CURRICULUM VITAE

Dr. SANJAY KUMAR (PhD)
Mechanical Engineering
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REWARI,
Haryana, Pin-123401



CAREER OBJECTIVE:

A highly organized and hard-working individual to get mastery in teaching and training of young graduates who are seeking their career in Mechanical Engineering by equip them with the art of modern manufacturing systems using CAM to cater the need of strong economy and nation building through youth employments and entrepreneurship.

EDUCATIONAL QUALIFICATIONS: Academics

Ph.D. in Mechanical Engineering in "Analysis and implementation of Cellular Manufacturing System and its impact on manufacturing flexibility" from **J. C. Bose University of Science and Techonology YMCA Faridabad**.

- **M. Tech.** in Production Engineering from **Punjab Technical University Jalandhar** with 67% aggregate marks.
- **B. Tech.** in Mechanical Engineering from **Kurukshetra University, Kurukshetra** with 68% aggregate marks.
- 10+2 in PCM from **C.B.S.E.** with **69%** marks.
- Matric from **C.B.S.E**. with **67%** marks.

Experience:

At UG Level **Total- 16.5 years**

- 1 year of teaching Experience as lecturer in R.P.S. College of Engg. & Tech., M/Garh from 15/9/2008 to 15/9/2009.
- Worked as Lecturer From 01/07/2011 to 30/06/2013 in MRKIET, Rewari.
- Worked as **Assistant Professor/HOD** at M.R.K.I.E.T., Rewari from 1st July 2013 to 3rd August 2022.
- Working as **Master Skill Instructor** at **Shri Vishwakarma skill university**, Dudhola, Palwal from 4th August 2022 to till date**.**

At PG Level **Total 09 years**

- Taught Post Graduates in Engineering from 1st July 2013 to 3rd August 2022 at M.R.K.I.E.T. Rewari.

THESIS AND PROFESSIONAL TRAINING:

M. Tech.

"WELDABILITY OF FIBER REINFORCED CAST IRON (FRCI) BY GAS TUNGSTEN ARC WELDING"

- Selection of fiber to be reinforced, Manufacturing of fiber reinforced cast iron.
- To make comparison between tensile strength of preheated and non-preheated specimens and for air cooled and sand cooled specimens.
- Tensile test results discussion (e.g. tensile strength, elongation etc.).
- Hardness measurement across the welded joint for different conditions.
- Microstructure examination of all preheated and non-preheated specimens.
- Calculation of weld quality for all the specimens.

PhD:

"ANALYSIS AND IMPLEMENTATION OF CELLULAR MANUFACTURING SYSTEM AND ITS IMPACT ON MANUFACTURING FLEXIBILITY"

- Various factors are synthesized and collected by Questionnaire based survey and validated with ANOVA.
- Factors, enablers and barriers are identified and categorized using ISM and TISM approach.
- Suitability of CMS is analysed using AHP Technique over other manufacturing systems.
- Weightage criteria and ranking of facilitators by Entropy, Moora, and Vikor analysis.
- Factors affecting CMS using Graph Theoretic Approach.

TRAINING DURING UG:

- Seven weeks training at **"Speedomax Ltd."** Dharuhera in "**Production Depratment".**
- Six weeks summer training at **"Exide Industries Bawal".**

COMPUTER PROFICIENCY:

- Knowledge of **AUTO-CAD, SOLID WORKS, CAM.**
- Good knowledge of **Windows.**
- MS Word, Excel, PPT.

PROJECTS AND SEMINARS:

- Minor project on **"Study of Hybrid Electric Vehicle".**
- Major project on **"Solar Chimney".**
- Participation in seminar on **"Electric Discharge Machining"** at N.C. College of Engineering Panipat.
- Participation in seminar on **"Gear Box – Types and working Principles"** at N.C. College of Engineering Panipat.

STUDENTS GUIDED:

- 35 students at M. Tech (PG) Level

- Numerous at Graduation Level

INTRESTED SUBJECTS:

- CNC Programming, Internal combustion engines, Production/Manufacturing, Fluid mechanics, Strength of Materials Etc.

ACHIEVMENTS:

- Part of team for setup and commissioning of CNC lab at COE in SVSU, Palwal.
- Best NOS demonstration award at SVSU.
- Best Teaching Award 2011-12 in MRKIET Rewari.
- Purchasing and installation of all Mechanical labs in MRKIET, Rewari.
- Member of Time Table Committee.
- Lab Manual Developer.
- 5 S in Department.
- Workshop coordinator for remote center of IIT BOMBAY.

