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## Resume of Prof. (Dr) Vinod Yadava



### Personal Information:

**Name:** Prof. (Dr) VINOD YADAVA

**Father's Name:** Late Sri Ram Awadh Yadav

**Date and Place of Birth:** 13.10. 1964; Vil. Sonda, Post & Dist. Deoria, UP

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### Official Address:

Prof (Dr) Vinod Yadava, Professor, Mechanical Engineering Department,  
Motilal Nehru National Institute of Technology Allahabad, Allahabad-211004

### Residential Address:

Prof (Dr) Vinod Yadava, A-26, Staff Colony, Motilal Nehru National Institute of  
Technology Allahabad, Allahabad-211004

## Academic Interest:

**Research:** **Research Areas:** Advanced Manufacturing Science and Technology; Hybrid Machining Science and Technology; Micro Manufacturing Science and Technology; **Research Tools:** Finite Element Method (FEM); Design of Experiment (DOE); Soft Computing Method (SCM)

**Teaching:** **PG Courses:** Machining Science; Metal Forming; Computer Integrated Manufacturing; Finite Element Method; **UG Courses:** Manufacturing Science and Technology; Advanced Manufacturing Processes; Tool Design; Computer Aided Manufacturing; Quality Engineering

## Academic Qualifications

Degree	Discipline	Div	Year	Institute/College (University)
PhD	Mechanical Engineering	-	2002	Indian Institute of Technology Kanpur, Kanpur (Uttar Pradesh)
M. Tech.	Mechanical Engineering	First (Dist)	1991	Regional Engineering College Kurukshetra (Now NIT Kurukshetra), Kurukshetra, Haryana, India
B. E.	Mechanical Engineering	First	1989	Madan Mohan Malviya Engineering College Gorakhpur (Now Madan Mohan Malviya University of Technology), Gorakhpur, UP, India

## Academic Experience:

**More than 22 years of Teaching and Research Experience**

Position	From & To	Years	Institute/College
Professor	Dec 2007 to Till Now	6+	Motilal Nehru National Institute of Technology, Allahabad (UP)
Associate Professor	Jan 2006 to Nov 2007	2	Motilal Nehru National Institute of Technology, Allahabad (UP)
Assistant Professor	Nov 2001 to Dec 2005	4	Motilal Nehru National Institute of Technology, Allahabad (UP)
Senior Lecturer	Nov 1996 to Oct 2001	5	Motilal Nehru Regional Engineering College, Allahabad (UP)
Lecturer	Nov 1992 to Oct 1996	4	Motilal Nehru Regional Engineering College, Allahabad (UP)
Lecturer	Sept 1991 to Oct 1992	1	Chhotu Ram State College of Engineering, Murthal, Sonipat (Haryana)

## International Visits:

- **SINGAPORE** during February 26-28, **2011** to present paper in International Conference Manufacturing, Industrial and Mechanical Technology (MIMT-2011);
- **UK (Manchester)** during July 14-16, **2010** to present paper in 36<sup>th</sup> MATADOR-10 International Conference (MATADOR-10);
- **AUSTRALIA (Sydney)** during January 15-19, **2007** for technical training on “Pneumatic Automation and Systems” at SMC Pneumatics (Australia) Pty. Ltd., Australia,
- **USA (Chicago)** from November 5-10, **2006** to present paper in 2006 ASME International Mechanical Engineering Congress and Exposition (IMECE-2006)

## Laboratory Development:

- Developed **Advanced Machining Lab** equipped with Laser Machine and EDM Machine at MNNIT Allahabad under TEQIP first phase
- Renovated **Machine Tool Lab** at MNNIT Allahabad
- Developed **Product Design and Manufacturing Lab** at MNNIT Allahabad

