Dr. SOMVIR SINGH

Designation	**:**	Assistant Professor, Dept. of Mech.Engg.
Qualification	**:**	M.E, Ph. D.
Date of Joining	**:**	02-07-2018
Experience	**:**	3 Years
Ph.No.	:	+91-9468428080, +91-7015751570
E Mail Id	**:**	drsomvirsingh@cmrcet.org, somveersingh34@ymail.com,
Google Scholar	**:**	**Link**
Scopus Id	**:**	**57204467597 Link**
ORCID iD	**:**	**0000-0003-4319-2383 Link**
Researcher ID	**:**	**P-7780-2018 Link**
JNTUH Registration Number	**:**	**9481-180421-153750**

Educational Qualifications:

- **Ph.D. (Mechanical Engineering)** in February 2018 from National Institute of Technology Kurukshetra, Haryana, India for the thesis titled "Study of the machining characteristics of super alloy Udimet-L605 using wire-EDM process".
- ME (Mechanical Engineering) in 2012 from Punjab Engineering College University of Technology (PEC), Chandigarh, India.
- B.Tech (Mechanical Engineering) in 2009 from Kurukshetra University, Haryana, India.

TEACHING EXPERIENCE: 3 Years

- Presently Working as Assistant Professor in Department of Mechanical Engineering, CMR College of Engineering & Technology, Hyderabad since 2nd July 2018.
- Worked as Assistant Professor in Department of Mechanical Engineering, St. Mary's Integrated Campus, Hyderabad, India from 30th April 2018 –26th June 2018. (2 Months)
- Worked as Assistant Professor in Department of Mechanical Engineering, Seth Jai Parkash Mukand Lal Institute Of Engineering And Technology (JMIT), Radaur, Haryana, India from 29th January 2018 to 30thApril 2018. (3 Months)
- Worked as Teaching Assistant in Department of Mechanical Engineering, National Institute of Technology (NIT), Kurukshetra, Haryana, India from 3rd January 2013 to 30th April 2013. (4 Months)

- Worked as Assistant professor in Department of Mechanical Engineering, OM Institute of Technology and Management, Hisar, Haryana, India from 20th August 2012 to 31st December 2012 . (4 Months)
- Worked as Lecturer in Department of Mechanical Engineering, APEX Polytechnic and Engineering College, Tohana, Haryana, India from 16th August 2009 to 17th August 2010. (1 Year)

RESEARCH EXPERIENCE: 3 ½ Years

- Worked as Research Scholar in Department of Mechanical Engineering, National Institute of Technology (NIT), Kurukshetra, Haryana, India from May 2013 – Dec 2017 .

Achievements/Publications/Workshops/Seminar/Guest Lectures

Journal Publications/Conference Presentations: 22

International Journals: 12

1. Somvir Singh Nain, Ravinder Sai, Parveen Sihag (2019) "**Use of Machine Learning Algorithm for the better prediction of SR peculiarities of WEDM of Nimonic-90 Superalloy**" Archieve of Material Science and Engineering, Vol. 95 (1), pp. 12-19, Scopus. **Link**

2. Nain, S.S., Garg, D. and Kumar, S., "**Modeling and Analysis for the Machinability Evaluation of Udimet-L605 in Wire-cut Electric Discharge Machining**", International Journal of Process Management and Benchmarking, Vol. 9, No. 1, 2019 (**SCI,** Inderscience Publishers) **Link.**

3. B. Srinivasa Varma, Santosh Kulkarni & Somvir Singh Nain (2018) "**Influence of Different Electrodes Material on MRR of EDM of Die Steel**",Global Journal of Engineering Science & Research, pp. 236-240 (ISSN : 2348-8034) (UGC Indexed Journal : Serial No.64316) **Link**

4. ParveenSihag & Somvir Singh Nain (2018) "**Modeling of Infiltration Rate Using Data Mining Models**" Global Journal of Engineering Science & Research, pp. 231-239. (ISSN : 2348-8034) (UGC Indexed Journal : Serial No.64316) **Link**

5. Nain, S.S., Garg, D. and Kumar, S., "**Performance Evaluation of the WEDM Process of Aeronautics Super Alloy**, Material and Manufacturing Processes, pp. 1-16, (2018). (**SCI, Taylor and Francis)**.**Link**

6. Nain, S.S., Garg, D. and Kumar, S.,"**Investigation for Obtaining the Optimal Solution for Improving the Performance of WEDM of Super Alloy Udimet-L605 Using Particle Swarm Optimization**" Engineering Science and Technology, an International Journal, Vol. 21,No. 2, pp. 261- 273, (2018). (**Elsevier)**.**Link**

7. Nain, S.S., Luthra, S. and Sihag, P., "**Performance Evaluation of Fuzzy-Logic and BP-ANN Methods for WEDM of Aeronautics Super Alloy**", MethodsX, (2018), Volume 5, 2018, Pages 890-908 (**Elsevier)**.**Link**

8. Vand, A.V., Nain, S.S., Kisor, V., and Sihag, P., (2018) "**Estimation of models for cumulative infiltration of soil using machine learning methods**",ISH Journal of Hydraulic Engineering. (**Scopus**, Indexed Taylor and Francis). **Link**

9. Nain, S.S., Garg, D. and Kumar, S., "**Modeling and optimization of process variables of wire-cut electric discharge machining of super alloy Udimet-L605**", Engineering Science and Technology, an International Journal, Vol. 20, No. 1, pp. 247-264, (2017),. **(Elsevier).Link**

