Curriculum Vitae

Rahul Singh
Ph.D Scholar (Thesis Submitted)
Department of Applied Mechanics
Motilal Nehru National Institute of Technology Allahabad, Prayagraj

Email: rahul24342@gmail.com

Contacts: +917499160046

Google Scholar Link: http://scholar.google.co.in/citations?user=0o0jkEUAAAAJ

Orcid Link: http://www.orcid.org/0000-0003-3142-6162

Professional Experience (Teaching) ≈ 2.5 years

01 August, 2012 – 28 December, 2014	**Assistant Professor** Department of Mechanical Engineering Indus Institute of Technology and Management, Kanpur Uttar Pradesh, 209202 (India)

Education

Doctor of Philosophy from Department of Applied Mechanics, MNNIT Allahabad
Year – 2021 (Thesis Submitted)
Thesis: "Mechanical and Corrosion Behavior of Cryo-rolled and CGPed Austenitic Stainless Steels" (Ph.D. Supervisor Dr. Abhishek Kumar)

Master of Technology in *Corrosion Engineering* from Departement of Metallurgical and Materials Engineering, Indian Institute Of Technology, Roorkee (Uttarakhand)
Year – 2012
Thesis: "Mechanical Behavior of Ultrafine Grained Ti Alloy (Ti-6Al-4V) Processed by Cryorolling" (M.Tech. Supervisor: Prof. R. Jayaganthan, Presently at IIT-Madras in Department of Engineering Design)

Bachelor of Technology in *Mechanical Engineering* from University Institute of Engineering & Technology, CSJM –University Kanpur
Year – 2009

Areas of Research/Interest

1. Mechanical behavior of metals and alloys
2. Severe plastic deformation of austenitic stainless steels
3. Materials Characterization
4. Corrosion
5. FE-analysis (Deform-3d)

Subject Taught:

UG Level

1. Materials Science and Engineering
2. Basic manufacturing processes
3. Basic Thermodynamics
4. Manufacturing Science

Administrative Responsibilities (@ Indus institute of Technology)

1. OC, Workshop (August, 2012- July, 2013)
2. OC, Time-Table, Mechanical Department (Dec, 2013- July, 2014)
3. Warden, Boys Hostel (August, 2012- June, 2013)
4. Head, Cultural Committee, 2013 and 2014

Membership of Professional Societies:

1. Indian Society of Applied Mechanics (ISAM). (membership number: GM00029

Awards and Scholarships:

1. Recipient of MHRD fellowship for PhD at MNNIT Allahabad, 2015-2020.
2. Recipient of GATE fellowship for M.Tech. at IIT Roorkee, 2010-2012.
3. **IInd Best Presentation** at AEMSD – 2018 organized by NML-Jamshedpur, held on 18-19 January, 2019.
4. GATE Qualified in 2009, 2010.

Other Information

1. Helping hand in development of laboratory in Applied Mechanics Department, MNNIT-Allahabad
2. Conducted procurement of laboratory equipment's and software's
3. Worked as **Teaching Assistant** for material science and engineering laboratory (**B-TECH**)
4. Worked as **Teaching Assistant** for Materials development and characterization laboratory (**M-Tech**)
5. Conducted processing (both room temperature & cryogenic temperature) and its heat treatment for materials (steels and other non-ferrous metals)

Research Publication

A. International Journal

1. **Rahul Singh**, Samarjit Singh, B Kranthi Kumar and Abhishek Kumar, "*Mechanical*

behaviour and corrosion study of 304L austenitic steel processed by constrained groove pressing", Indian Journal of Engineering and Materials Sciences, Accepted 2021, (SCI: Impact factor- 0.521)

