Dr. Vinod Kumar Saini

*Ph.D. (Mechanical Engineering), M.E. (Manufacturing Technology), MBA (Operation Management)*

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**Profile**

Professor and Head Mechanical Engineering in IMS Engineering College, Ghaziabad. Teaching experience for more than 16 years and Over 15 years of experience in Indian Air Force.

**Education**

* **Ph.D. from Department of Mechanical Engineering, Jamia Millia Islamia University, New Delhi (2014).**
* **Master of Engineering** **(Manufacturing Technology)** from National Institute of Technical Teacher’s Training and Research (NITTTR), Chandigarh (2004).
* **MBA (Operation Management)** from IGNOU (2008).
* **AMIE (Mechanical Engineering)** from Institute of Engineers (India) (1997).
* CMI level 5 certificate (UK) in Management and leadership (2020)

**academic Experience**

* **Professor and Head - Mechanical Engg Department, ABES Engineering College, Ghaziabad (NAAC accredited ‘A’ grade, NBA) (16th July 2021 - till date)**
* Mechanical Engg Department, IMS Engineering College, Ghaziabad (NAAC accredited ‘A’ grade, NBA) (12th August 2004 – 15th July 2021): Worked as Lecturer to Professor and Head, Mechanical Engineering

**Industrial Experience**

* **Total 15 years of service in Indian Air Force.**
* Worked at different Air Force Stations and responsibility includes: Inspection and maintenance of sophisticated mechanical systems and ground equipment’s/armament systems of fighter aircraft (MIG 21).

**subjects taught**

* Engineering Mechanics, Manufacturing Science, Strength of Material, Mechanical Engineering, Engineering Graphics; Internal combustion Engine, Unconventional Manufacturing Processes and Advanced Welding Technology.

**administrative Experience, responsibilities and skills**

* Working as Head of Mechanical Engineering department since 2010 to till date
* Teaching Theory & Lab courses to B. Tech and M. Tech students
* Continues improvement in result of students
* Increase the effectiveness of the team by recognizing opportunities
* Strong organizational leadership, management and proven performance in leading teams to accomplish goals
* Organizing various FDPs, workshops, guest lectures, seminars for students and faculty
* Track record of building strong, empowered teams with positive cultures
* To prepare NBA documents, guiding faculty members for NBA inspection
* Evaluate student performance through quizzes, class tests, examinations etc.
* Managing preparation of question papers, evaluate answer sheets and examinations
* Design and set up labs, and add new experiments to existing labs
* Guide student projects at UG and PG levels, help them with reports, review articles, research papers
* Coordinate and participate in Industrial/field visit for the students
* Manage summer internship and visit the companies/students during the internship, if required
* Perform all academic administration jobs and other related responsibility at college level, etc
* Organize faculty development program for faculty members and students by eminent personalities
* Attend Short term courses, seminars, conferences, workshop to improve own skills and /or present research papers
* Build, train and support a high performing team of individual contributors with a positive culture of problem solving
* Develop win strategies and program milestone schedules
* Undertake research and/or R & D activities inhouse
* Write research/R&D proposals
* Interact and partnership with industry
* Ensure discipline in class and in the campus
* Plan and implement new policies, procedures etc. for improving academic rigour.
* Coaching students in developing special skills, preparing them for job interviews. Help students’ placements, Counsel students on their academic as well as non-academic problems
* Helping students with co-curricular activities and sports activities
* Creating and managing various centers of excellence
* Strong management capacities
* Develop, manage, and execute a comprehensive strategy for the organization
* Any other duties assigned by the management from time to time.

**research paper Published**

**International Journal**

1. **Saini, V.K**., Zahid, A. Khan, Siddiquee, A.N., (2013). Optimization of Wire Electric Discharge Machining of Composite Material (Al 6061/SiCp 10%) using Taguchi method. International Journal of Mechanical and Production Engineering, ISSN No. 2315-4489, 1 (1), 61-64.
2. **Saini, V.K**., Zahid, A. Khan, Siddiquee, A.N., (2013). Multi Response Optimization of Process Parameters in Electric Discharge Machining of High Strength Low Alloy (HSLA) Steel. Vivechan, International Journal of Research, 4, 8-90.
3. **Saini, V.K**., Zahid, A. Khan, Siddiquee, A.N., (2012). Advancements in Non-Conventional Machining of Aluminum Metal Matrix Composite materials. International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, 1 (3), 1-14.
4. Pachauri, Himanshu, **Saini, V.K.,** Kumar Sunil., and Bhardwaj, Bhavyakant., (2017). Design and analysis of independent suspension system for an all-terrain vehicle*.* International Research Journal for research in Applied Sciences & Engineering Technology (IJRASET) e-ISSN: 2321 - 9353 Volume: 05 Issue: 05*,*
5. **Saini, V.K.,** Kumar, Sunil. Shakya, Amit Kumar., and Mishra, Harshit., (2017). Design Methodology of Steering System for All Terrain Vehicles. International Journal of Engineering and Technology (IRJET) e-ISSN: 2321 -0056 Volume: 04 Issue: 05*.*
6. **Saini, V.K.,** Tomer, Dushyant., and Kulshrestha, Kshitij., (2017). Design and Analysis of Frame of an All-Terrain Vehicle. International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395 -0056 Volume: 04 Issue: 05
7. **Saini, V.K.** (2018) "Design and Analysis of All-Terrain Vehicle Frame” Published in International Research Journal of Engineering and Technology (IRJET) Vol-5, Issue-4, Apr 2018, 2550-2553
8. **Saini, V.K.,** (2018) “Design, analysis, and development of transmission system for an all-terrain vehicle” Published in International Research Journal of Engineering and Technology (IRJET) Vol-3, Issue-4, 2018, pp 248-255