10. Nain, S.S., Garg, D. and Kumar, S., "**Evaluation and Analysis of Cutting Speed, Wire Wear Ratio and Dimensional Deviation of WEDM of Super Alloy Udimet-L605 Using Support Vector Machine and Grey Relational Analysis**", Advances in Manufacturing, Vol. 5, pp. 1-22, (2017), (**Springer SCI**). **Link.**

11. Nain, S.S., Garg, D. and Kumar, S., "**Prediction of the Performance Characteristics of WEDM on Udimet-L605 Using Different Modeling Techniques**", Materials Today Proceeding Vol. 4 No. 2, pp 546-556, (2017),(**Elsevier). Link**

12. Nain, S.S., Garg, D. and Kumar, S. "**A Study on Performance Characteristics in WEDM**", International Journal of Scientific Progress and Research (IJSPR), Volume-08, Number-01, 2015, ISSN: 2349-4689. **Link**

Book Chapters: 01

1. Nain, Somvir (2019) , "**Sustainability of Advance Machine Learning Algorithms in the Manufacturing Field**" Sustainable Procurement in Supply Chain Operation, CRC Press, Part of Mathematical Engineering, Manufacturing, and Management Science Series Taylor and Francis Group, pp. 465-480, 2019. **Link**

Conference Presentations: 09

International Conferences: 06

1. B.S.Varma, Santosh Kulkarni, Somvir Singh, **"Inflence of different electrodes material on MRR of EDM of Die steel"** Proceedings of 1st International Conference on Advances in Mechanical Engineering, pp 220-223, 21st & 22nd December 2018, Department of Mechanical Engineering, CMR College of Engineering & Technology, Hyderabad. **Link**

2. ParveenSihag & Somvir Singh Nain,"**Modeling of Infiltration Rate Using Data Mining Models**" Proceedings of International conference on Civil Engineering practices and trends, 21st & 22nd December 2018, Department of Mechanical Engineering, CMR College of Engineering & Technology, Hyderabad. **Link**

3. Garg, D., Nain, S.S., and Kumar, S. "**Modelling for the Cutting Speed of the WEDM of Aerospace Super Alloy**", 59th National Convention of Indian Institution of Industrial Engineering and International Conference, Aurangabad, India, October2017.

4. Nain, S.S., Garg, D. and Kumar, S., **"Evaluation for Enhancing the Material Removal Rate of Wire Electric Discharge Machining of Udimet-L605 Using Back Propagation Artificial Neural Network Modeling**", 58th National Convention of Indian Institution of Industrial Engineering and International Conference on Smart Strategies for Digital World- An Industrial Engineering Perspective, October, 2016.

5. Nain, S.S., Garg, D. and Kumar, S., "**Investigating for Obtaining the Desirable Result for the Cutting Speed and Waviness in WEDM of Udimet-L605**", IV International Conference on Production and Industrial Engineering, NIT Jalandhar, India. (2016).

6. Nain, S.S., Garg, D. and Kumar, S. "**Evaluation for the Machining Time of Wire Electric Discharge Machining of Udimet-L605 Using Regression",** International Conference organized by Institute of Engineers, India, 2016.

National Conferences: 3

1. Singh, S., Garg, D. and Kumar, S., "**A Study on Research Trends on Machining Different Materials and Performance Characteristics In WEDM**", Proceedings of National Conference on Advancements and Futuristic Trends in Mechanical Engineering, PEC University of Technology, Chandigarh on 17th-18th Oct. 2014.

2. Singh, S., Garg, D. and Kumar, S., "**Effect of Process Parameters on Metal Removal Rate in Wire-cut Electric Discharge Machining**" , Proceedings of National Conference on Advancements and Futuristic Trends in Mechanical Engineering, PEC University of Technology, Chandigarh, India, 17th-18th Oct. 2014.

3. Nain, S.S., Garg, D. and Kumar, S., "**Evaluation for the Dimensional Deviation of WEDM of Udimet-L605 Using Back Propagation Artificial Neural Network Modeling**" NCRME-2017, National Conference held at NIT Kurukshetra, March-2017.

FDPs/Workshops Attended: 07

1. One day Invited Lecture on Current Trends in Precision Engineering on at CMR College of Engineering & Technology, Hyderabad on 7th September 2018.

2. Five days Short Term Course on MAT Lab Basic course, MED, State Engineering College Haryana, India, and Mathworks USA, November 13-17, 2017.

3. Two days Short Term Course on Renewable Energy: Technology and Transition, MED, NIT Kurukshetra, March 22-23, 2017.

4. Two days Short Term Course on Research Methodology & Thesis Writing: An Interdisciplinary Approach, MED, NIT Kurukshetra, March 11-12, 2017.

5. One week Short Term Course on Advances in Manufacturing (AIM-2016), MED, NIT Kurukshetra, October 17-22, 2016.

6. Attended one week Short Term Course on Engineering Optimization Methods (Analytical Models), ECE Department, NIT Kurukshetra, September 23- 27, 2015.

7. One week Short Term Course on Advance Engineering Optimization Through Intelligent Techniques (AIOTIT), MED Department, NIT Surat, Gujrat, September 23- 27, 2014.

Memberships in Universities/Professional Societies: 02

1. Lifetime member of Indian Institutions of Industrial Engineering, India. No. 11014 (99)/15-03-2017.
2. Lifetime member of International Association of Engineers IAENG 224245

Reviewer of Journal and Conference Committee:

1. Reviewer for Indian Journal of Engineering and Material Sciences (NISCAIR SCI)
2. Reviewer for Indian Journal of IJA-ERA.
3. Reviewer for the Journal : Multidiscipline Modeling in Materials and Structures (**Emerald** Scopus)
4. Member of Advisory Committee of National conference held on 22 December, 2017 at BIFF & Bright College of Engineering & Technology, Padasoli, Dudu, Jaipur, Rajasthan.