## Setup Development:

- Associated with **In-house Development** of many **New Advanced Machining Setup** such as Electrical Discharge Diamond Cut-off Grinding , Electrical Discharge Diamond Face Grinding, Electrical Discharge Diamond Surface Grinding, Sinking-Electro-Chemical Spark Machining, Wire-Electro-Chemical Spark Machining, Milling-Electro-Chemical Spark Machining
- Associated with **In-house Development** of many **New Micro Machining Setup** such as Sinking-Electro-Discharge Micro Machining; Sinking-Electro-Chemical Micro Machining; Electrolytic Magnetic Abrasive Finishing for Plane and Cylindrical Surfaces
- Associated with **In-house Development** of FEM based software's for the Simulation and Optimization of various **Manufacturing Processes** such as EDM, ECM,USM,LBC,LBPD,LBW, LBB, EDDG, ECSM,ECSMW etc

## Recognitions: Professional Memberships

- **Member-Academic Senate, MNNIT Allahabad ( Dec-2007 to Till date)**
- **Member-BOG, MMMEC Gorakhpur (June-2012 to Nov-2013)**
- **Member-Academic Council, MMMEC Gorakhpur (May-2011 to Nov-2013)**
- **Member-Research Degree Committee, UPTU Lucknow (many times)**
- **Member-NBA New Delhi (many times)**
- **Member-Excellence Award Committee of UPTU Lucknow (many times)**
- **Member-Faculty Selection Board at MANIT Bhopal, MMMEC Gorakhpur and Many Private Engineering Colleges**
- **Member-Selection Committee at UPPSC Allahabad (many times)**
- **Member, Core Curriculum Development Committee-2004 of the MNNIT Allahabad for Course Structure of UG Courses**
- **Convener, Curriculum Development Committee-2002 for M. Tech. Courses of the Mechanical Engineering Department of the MNNIT Allahabad**
- **Member, Curriculum Development Committee-1993 of Mechanical Engineering Department of the MNNIT Allahabad**
- **Appointed PhD Examiner to NITs and State Engineering Colleges**

## Recognitions: Academic Memberships

- **Member of Editorial Board:** Intelligent Control and Automation Journal, International Journal of Mechanical Engineering and Robotics Research, International Journal of Mechanical Engineering, International Journal of Manufacturing Technology and Industrial Engineering and Indo-American Journal of Mechanical Engineering
- **Member of National Advisory Board:** International All India Manufacturing Technology, Design and Research Conference as IAIMTDR-2010 at AU-COE Vishakhapatnam and IAMTDR-2012 at JU Kolkata
- **Member of National Advisory Board:** International Conference on Advances in Mechanical and Building Sciences in the <sup>3rd</sup> millennium as ICAMB2009 at VIT University Vellore
- **Selected as one of the Biographies of the Marquis Who's Who in the World in the 27th Edition 2010**

## Recognitions: Reviewer Membership

1. International Journal of Advanced Manufacturing Technology
2. International Journal of Machine Tools Manufacture
3. Machining Science and Technology-An International Journal
4. International Journal of Mechanical Science
5. International Journal of Manufacturing Technology and Management
6. Journal of Materials Processing Technology
7. International Journal of Abrasive Technology
8. International Journal of Thermal Sciences
9. International Journal of Design Engineering
10. International Journal of Precision Engineering and Manufacturing
11. Journal of Zhejiang University Science
12. Optics and Laser Technology
13. Optics and Laser in Engineering
14. Surface and Coating Technology
15. Journal of Mechanical Engineering
16. Journal of Manufacturing Processes
17. Multidiscipline Modeling in Materials and Structures
18. Frontiers of Mechanical Engineering
19. International Journal of Mechanical and Materials Engineering
20. International Journal of Engineering Science and Technology
21. Many International and National Conferences in India

## Recognitions: Expert Speakerships

- **06 Key Note** speeches delivered at UP/MP State Engineering Colleges (NIITTR-Chandigarh, MMMEC-GKP, MIT-Moradabad, BSA-Mathura, IES-Bhopal, HBTI-Kanpur)
- **Eighteen (22) expert** talks delivered in Short Term Courses at IIT-Kanpur, IIT (BHU) Varanasi, NITs and UP State Engineering Colleges mostly in the areas of Recent trends in EDM and Micro-EDM, LBM and Micro-LBM, ECSM and Micro-ECSM, FEM applications in Design and Manufacturing