2. **Rahul Singh**, Shubham Agrahari, Surya Deo Yadav and Abhishek Kumar, "*Microstructural evolution and mechanical properties of 316 austenitic stainless steel by CGP*", Materials Science & Engineering A, Article id: 141105, 2021. (SCI: Impact factor- 4.652) https://doi.org/10.1016/j.msea.2021.141105
3. **Rahul Singh**, Surya Deo Yadav, Biraj Kumar Sahoo, Sandip Ghosh Chowdhury and Abhishek Kumar, "*Phase transformation, mechanical properties and corrosion behavior of 304L austenitic stainless steel rolled at room and cryo temperature*", Defence Science Journal, 71(3), 383-389, 2021. (SCIE: Impact factor- 0.730) https://doi.org/10.14429/dsj.71.16721
4. **Rahul Singh**, Deepak Sachan, Deepak Singh, Surya Deo Yadav, Abhishek Kumar, "*Microstructural Evolution and Mechanical Properties of Constrained groove pressed 304 Austenitic Stainless Steel*", Journal of Materials Engineering and Performance, 30, 290-301, 2020. (SCIE: Impact factor-1.652) https://doi.org/10.1007/s11665-020-05372-x
5. **Rahul Singh**, Surya Deo Yadav, Nikhil Malviya, Sunkulp Goel, R. Jayaganthan & Abhishek Kumar, "*Finite Element Analysis and Mechanical Behavior of 316L Stainless Steel Processed by Room Temperature Rolling*", Materials Science Forum, Vol. 969, 508-516, 2019. (Scopus Indexed) https://doi.org/10.4028/www.scientific.net/MSF.969.508
6. **Rahul Singh**, Gaurav Rajan, B. Kranthi Kumar, Raviraj Verma, R. Jayaganthan & Abhishek Kumar, "*Numerical Analysis of Constrained Groove Pressing and Mechanical Behaviour of Processed 316L Stainless Steel*", Materials Science Forum, Vol. 969, 901-908, 2019. (Scopus Indexed) https://doi.org/10.4028/www.scientific.net/MSF.969.901
7. **Rahul Singh**, Deepak Sachan, Raviraj Verma, Sunkulp Goel, Abhishek Kumar, "*Mechanical behavior of 304 austenitic stainless steel processed by cryogenic rolling*", (https://doi.org/10.1016/j.matpr.2018.04.090)
8. **Rahul Singh**, Sukulp Goel, Raviraj Verma, R.Jayaganthan and Abhishek Kumar, "*Mechanical behavior of 304 Austenitic stainless steel processed by Room temperature rolling*", (https://doi.org/10.1088/1757-899X/330/1/012017)

B. National & International Conference

9. Samarjit Singh, Sushil Kumar Singh, **Rahul Singh**, Abhishek Kumar, "*Ball milled Ni dispersed SiC composites for improved microwave absorption response", in International Conference on Sustainable Engineering*" (ICSE-2021) organized by Government Engineering College Bikaner, Rajasthan, held on 26 – 27 February, 2021.
10. **Rahul Singh**, Samarjit Singh, B Kranthi Kumar, Abhishek Kumar, "*Mechanical behaviour and corrosion study of 304L austenitic steel processed by constrained groove pressing", in International Conference on Sustainable Engineering*" (ICSE-2021) organized by Government Engineering College Bikaner, Rajasthan, held on 26 – 27 February, 2021.
11. **Rahul Singh**, Samarjit Singh, Balina Kranthi Kumar and Abhishek Kumar, "*Study of Mechanical and Corrosion Behaviour of Constrained Groove Pressed Austenitic Steel-304L*", 4th Prof. Vijaya Agarwala Memorial National Conference on Microwave Absorbing Materials (VAMMAM-2020) organized by IIT Roorkee and MNNIT-Allahabad, during August 23rd -24th, 2020
12. **Rahul Singh**, Surya Deo Yadav, Biraj Kumar Sahoo, Sandip Ghosh Chowdhury and

Abhishek Kumar, "*Phase transformation, mechanical properties and corrosion behavior of 304L austenitic stainless steel rolled at room and cryo temperature*", 4th Prof. Vijaya Agarwala Memorial National Conference on Microwave Absorbing Materials (VAMMAM-2020) organized by IIT Roorkee and MNNIT-Allahabad, during August 23rd -24th, 2020

