7. Organized CEPTAM, DRDO Examination in 2012 and 1st Feb. 2015 as observer.
8. Faculty advisor of AME (Association of Mechanical Engineers) from 2007 to 2010
9. Organized student national level Program MECHARNIVAL- 2008, 2009 and 2010
10. Hostel Warden WCH-III from September 2009 to June 2010
11. Hostel Warden WCH-II from June 2010 to March 2013
12. Sports Convener, HBTI, from March 2013 to 2015
13. Security In-charge, HBTI, from July 2013 to 2015
14. Organized SEE-15 as Nodal Officer at H.B.T.I Kanpur
15. Member of Selection Committee for selection of Tech. staff at IIT Kanpur during 2014-15.
16. Assistant Dean, Research and Development, HBTI Kanpur, from Oct.2015 – 2017
17. Hostel Warden WCH-II from July 2016 to 28 July 2022.
18. Faculty advisor of AME from July 2017 to till date
19. Departmental Library In-charge from July 2017 to till date
20. Departmental Coordinator of Training and Placement H.B.T.U Kanpur
21. Member of DPC of Library, Workshop and Mechanical Engineering Department
22. Member of Committee Constituted for NAAC team
23. Assistant Superintendent Examination from July 2017
24. University In-charge Training and Placement H.B.T.U Kanpur from 15 April 2019.
25. Coordinator, Employability Skill Training 2019,20
26. University Officer In-charge Central Store and Purchase (e-tendering) from Oct 2020.
27. Member secretary of University IPR Cell committee.
28. Member of Committee constituted by on 18 Feb 22 by Principal Secretary, Technical Education for design of new syllabus for Drone tech.
29. Member of Institution Industry Cell at HBTU from 23 April 2022.
30. Hostel Warden WCH-III (Raman Hostel) from 28 July 2022 to 05 Dec.2022.
31. Member of the BOS at MED BIET Jhansi

Extra-Curricular Activities

- NCC 'C' Certificate, **Rank:** Under Officer.

Courses Taught

- **Undergraduate Level:** Advanced Manufacturing Processes, Manufacturing Science, Manufacturing Science and Engineering I and II, CAM
- **Postgraduate Level:** Rapid Prototyping, A.I in Engineering, Advanced Manufacturing Processes, Machining Science, Neural Network and Fuzzy system, PDD
- **Pre PhD:** Research Methodology

Program Organized

1. Organized departmental student Annual function 'Mecharnival-2009' as Convener.
 2. Organized a Faculty Development program on Advances in Engineering Materials from March 16-21, 2009 as Dy. Coordinator
 3. Organized departmental student Annual function 'Mecharnival-2010' as Convener.
 4. Organized a National Conference on "Emerging Frontiers in Mechanical Engineering" as a Organizing Secretary, Under TEQIP-II, from 15-16 Feb.2014 at HBTI Kanpur
 5. Organized Faculty Development Programme on Engineering Education: Opportunities, Challenges & Future Directions, From March 7-12, 2014. as Dy. Coordinator Under TEQIP-II.
 6. Organized Annual Sports at HBTI in February 2014 as Convener.
 7. Dy. Co-ordinator of two days training program at HBTU Kanpur during 17-18 Feb. 2017
 8. Organized International Conference on Design, Materials & Manufacturing Concerns in Production of Quality Engineering Goods during March 27-29, 2017
 9. Organized Two weeks Summer Training Program during 09-21 July 2018.
 10. Organized Two weeks Summer Training Program during 08-20 July 2019.
 11. Organized one (100 hr) month Employability training for final year in August 2019.
 12. Organized Two weeks Summer Training Program during 08-20 July 2019.
 13. Organized one-week short term Training Program on Recent Advances in Engg. & Tech. for better career prospects during 15-20 July 2021.
 14. Organized Two weeks Summer Training Program on Personality Transformation in collaboration with super 77 from 16th July – 28th July 2021.
 15. Organized one day workshop on Drone technology at Govt Polytechnic Kanpur on 23 April 2022
 16. Organized one week training program on Skill Development (Technical & Soft Skill) from July 26-31,2024.
 17. Organized workshop on Robotics in 2023 and 2024
 18. Organized workshop on AutoRob and Aero Club in Nov 2024
- Reviewer of Journal of Mechanical Engineering and Technology (JMET)
 - Reviewed Books Manufacturing Tech. I & II by P.N.Rao.
 - Life Member of THE INDIAN SOCIETY FOR TECHNICAL EDUCATION (ISTE)
 - Member of Institution of Engineers (INDIA)-M-159898

Thesis Supervised (M.Tech Thesis: 35 completed)