## Administration:

### Administrative Responsibility at the Institute Level (MNNIT Allahabad)

- **Dean (Research and Consultancy)** (Dec-2012 to Till Date)
- **Chairman, Senate Doctoral Programme Committee** (June-2013 to Till Date)
- **Ex-Chairman-Senate Post Graduate Committee** (01-Year Sep-12 to Sep-13)
- **Ex Dean (Academics)** Additional Charge (27.7.2013 to 31.8.2013)
- **Ex Dean (Student Welfare)** (02-Years during Oct 2010- Oct 2012)
- **Ex Chief Proctor** (01-Year during Oct 2010-Oct 2011)
- **Ex Chief Warden** (3.5 Years during May 2008-Nov 2011)
- **Ex Warden In charge/Warden** (12 years during 93-97 and 2002-07)
- **Ex Officer-in-Charge NCC** (04 Years during 1993 to 1997)
- **Ex Officer-in-Charge Trekking and Mountaineering** (04 Years 93 to 97 )

### Administrative Responsibility at the Department Level (MNNIT Allahabad)

- **Serving as Member DDPC-MED** (July-2013 to till date)
- **O/C Product Design and Manufacturing Lab** (Oct-07 to till date)
- **Ex Member DPGC-EED** (01-Year during Aug-2012 to July-2013)
- **Ex Member DUGC-MED** (02-Years during July-2011 to July-2013)
- **Ex Member DPGC-MED** (06-Years during July 2005-11)
- **Ex Member DUGC-MED** (02Years during July 2003-05)
- **Ex Member DUGC-CED** (02Years during July 2003-05)
- **Ex Member Departmental Purchase Committee** (05 Years during 2006-11)
- **Ex Officer-in-Charge Advanced Machining Lab** (04 Years during 2004-08)
- **Ex Officer-in-Charge Machine Tool Lab** (04 Years during 2004-08)
- **Ex Officer-in-Charge NC Machine Lab** (02 Years during 1995-1997)
- **Ex Officer-in-Charge Newer Machining Lab** (02 Years during 1995-1997)
- **Ex Workshop Superintendent** (1.5 Years)
- **Ex Officer-in-Charge M. Tech and PhD Stipend** (04 Years)
- **Ex Departmental Representative Examination** (02 Years)
- **Ex O/C ME Project and Thesis Examinations** (02 Years)

## **Organizations: Short Term Courses and Conferences (07)**

1. Organised self-financed short term course on **Micromanufacturing: Materials, Processes and Systems** during July 08-12, 2013 in Mechanical Engineering Department at Motilal Nehru National Institute of Technology Allahabad.
2. Organised AICTE Sponsored Staff Development Programme on **Advanced Manufacturing Processes** during March 12-23, 2007 in Mechanical Engineering Department at Motilal Nehru National Institute of Technology Allahabad.
3. Worked as **Joint Organizing Secretary**, National Seminar on Emerging Trends in Design Engineering at Motilal Nehru Regional Engineering College Allahabad During **Jan. 31-Feb 2-1997**
4. Worked as **Joint Organizing Secretary** and **Member of Review Committee**, National Seminar on Corporate Strategies in the Changing Business Scenario at Motilal Nehru Regional Engineering College. Allahabad, During September-**1997**
5. Worked as **Joint Organising Secretary**, All India Seminar on Advances in Industrial Engineering and Productivity Improvement Techniques at Motilal Nehru Regional Engineering College, Allahabad-**1995**
6. Worked as **Member Organizing Committee**, National Seminar on Energy Management at Motilal Nehru Regional Engineering College Allahabad, during March-**1995**
7. Worked as **Member Review Committee**, 8<sup>th</sup> National Convention of Production Engineers and All India Seminar on Automation and its Levels in Manufacturing Industries at Motilal Nehru Regional Engineering College Allahabad during July-**1993**