13. B. Kranthi Kumar, **Rahul Singh** and Abhishek Kumar, "*Effect of nanoparticles dispersion in High entropy alloys: A brief review*", in national conference Industrial application of Nano-Science and Nano-Technology (IANN-2019) organized by MNNIT-Allahabad, held during November 15-16, 2019.
14. **Rahul Singh,** Gaurav Rajan, & Abhishek Kumar "*Mechanical behavior of constrained groove pressed 18-8 austenitic stainless steel*" as oral presentation in "NMD-ATM – 2019" organized by IIM-Trivandrum, held on 13-16 December, 2019.
15. **Rahul Singh,** B.Kranthi Kumar, & Abhishek Kumar "*Corrosion behavior of medical grade austenitic stainless steel processed by room temperature rolling*" as poster in "BIOSANGAM – 2020" organized by MNNIT-Allahabad
16. **Rahul Singh**, Gaurav Rajan and Abhishek Kumar, "*Parameters optimization of sliding wear of Cryogenically-rolled Austenitic steel using Taguchi method*" in conference AEMSD – 2018 organized by NML-Jamshedpur, to be held on 18-19 January, 2019. (IInd Best Presentation)
17. Samarjit Singh, **Rahul Singh** and Abhishek Kumar, "*Effect of Ni microspheres on the dielectric behavior and microwave absorption performance of ZnO composites*" in conference ANA-2018, organized by MNNIT Allahabad, held during 21st-23rd December, 2018.
18. **Rahul singh**, & Abhishek Kumar, "*Impact of deformation route over Mechanical and magnetic behavior of austenitic stainless*" in conference "SWAYAM – 2018" organized by BITS Pilani, K.K.Birla Goa Campus, held during 04th-06th July, 2018.
19. **Rahul Singh**, Surya Deo Yadav, Nikhil Malviya, Sunkulp Goel, R. Jayaganthan & Abhishek Kumar, "*Finite element analysis and Mechanical behavior of 316L stainless steel processed by room temperature*" in international conference "ICRAMMT – 2018" organized by MLRITM, Hyderabad, Telangana, held on 19-20 November 2018.
20. **Rahul Singh**, Gaurav Rajan, B. Kranthi Kumar, Raviraj Verma, R. Jayaganthan & Abhishek Kumar, "*Numerical analysis of constrained groove pressing and mechanical behaviour of processed 316L stainless*" in international conference "ICRAMMT – 2018" organized by MLRITM, Hyderabad, Telangana, held on 19-20 November, 2018.
21. **Rahul Singh**, I. K. Bhat, Raviraj Verma, R. Jayaganthan, Abhishek Kumar, "*Effect of processing temperature over the mechanical behaviour of 304 austenitic stainless steel*", NMD-ATM 2017 at Goa (The Indian Institute of Metals), November 11-14, 2017.
22. **Rahul Singh**, Deepak Sachan, Sunkulp Goel, R. Jayaganthan, Abhishek Kumar, "*Effect of temperature over the mechanical behaviour of Titanium alloy (Ti06Al-4V)*", NMD-ATM 2017 at Goa (The Indian Institute of Metals), November 11-14, 2017.

Workshops/Short-term Course Attended

1. Attended authors workshop conducted jointly by springer India and MNNIT-Allahabad held on 29-10-2015.
2. Short-term course on "Modelling and Simulation at Nano scale and Nano Structures" under Global Initiatives for Academic Networks (GIAN) by MHRD Conducted at MNNIT, Allahabad from 07- 03-16 to 11-03-2016.
3. Short-term course on "Thermal Sprayed Coatings ant Composites: Science, Engineering and Applications" under Global Initiatives for Academic Networks (GIAN) by MHRD Conducted at MNNIT, Allahabad from 20-6-16 to 01-07-2016.
4. Attended an orientation programme organised by Department of applied mechanics on August 10,2016.
5. Two days National workshop on "Inclusive Technical Education in National Context: Challenges ad Solutions" organised jointly by Department of civil engineering and Department of applied mechanics held on 16-17, July 2016.
6. Short-term course on "Active learning techniques and robust assessment methods in 'train the trainer format" under Global Initiatives for Academic Networks (GIAN) by MHRD Conducted at MNNIT, Allahabad from 10-7-17 to 15-07-2017.
7. Short-term course on "Composite materials: an overview, characterization and application" under TEQIP-III Conducted at MNNIT, Allahabad from 16-7-17 to 20-07-2018.
8. Short-term training programme on "Structural integrity and Reliability" under TEQIP-III Conducted at MNNIT, Allahabad from 23-12-19 to 27-12-2019.
9. Attended authors workshop conducted jointly by springer nature and MNNIT-Allahabad held on 27-02-2019.
10. Attended two days workshop on plasma spray coatings and wondrous materials and its applications held on February 03-04, 2020 at Department of metallurgical and materials engineering, IIT-Patna.
11. Online Short-term course on "Advances in mechanical engineering and sustainability" Conducted by Department of mechanical engineering at Engineering college Bikaner from 27-05-17 to 31-05-2021.

Personal Details

DOB: 6 October 1983
Father's Name: Late Shri Ram Prakash Singh
Marital status: Married
Permanent Address: 552, Ram Nagar Behind Idgah, Jhansi Road Orai ,Distt – Jalaun, Uttar Pradesh– 285001
Languages Known: Hindi, English

REFERENCES

1. Dr. ANUJ JAIN, Professor, Department of Applied Mechanics, MNNIT ALLAHABAD anujjain@mnnit.ac.in 9415305131.

2. Dr. I. K. BHAT, Professor, Department of Applied Mechanics, MNNIT ALLAHABAD, ikbhat@rediffmail.com, 9414076013

3. Dr. ABHISHEK KUMAR, Associate Professor, Department of Applied Mechanics, MNNIT ALLAHABAD, abhishek@mnnit.ac.in 9415364799. **.**

4. Dr. R. Jayaganthan, Professor, Department of Engineering Design, IIT-Maras, metarj@gmail.com, 7358048942

Declaration

I hereby declare that all the above information furnished by me in this resume is correct to the finest possible extent till date.

(Rahul Singh)