NATIONAL AND INTERNATIONAL PUBLICATIONS:

- International journal-20
- International conference-03
- National conference – 04
- Workshop attended-06
- Faculty Development Program- 01

EDITORIAL/ADVISORY/REVIEWER BOARD MEMBER:

- International Journal of R&D in Engineering, Science and Management.
- International Journal of system assurance engineering and management. Springer (SCImago)
- Aspiring Minds

PUBLICATIONS:

1. **Kumar S, Malhotra V, Kumar V, (2020)** "To find the suitability of CMS in Indian industries in comparison of other manufacturing system using AHP technique". **International journal of process management and bench marking(InderScience Enterprises).** Vol.10, No. 3, pp. 367-381. **Scopus**
2. **Kumar S, Malhotra V, Kumar V, (2019) "**Case study to enhance productivity in cellular manufacturing". **National conference on Trends and advances in mechanical engineering TAME April 04-05, 2019 YMCAUST Faridabad.**
3. **Kumar S, Malhotra V, Kumar V, (2017) "**Identification of key barriers affecting the cellular manufacturing system by ISM approach". **International journal of process management and bench marking (InderScience Enterprises).** Vol. 7, No. 4, pp. 466-486. **Scopus**
4. **Kumar S, Malhotra V, Kumar V, (2018) "**A framework to enhance cellular manufacturing system: a total interpretive structural modelling approach". **International journal of process management and bench marking (InderScience Enterprises).** Vol. 8, No. 4, pp. 393-407. **Scopus**

5. **Kumar S, Malhotra V, Kumar V, (2018) "**To analyze the impact of labor related factors on the performance of cellular manufacturing using AHP technique". **International journal of Research in electronics and computer Engg. (I2OR).** Vol. 6, No. 4 pp. 40-45. **UGC Referred**
6. **Kumar S, Malhotra V, Kumar V, (2018) "**Ranking of various factors affecting Cellular Manufacturing System". **International journal of Research in electronics and computer Engg. (I2OR).** Vol. 6, No. 4 pp. 36-39. **UGC Referred**
7. **Kumar S, Malhotra V, Kumar V, (2017)** "An Excellent Technique: The CMS", **International Journal of Computational Intelligence Research**. Vol. 6, No. 13, pp. 1498-1502. **UGC Referred**
8. **Kumar S, Malhotra V, Kumar V, (2017)** "Importance of Cellular Manufacturing System", **International Journal of Computational Intelligence Research**. Vol. 4, No. 13, pp. 497-502.
9. **Kumar S, Malhotra V, Kumar V, (2017) "**Overview and Enablers of cellular manufacturing system: A review". **International conference on sustainable development through research in engineering and Management SDREM-16, Dec-26-27 2016 YMCAUST, Faridabad**.
10. **Kumar S, Malhotra V, Kumar V, (2016) "**The literature of enablers and barriers affecting the cellular manufacturing system". **International conference on advanced developments in engineering and technology LKCE Ghaziabad**.
11. **Kumar S, Malhotra V, Kumar V, (2014) "**Basic Elements of Cellular Manufacturing System". Proceeding of the **National Conference on advances in Mechanical Engineering NCAME-2014 GITM Gurgaon.**
12. **Kumar S, Malhotra V, Kumar V, (2015) "**Cellular manufacturing system: An overview". **International Journal of Artificial Intelligence and Mechatronics.** Vol 2, No. 3, pp. 51-55.
13. **Kumar S, Malhotra V, Kumar V, (2012) "**Study of various mechanical properties of fiber reinforced cast iron". **National conference on Technical advances in mechanical engineering TAME 2012 YMCAUST Faridabad**.
14. **Kumar S, Verma M, Mann S, (2012) "**Weldability of reinforced cast iron by gas metal arc welding". **International Journal of Mechanical Engineering and Material Science**. Vol. 1 pp. 53-58.

STRENGTHS:

- Excellent interpersonal skills.
- Strong leadership.
- Flexible and adaptive to change.
- Dedicated to work assigned.
- Appreciate a challenging job

PERSONAL DETAILS:

Name	**:**	Dr. Sanjay Kumar
Father's name	**:**	Sh. Mahender Singh
Sex	**:**	Male
Date of birth	**:**	1st September 1986
Hobbies	**:**	Netsurfing, Listening Music and interacting with others
Nationality	**:**	Indian
Marital status	**:**	Married

DATE (SANJAY KUMAR)