## Short Term Courses Attended: 09

1. Attended AICTE and BARC sponsored short term course on “Micromachining” held at IIT Kanpur during June 18 to June 23, 2007.
2. Attended short term course on “Advanced Machining Processes” held at IIT Kanpur during October 18-23, 2004.
3. Attended DST Sponsored 3<sup>rd</sup> SERC school on “PRECISION ENGINEERING” held at IIT Kanpur during June 10-19, 2002.
4. Attended DST Sponsored 6<sup>th</sup> SERC school on “Advanced Manufacturing Technology” held at IIT Kanpur during March 15-27, 1999.
5. Attended QIP course on “Computer Aided Maintenance” held at IIT Delhi during December 8-13, 1997.
6. Attended DST Sponsored 2<sup>nd</sup> SERC school on “Reliability, Availability and Maintainability (RAM) Engineering in Manufacturing” held at IIT Kanpur during November 17-29, 1997.
7. Attended QIP course on “Advanced Machining Processes” held at IIT Kanpur during July 21-26, 1997.
8. Attended short term course on “Advanced Machining Processes” held at IIT Kanpur during December 23-28, 1996.
9. Attended short term course on “Recent Trends in Engineering Materials” held at MNREC Allahabad during December 26, 1994 to January 6, 1995.

## Chapter Publications: 03

1. Written a book chapter on **Electro-Chemical Spark Micro-Machining** in **Introduction to Micromachining** by Allied Publisher Pvt. Ltd., New Delhi-2009; ISBN:978-81-7319-915-8
2. Written a book chapter on **Micro-Electro-Discharge Machining** in **PRECISION ENGINEERING** published by Allied Publisher Pvt. Ltd., New Delhi-2002; ISBN: 81-7764-328-2.
3. Written a book chapter on **Availability Analysis of Coal Handling System in Thermal Power Plants** in published by **RELIABILITY, AVAILABILITY AND MAINTAINABILITY ENGINEERING IN MANUFACTURING Vol. II** Allied Publisher Pvt. Ltd., New Delhi-1997; ISBN: 81-7023-729-7.



## Research Projects: 03-Completed + 02-Running

1. **Principal Coordinator, TEQIP-I Sponsored Project** for development of Advanced **Machining Lab** equipped with **Laser Machine** and **EDM Machine**. Duration 2003-2005 (25 lacs) **(Completed)**
2. **Principal Investigator, DST sponsored project** on “Experimental and Numerical Study of Nd: YAG Laser Beam Cutting of Thin Sheet”. Duration 2007-2010 (25.7 lacs) **(Completed)**
3. **Principal Investigator, CSIR sponsored project** on “Experimental and Numerical Study of Traveling Wire-Electro-Chemical Spark Machining of Advanced Engineering Material”. Duration 2010-2013 (10 lacs) **(Completed)**
4. **Principal Investigator, ARDB sponsored project** on “Electro-Discharge Diamond Grinding-Development and Optimization”. Duration 2011-2014 (25 lacs) **(Running)**
5. **Principal Investigator, CSIR sponsored project** on “Cylindrical Electrolytic Magnetic Abrasive Machining (C-EMAM): Development, Modeling and Optimization”. Duration Jan-2014-2017 (18 lacs) **(Running)**

# Research Supervision:

**Supervision of PhD Theses: (Completed-12 + Under Progress-5)**

## **PhD Theses Completed (12)**

1. **Avanish Kumar Dubey** Thesis Topic: Experimental Modelling and Multi-Objective Optimization of Laser Beam Cutting of Thin Sheets (**April-2008**)
2. **Mohan Charan Panda** Thesis Topic: Thermal Finite Element based Intelligent Modeling and Optimization of Electro-Chemical Spark Machining Process (**Dec-2010**)
3. **Gyanendra Kumar Singh** Thesis Topic: Electro-Discharge Diamond Face Grinding: Development, Modeling and Optimization (**Oct-2011**) (*Co-Supervisor: Prof. Raghuvir Kumar*)
4. **Amit Sharma** Thesis Topic: Modelling and Optimization Studies of Nd: YAG Laser Beam Straight and Profile Cutting of Difficult to Cut Thin Sheet Materials (**Oct-2012**)
5. **Audhesh Narayan** Thesis Topic: Thermal Finite Element Analysis and Optimization of Deep Surface Grinding Processes (**Nov-2012**)
6. **Sanjay Mishra** Thesis Topic: Finite Element based Simulation and Optimization of Nd: YAG Laser Beam Percussion Drilling of Thin Sheet Metals (**May-2013**)
7. **Sanjeev Kumar Singh Yadav** Thesis Topic: Modelling and Multi-Objective Optimization of Electrical Discharge Diamond Cut-off Grinding Process (**July-2013**)