S.N.	Name of students	Title of Thesis	Year of Completion	Place, Co-Supervisor
1.	Arvind Saroj (734/08)	Study on Design and Development of High Transparency, Light Weight Radome for Air Craft Application	2011	DMSRD, Sri P.Verma
2.	Naveen Sargam (Roll No.- 5604540003)	Neural Network Modelling and Experimental Study of Electrical Discharge Machining	2011	-
3.	Rajendra Kumar (S.R. No-736/09)	Failure Analysis of In-flight refuelling system of supersonic Aircraft's House	2013	DMSRD, sri P.Verma
4.	Vivek Kumar (SR. No-739/09)	Multi Objective Optimization of Electrical Discharge Grinding using Taguchi Method	2013	-
5.	Brahm Bahadur Maurya (Roll No.- 5504540018)	Comparative study of Copper and Aluminum tube through tube Hydro forming Process	2010	-
6.	Vakalat Husain (722/11)	Development of light weight polymer blend flame retardant material for passenger aircraft interior components	2013	DMSRD, Sri P. Verma
7.	Sishupal Singh (735/11)	Design, analysis and residual life estimation of rotary wing aircraft floatation system	2013	DMSRD, Sri P.Verma
8.	Kuldeep Kumar (6204540010)	Development and Experimental Study of Powder Mixed EDM for Cemented Carbide Workpiece (Selected under TEQIP-II project)	2014	-
9.	Deepak Azad (6204540007)	Modelling and Optimization of Electrical Discharge Machining Process using Neural Network	2014	-
10.	Arvind Kumar Yadav (721/13)	Development of Insulated Tool Electrode for Minimum Tool wear in EDM	2015	-
11.	Pravendra Kumar (726/13)	Modelling and Optimization of Powder Mixed Electrical Discharge Machining Process for Cemented Carbide Workpiece	2015	-
12.	Milind Priya (743/14)	Experimental Study of Electrical Discharge Diamond Grinding (EDDG) process	2016	-
13.	Shivam Yadav (745/14)	Experimental Study of Electrical Discharge Drilling (EDD) for MMC work Material	2016	-
14.	Pawan Kr.Yadav (712/15)	Development and Experimental Study of Electromagnetic Field Assisted EDM -Internal Completed	2017	-
15.	Sunit Kumar (717/15)	Experimental Study of ECM Process for Processing of Ti-alloy- Internal Completed	2017	-
16.	Anupma Katiyar (908/15)	Design, Development of Experimental setup for making of biocompatible materials on ECM (Dental Implants)	2018	-

17.	Vandana Pandey (914/15)	Analysis and calculation of Residual Stress in Hybrid machining Process	2018	-
18.	Krishan Kumar Shukla (903/16)	Experimental Study and optimization of Rotary Ultrasonic Machining Process	2019	-
19.	Prakash Mishra (904/16)	Design and Development of Wire EDM setup on ZNC EDM	2019	-
20.	Ashutosh Saini (758/16)	Study of EN-31 Hardened Steel and Experimental Analysis of process parameters using MQL	2018	-
21.	Santosh Kumar (769/16)	Development and Experimental Study of Rotary Electrochemical Machining Process	2018	-
22.	Onkar Gupta (766/16)	Experimental Study and parametric optimization of surface Grinding Process	2018	-
23.	Suraj Srivastava (170204014)	Experimental study and process optimization of rotary USM for glass using Taguchi method	2019	-
24.	Anand Sekhar (170204005)	Optimization of Electrical Discharge Drilling Process of Carbon-Carbon composite using grey relation analysis	2019	-
25.	Abhishek Singh (180204002)	Study and analysis of residual stresses in electric discharge grinding	2020	Pursuing
26.	Uzair Ahmad (180204015)	Experimental study and optimization of various forces acting during drilling operation	2020	-
27.	Venkat lalit Shukla (180204016)	ANN modelling and multi objective optimization of wire cut EDM process	2020	-
28.	Sunil 190204014	Investigation of Residual Stress during wire cut EDM	2021	-
29.	Srishti Namdev 190204013	Modelling and Optimization of foot planter pressure measurement system	2021	-
30.	Shivam Singh Tomar (190204011)	Development and parametric study of Abrasive jet Machining	2021	-
31.	Shivam (Part time)	Development and experimental analysis of prosthetic knee joint on ADAM process.	2022	-
32.	Praveen Kumar 200204009	3 D Analysis of cutting force during turning operation	2022	-
33.	Shivam Singh 200204012	Design analysis of injection mold	2022	-
34.	Raj Pratap	Experimental study of rotatory and static tool during EDM process	2023	-
35.	Mayank Dhar Pandey	Experimental Investigation of Solar Hot Case Based on Photovoltaic panel	2023	-

Book chapter and Reviewer

1. Development and Experimental Study of Ultrasonic Assisted Electrical Dis. (doi: 10.1007/978-981-32-9471-4_8), Springer link.
2. An Experimental Study of Electrochemical Spark Drilling (ECSD) (doi: 10.1007/978-981-32-9471-4_7) Springer link
3. Machining of EN-31 Steel and Experimental Analysis of Various Process Pa... (doi: 10.1007/978-981-32-9417-2_21) Springer link
4. Review on Dental Implant with Special Reference to Tooth Abutment Implant https://doi.org/10.1007/978-981-13-6577-5_22 (doi: 10.1007/978-981-13-6577-5_22) Springer link
5. Modelling of material removal rate and hole circularity on soda lime glass for Ultrasonic Drilling. https://link.springer.com/chapter/10.1007/978-981-15-3215-3_49.
6. Modelling of Material Removal Rate of Soda Lime Glass for Rotary Ultrasonic Drilling https://link.springer.com/chapter/10.1007/978-981-15-3215-3_51
7. Book chapter on Electro-Spark process for micro fabrication in book Micro electro fabrication by Elsevier in 2021,
8. Reviewer of Book MSE -1 by P.N.Rao (McGraw Hill Education Private Ltd)
9. Reviewer of Book MSE II by P.N.Rao (McGraw Hill Education Private Ltd).