**National Journal:**

1. Kalla S.K., **Saini V.K**. “Thermo economic and Exergy Analysis of Refrigeration System” Indian Journal of Engineering, Science and Technology 2012

**International Conference**

1. Aadarsh Kumar, Mubina Shekh & **V.K. Saini** "Fabrication of Nano Material: A Review“ Presented in an International Conference on” Recent Trend in Mechanical, material, industrial, Automotive”, Aeronautical and Nano-technology (MIANT-2017)“ Organized by "Krishi Sanskriti" on 2nd April 2017 at JNU, New Delhi. Published in Journal of material science and mechanical engineering (JMSME) Vol-4, Issue-1, Jan-March 2017, Page no. 17-20
2. Azizul Bin Mohamad, Arshad Noor Siddiquee, Ghulam Abdul Quadir, Zahid A. Khan, **V.K. Saini** (2012).Optimization of EDM process parameters using Taguchi method. Published in the Proceedings of International Conference on Applications and Design in Mechanical Engineering (ICADME 2012) held during 27 - 28 February 2012 at Penang, Malaysia.
3. **Saini, V.K.,** Sharma, D., Kalla, S.K., Tulsi Chouhan, (2012). Optimisation of Process Parameter in Ultra-precision Diamond Turning of Polycarbonate Material in international conference held during 29-30 March, 2012 at Amity University Campus, Noida.
4. Sharma, D., **Saini, V.K**., Tulsi Chouhan, Upadhye, N., (2012) Implementing QFD for an Auto Service Station, A Case Study in international conference held during 29-30 March, 2012 at Amity University Campus, Noida.
5. Tulsi Chouhan, **Saini, V.K**., Sharma, D., Chouhan, H., (2012) Creative problem-solving approach to enhance functionality of vacuum cleaner in international conference held during 29-30 March, 2012 at Amity University Campus, Noida.

**National Conference:**

1. **Saini, V.K** ‘Ultra precision machining of polycarbonate material using single point diamond turning tool’ presented in national conference ‘Recent Developments in Mechanical Engineering’ (RDME-2010) held on 20 February 2010 at BRCM College of Engineering & Technology, Bahal, Distt. Bhiwani (Haryana).
2. **Saini, V.K** ‘Needs and applications of NDT in automobile industries’ presented in national conference ‘future trends in applications of computers in science and technology’ 2009 at IMS Engineering College, Ghaziabad.
3. **Saini, V.K** “Optimization of Copper turning process Parameters using Taguchi method” presented and published in the Proceedings of National Conference on "Emerging Frontiers in Mechanical Engineering​g for New Generation Industry (EFME - 2011)" on 12th & 13th March, 2011.

**PROGRAMS Attended**

* Online Short-Term Training Program on "Composites: Fracture Toughness, NDE and Failure Analysis" conducted online from 17th to 22nd November 2020 by the Department of Mechanical Engineering, Pillai HOC College of Engineering and Technology, Rasayani
* Online five-day FDP on “Futuristic Technologies in Industries” Organized by Department of Mechanical Engineering of Dr. D. Y. Patil Institute of Technology, Pune from 5th to 9th June 2020
* Online five-days FDP on “Inculcating Universal Human Values in Technical Education” during 19-23 August, 2020 as organized by AICTE.
* "First Summer School on Automotive Technologies" from 12th to 16th June 2018 organised by SAE North India Section at G.L. Bajaj, Greater Noida.
* TEQIP-III supported FDP on "Industrial Automation with Robotics and 3D Printer (IARP2018) from 04thJune to 09thJune, 2018" at JSS Academy of Technical Education, Noida
* Advanced Materials and Manufacturing” held during 20-22 January, 2012 in the department of Mechanical & Industrial Engineering, Indian Institute of Technology, Roorkee (Uttarakhand)
* Processing Challenges and Newer Manufacturing Methods” held from 25.06.2011 to 29.06.2011 (one week) in the department of Mechanical & Industrial Engineering, Indian Institute of Technology, Roorkee (Uttarakhand)
* Advanced material and manufacturing, IIT Roorkee, 2010
* Modelling and Simulation of Mechatronics Systems, IIT Roorkee, 2007
* Robotics vision and control, IIT Roorkee, 2006.
* Advances in Arc Welding Technology, KIET Ghaziabad, 2006
* Attended one-week industrial training in Spark Minda Greater Noida, 2016

**Funded PROGRAMS organised**

* AICTE sponsored a two weeks **faculty development program** on “Next Generation Materials & Manufacturing” from 16th to 28th December 2019. (Grant: Rs.573000/- from AICTE)
* AICTE sponsored international conference Recent Advances in Non-Conventional Energy Resources Using Solar Based Technologieson 27th &28th July 2019. (Grant: Rs.131000/- from AICTE)
* AKTU sponsored faculty development program” “Advancements in Materials and Manufacturing” (24th to 28th July, 2017) (Grant: Rs.150000/- from AKTU, Lucknow)

**GUIDANCE OF THESIS/PROJECTS**

* M. Tech - 03
* B. Tech - 30
* Final year student’s project “Creation of water from atmospheric air” selected under CST U.P. engineering students' project grant scheme under my guidance (2017)
* Unidentified, interactive & smart Robot for surveillance was selected by DRDO, Robotics and Unmanned Systems Exposition (DRUSE 2018)

**MEMBERSHIP OF PROFESSIONAL BODIES**

* Life Member, Institute of Engineers (India) – Various programs organized in association with Institute of Engineers Ghaziabad local Chapter
* Member, Society for Automotive Engineers (SAE) – Faculty advisor for SAE BAJAINDIA competitions

**DATE OF BIRTH**

* 2nd Feb 1970

(**Vinod Kumar Saini**)