8. **Shyam Sunder Agarwal** Thesis Topic: Some Investigations on Surface-Electrical Discharge Diamond Grinding of Metal Matrix Composites (**August-2013**)
9. **K.B. Judal** Thesis Topic: Some Investigations into Cylindrical Electrochemical Magnetic Abrasive Machining Process (**September-2013**)
10. **Ravindra Nath Yadav** Thesis Topic: Some Investigations on Slotted-Electrical Discharge Diamond Grinding (**February-2014**)
11. **Rajesh Kumar Porwal** Thesis Topic: Modelling and Optimization of Micro Electrical Discharge Machining of Super Alloys (**Submitted in July-2013**)
12. **Basant Kumar Bhuyan** Thesis Topic: Travelling Wire Electro-Chemical Spark Machining-Development, Modelling and Optimization (**Submitted in Jan-2014**)

**PhD Theses in Progress: (04)**

13. **Ajay Suryavansi: In the area of** Electro-Discharge Micro Machining: Thermal Finite Element Modelling, Simulation and Optimization (*Co-Supervisor: Dr Audhesh Narayan*)
14. **Ram Singar Yadav: In the area of** Variants of Electrical Discharge Diamond Grinding: Experimental Study, Modelling and Optimization
15. **Vivek Kumar: In the area of** Variants of Electro-Chemical Spark MicroMachining (ECSMM): Development and Performance Study
16. **Param Singh: In the area of** Vibration Assisted Electro-Discharge MicroMachining (*Co-Supervisor: Dr Audhesh Narayan*)

**Supervision of M. Tech Theses: 45 (42-Awarded + 03-Under Progress)**  
**(28 Published: 17-IJ and 11-IC)**

1. Devendra Kumar (1997) Analysis of Strip Rolling Process taking Roll Flattening and Strain Hardening into Account (Published in Proc. of National Seminar on Emerging Trends in Design Engineering-1997 at IE Allahabad)
2. R.Edison Chandra Seelan (1997) FBCAPP-Feature Based Computer Aided Process Planning for EDM Operations (Published in Proc. of National Seminar on Emerging Trends in Design Engineering-1997 at IE Allahabad)
3. Sarvesh Tomar (1998) Thermal Modelling and Simulation of Abrasive Electro-Discharge Grinding (AEDG) Process (Given base for PhD)
4. Rahul Mullik (2003) Finite Element Analysis of Electro-Chemical Spark Machining (Published in International Journal of Manufacturing Technology and Management-2005)
5. Sanjeev Kumar Singh Yadav (2004) Design, Fabrication and Experimental Study of Electro-Discharge Diamond Grinding (Published in International Journal of Advanced Manufacturing Technology-2008)
6. Gurvinder Kumar (2004) Thermal Analysis of Plane Magnetic Abrasive Finishing using FEM (Published in International Journal of Advanced Manufacturing Technology-2009)
7. Wani Amit (2004) Finite Element Simulation of Magnetic Abrasive Flow Machining (Published in Journal of Materials Processing Technology-2007)
8. Patil Makrand Ramu (2004) Finite Element Analysis of Thermal Stresses in Selective Laser Sintering (Published in International Journal of Manufacturing Technology and Management-2008)
9. Patil Sandeep Sakharan (2004) Design of Tool for Electro-Chemical Machining Using FEM (Published in International Journal of Design Engineering-2007)
10. Anirudha Deoghare (2004) Design of Horn for Ultrasonic Machining with Rotation (Published in International Journal of Advanced Manufacturing Technology-2008)

11. Vikas Kumar Singh (2004) Thermal Analysis of Electro-Chemical Discharge Micro-Welding Using FEM ([Published in Proc. of National Conference IPROMM-2005 at IIT Kharagpur](#))
12. Bhodwe Kiran Laxman (2004) Computational Evaluation of Metal Removal Rate during Electro-Chemical Spark Machining ([Published in International Journal of Machine Tools Manufacture-2006](#))
13. Patil Rahul B. (2005) Temperature Distribution in Metallic Layer during Selective Laser Sintering using FEM ([Published in International Journal of Machine Tools Manufacture-2007](#))
14. Kapare Ankush (2005) Finite Element Analysis of Thermal Stresses in Electro-Chemical Discharge Micro-Welding ([Published in International Journal of Nanomanufacturing-2009](#))
15. Katheresan G. (2005) Thermal Analysis of Traveling Wire-Electro-Chemical Spark Machining (TW-ECSM) using FEM ([Published in International Journal of Advanced Manufacturing Technology-2009](#))
16. Amar Dhumal (2005) Optimization of Abrasive Water Jet Cutting Parameters using Neural Network and Genetic Algorithms
17. Lakshmi Narayan V. (2005) Analysis and Optimization Electro-Discharge Diamond Grinding using Taguchi Method ([Published in International Journal of Advanced Manufacturing Technology-2008](#))
18. Audhesh Narayan (2005) Experimental and Finite Element Predictions of Material Removal Rate in Electro-Discharge Machining ([Published in Proceedings of International Conference on Manufacturing Research at De Montfort University, Leicester UK, Sep-2007](#))
19. Atul Khatri (2006) Modeling and Simulation for the prediction of surface Roughness in Plane Magnetic Abrasive Finishing (MAF) using FEM ([Published in International Journal of Industrial Systems Engineering-2008](#))
20. Krishan Kishore (2006) Development of Software for Parameter Design of Laser Beam Cutting Process ([Given base for PhD](#))

21. Parikshit Sharma (2006) Thermal Analysis of Gas Tungsten Arc Welding (GTAW) using FEM (Given base for PhD)
22. Prabhat Kumar (2006) Manufacturing Study and Proposed Process Planning for Manufacturing of Hemi-Head of High Pressure Heater in Steam Power Plant
23. Rajeev Kumar (2007) Finite Element Analysis of Sinking Micro Electro-Discharge Machining (Published in International Journal of Nanoparticles-2009)
24. Rajan Prakash (2007) Finite Element Analysis of High Efficiency Deep Grinding (Published in International Journal of Abrasive Technology-2010)
25. B. Chandra Shekhar (2008) Experimental Study on Electrical Discharge Face Grinding (EDFG) (Published in Materials and Manufacturing Processes-2010)
26. Roomas Singh (2008) 3D Finite Element Thermal Analysis of Laser Beam Cutting Process
27. S. Raghvendra Rao (2008) Optimization of Nd: YAG Laser Beam Cutting of Ni-based Superalloy Thin Sheet (Published in Optics and Laser Technology-2009 and IAIMTDR-2008)
28. Shailendra Dyal (2009) Intelligent Modelling and Simulation of Electro-Discharge Machining Process (Published in Proc. of NC-RAMTM-2010 at Jadavpur University Kolkata)
29. Mohd. Salim (2009) 3D Transient Finite Element Thermal Analysis of Laser Beam Drilling Process (Published in Proc. Of IAIMTDR-2010 at Andhra University College of Engineering Visakhapatnam)
30. M. Nand Kumar (2009) 3D Transient Finite Element Thermal Analysis of Laser Beam Spot Welding Process (Given base for PhD)
31. Smita Gupta (2010) Finite Element Analysis of Laser Beam Bending in Ultra Thin Aluminium Foil (Published in Proc. of COPEN- 2011)
32. Pawan Kumar Yadav (2010) Thermal Analysis of Friction Stir Welding of Aluminium alloy thin sheet using Finite Element Method

33. Lokesh Mishra (2011) Development and Experimental Study of Plane-Electrolytic Magnetic Abrasive Finishing Process(Published in Proc. of IAIMTDR-2012 at JU Kolkata)
34. Mukesh Kumar (2011) CAD and Optimization of Horn used in Rotary Ultrasonic Machining (Given base for PhD)
35. Pratibha Sinha (2011) Modeling and Optimization of Electrical Discharge Machining
36. Dayanidhi Kumar Pathak (**2012**), Experimental and Computational Study of Cylindrical-Magnetic Abrasive Finishing Process (Published in International Journal of Precision Technology-2013 and Proc. of NC-AMT-2012 at NITTR Chandigarh and IAIMTDR-2012 at JU Kolkata)
37. S.V. Vishvanath (**2012**), Development and Experimental Study of Miling Electro-Chemical Spark Machining (Published in Proc. of NC-AMT-2012 at NITTR Chandigarh)
38. P.S. Balaji (**2012**), Finite Element Analysis of Electro-Discharge Diamond Surface Grinding (Published in Elsevier Journal Simulation Modelling: Practice and Theory-2013 and Proc. of NC-AMT-2012 at NITTR Chandigarh and IAIMTDR-2012 at JU Kolkata)
39. Anjani Kumar Singh (**July-2013**) Parametric Studies of Sinking Electrical Discharge Machining of Metal Matrix Composites
40. Sanjay Singh Patel (**July-2013**) Parametric Studies of Face-Electrical Discharge Grinding of Metal Matrix Composites
41. Gyan Singh (**July-2013**) Parametric Studies of Electrical Discharge Drilling of Metal Matrix Composites
42. Nitish Srivastava (**July-2013**) Simulation of Electrical Discharge Machining Accounting Randomness of Spark Generation
43. Pallvita Yadav (**Under Progress**) Determination of Bend Angle during Laser Beam Bending using FEM



44. Mahendra Singh (**Under Progress**) Modelling and Optimization of Travelling Wire Electro-Chemical Spark Machining of Epoxy Composite
45. Ashok Yadav (**Under Progress**) Finite Element Stress Analysis of Mechanical Transformer used in Sinking Ultrasonic Assisted Electric Discharge Machine

## Research Paper Publications: 219

Journals-----113 (International Journals-108+ National Journals-05)

Conferences-106 (International Conferences-66+National Conferences-40)

### (A) PEER REVIEWED INTERNATIONAL JOURNALS (108)

#### (56-SCI Journals)

#### Up to 2006 (08)

1. **Yadava, V.;** Jain, V.K.; Dixit, P.M. Temperature Distribution during Electro-Discharge Abrasive Grinding, Machining Science and Technology-An International Journal, Vol. 6, No. 1, pp. 97-127(**2002**)
2. **Yadava, V.;** Jain, V.K.; Dixit, P.M., Thermal Stresses due to Electric Discharge Machining, International Journal of Machine Tools Manufacture, Vol. 42, No. 8, pp. 877-888 (**2002**)
3. **Yadava V.,** Jain V.K., and Dixit, P.M., Theoretical Analysis of Thermal Stresses in Electro-Discharge Diamond Grinding, Machining Science and Technology-An International Journal, Vol. 8, No. 1, pp. 119-140 (**2004**)
4. **Yadava, V.;** Jain, V.K.; Dixit, P.M. Parametric Study of Temperature Distribution in Electro-Discharge Diamond Grinding? Materials and Manufacturing Processes, Vol. 19, No. 6, pp. 1-13 (**2004**)
5. **Yadava, V.;** Jain, V.K.; Dixit, P.M. Temperature Determination in the Workpiece during Diamond Surface Grinding: FEM Approach, International Journal of Manufacturing Technology, Vol. 1, No. 1, pp. 29-34 (**2005**)
6. **Yadava V.,** Jain V.K., and Dixit, P.M., Temperature Distribution in the Workpiece due to Electro-Discharge Diamond Surface Grinding using FEM, International Journal of Manufacturing Technology and Management Vol. 7, No. 2/3/4, pp. 246-267 (**2005**)

7. Rahul S. Mullik and **Vinod Yadava**, Thermal Stresses during Electro-Chemical Spark Machining using FEM, International Journal of Manufacturing Technology and Management , Vol. 7, No. (2/3/4),pp. 287-307(**2005**)
8. Kiran L. Bhondwe, **Vinod Yadava**, and G. Kathiresan, Finite element prediction of material removal rate due to electro-chemical spark machining, International Journal of Machine Tools Manufacture, Vol. 46, pp. 1699-1706 (**2006**)

#### **2007 (04)**

9. Patil Rahul B., and **Vinod Yadava**, Finite Element Analysis of Temperature Distribution in Single Metallic Powder Layer during Metal Laser Sintering , International Journal of Machine Tools Manufacture, Vol. 47, No. (7-8), pp. 1069-1080 (**2007**)
10. Amit M. Wani, **Vinod Yadava** and Atul Khatri, Simulation for the Prediction of Surface Roughness in Magnetic Abrasive Flow Finishing (MAFF), Journal of Materials Processing Technology, Vol. 190, No. (1-3), pp. 282-290 (**2007**)
11. Patil Sandeep Sakharan and **Vinod Yadava**, Finite Element Prediction of Tool Shapes in Electro-Chemical Machining, International Journal of Design Engineering, Vol. 1, No. 1,pp. 21-40 (**2007**)
12. Avanish Kumar Dubey and **Vinod Yadava**, Simultaneous Optimization of Multiple Quality Characteristics in Laser Beam Cutting using Taguchi Method, International Journal of Precision Engineering and Manufacturing, Vol. 8, No.4,pp. 10-15, (2007)

#### **2008 (11)**

13. Patil Makarand Ramu and **Vinod Yadava**, Determination of Thermal Stress Distribution in Metallic Layer during Selective Laser Sintering using Finite Element Method, International Journal of Manufacturing Technology and Management, Vol. 13, No. (2/3/4),pp. 280-296 (**2008**)
14. Atul Khatri and **Vinod Yadava**, Modeling and Simulation for the Prediction of Surface Roughness due to Plane Magnetic Abrasive Finishing, International Journal of Industrial and Systems Engineering, Vol. 3, No. 2, pp. 189-210 (**2008**)
15. Sanjeev Kumar Singh Yadav, **Vinod Yadava** and Lakshmi Narayana.V., Experimental Study and Parameter Design of Electro-Discharge Diamond Grinding, International Journal of Advanced Manufacturing Technology, Vol. 36, No. (1-2), pp. 34-42 (**2008**)
16. **Vinod Yadava** and Aniruddha Deoghare, Design of Horn for Rotary Ultrasonic Machining using Finite Element Method, International Journal of Advanced Manufacturing Technology, Vol. 39, No. (1-2),pp. 9-20 (**2008**)

17. Avanish Kumar Dubey and **Vinod Yadava**, Multi-Objective Optimization of Nd: YAG Laser Cutting of Nickel Based Super alloy Sheet using Orthogonal Array with Principal Component Analysis, Optics and Lasers in Engineering, Vol. 46,pp. 124-132 (2008)
18. Avanish Kumar Dubey and **Vinod Yadava**, Experimental Study of Nd: YAG Laser Beam Machining – An Overview, Journal of Materials Processing Technology, Vol. 195,pp. 15-26 (2008)
19. Avanish Kumar Dubey and **Vinod Yadava**, Laser Beam Machining-A Review, International Journal of Machine Tools and Manufacture, Vol. 48,pp. 609-628 (2008)
20. Avanish Kumar Dubey and **Vinod Yadava**, Optimization of Kerf Quality during Pulsed Laser Beam Cutting of Aluminium Alloy Sheet, Journal of Materials Processing Technology, Vol. 204, pp. 412–418 (2008)
21. Avanish Kumar Dubey and **Vinod Yadava** , Robust parameter design and Multi-Objective Optimization of Laser Beam Cutting for Aluminium alloy, International Journal of Advanced Manufacturing Technology , Vol. 38, No. (3-4),pp. 268-277 (2008)
22. Avanish Kumar Dubey and **Vinod Yadava**, Multi-Objective Optimization of Laser Beam Cutting Process, Optics and Laser Technology , Vol. 40, pp. 562-570, (2008)
23. Rajeev Kumar and **Vinod Yadava**, Finite Element Thermal Analysis of Micro Electro-Discharge Machining, International Journal of Nanoparticles, Vol. 1, No. 3,pp. 224-240 (2008)

#### 2009 (04)

24. Ankush R. Kapare and **Vinod Yadava** and Mohan Charan Panda, Finite element analysis of micro-weld bead due to electro-chemical discharge micro-welding, International Journal of Nanomanufacturing, Vol. 3, No. 3, pp. 240-263(2009)
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