



Dr. Samarjit Singh
Assistant Professor

Centre/School/Special Centre: SoS Engg. & Tech.

Department: Mechanical Engineering

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Personal Webpage Link:

Qualifications:

- **Ph.D.** from Motilal Nehru National Institute of Technology Allahabad, Prayagraj, India, (Status: Awarded, 31st December, 2020) with 8.33 CGPA in coursework.
Department: Department of Applied Mechanics
Specialization: Microwave absorbing materials
Title: *Studies on the development of SiC-based composite materials for microwave absorption.*
- **M.Tech** from Motilal Nehru National Institute of Technology Allahabad, India
Discipline: Materials Science and Engineering
Department: Department of Applied Mechanics
CPI: 9.05 (passing year – 2015)
Dissertation title: *Processing and mechanical behaviour of titania particles reinforced epoxy composite.*
- **B.Tech** from Tezpur University (A Central University)
Discipline: Department of Mechanical Engineering
CGPA: 8.84 (passing year – 2013)
Dissertation title: *Investigation of effect of cutting conditions on cutting forces through an experimental study and computational modeling.*

Area of Interest/Specialization: Radar absorbing composites, Nano-materials synthesis and characterization, Polymer composites, Conventional and Un-conventional machining

Experience: *Teaching (Institute of Engineering & Technology Lucknow):* 15 months and

Postdoctoral (NIT Meghalaya): 05 months

At present working as an Assistant Professor in the Department of Mechanical Engineering, School of Studies of Engineering & Technology, **GGV Bilaspur**

Awards and Honors:

- **Gold Medal Award** in the Annual Convocation for standing First at M.Tech. (Materials Science and Engineering, MNNIT Allahabad), 2016.
- B.Tech 1st class with **Distinction** (Mechanical Engineering, Tezpur University).
- Secured **All India Rank 3130** with a **percentile of 98.11 in GATE 2013** among 0.17 million Mechanical Engineering students across the country.
- Ministry of Human Resource Development, Govt. of India national fellowship for M.Tech. Program 2013-2015.
- Ministry of Human Resource Development, Govt. of India national fellowship for Ph.D Program, 2015- 2020.
- Class 10th STAR holder.

Research Projects:

International Collaboration/Consultancy:

JOURNAL PUBLICATIONS:

- 1) **Samarjit Singh**, Sankal Shukla, Abhishek Kumar, Dharmendra Singh, *Influence of Zn dispersion in SiC on electromagnetic wave absorption characteristics*, **Journal of Alloys and Compounds**, 738 (2018) 448-460. (SCI, IF- 6.371)
- 2) **Samarjit Singh**, Ankur Sinha, Raj Hemant Zunke, Abhishek Kumar, Dharmendra Singh, *Double layer microwave absorber based on Cu dispersed SiC composites*, **Advanced Powder Technology** 29(9) (2018) 2019-2026. (SCI, IF- 4.969)
- 3) Abhishek Kumar, **Samarjit Singh**, Dharmendra Singh, *Effect of heat treatment on morphology and microwave absorption behavior of milled SiC*, **Journal of Alloys and Compounds** 772 (2019) 1017-1023. (SCI, IF- 6.371)
- 4) **Samarjit Singh**, Anil Kumar Maurya, Rajeev Gupta, Abhishek Kumar, Dharmendra Singh, *Improved microwave absorption behavioral response of Ni/SiC and Ni/SiC/Graphene composites: A comparative insight*, **Journal of Alloys and Compounds** 823 (2020) 153780. (SCI, IF- 6.371)

- 5) **Samarjit Singh**, Abhishek Kumar, Smriti Agarwal, Dharmendra Singh, *Synthesis and tunable microwave absorption characteristics of flower-like Ni/SiC composites*, **Journal of Magnetism and Magnetic Materials** 503 (2020) 166616. (SCI, IF- 3.097)
- 6) **Samarjit Singh**, Abhishek Kumar, *Selection of core-shell material-based electromagnetic wave absorbers in 2-18 GHz using TOPSIS and VIKOR ranking methods*, **Defence Science Journal** 69 (2019) 431-436. (SCIE, IF-0.707)
- 7) Saurabh, Anil Kumar Maurya, **Samarjit Singh**, Abhishek Kumar, *Microwave absorption performance of graphene nanoplatelets dispersed SiC*, **Defence Science Journal** 69 (2019) 437-441. (SCIE, IF-0.707)
- 8) Sushil Kumar Singh, **Samarjit Singh**, Abhishek Kumar, Anuj Jain, *Thermo-mechanical behavior of TiO₂ dispersed epoxy composites*, **Engineering Fracture Mechanics** 184 (2017) 241-248. (SCI, IF- 4.898)
- 9) **Samarjit Singh**, Abhishek Kumar, Dharmendra Singh, *Enhanced microwave absorption performance of SWCNT/SiC composites*, **Journal of Electronic Materials** 49(12) (2020) 7279-7291. (SCI, IF- 2.047)
- 10) Naveen Kumar, Deepak Singh, Abhishek Nigam, Omprakash Rajpoot, Mayank Kumar Yadav, Yogendra Pratap Singh, P. Shakti Prakash, **Samarjit Singh**, *Structural and magnetic properties of zinc doped copper ferrite synthesized by sol-gel and hydrothermal route*, **Materials Physics and Mechanics** 47(2) (2021) 306-314. (SCOPUS, IF- 0.733)
- 11) Rahul Singh, **Samarjit Singh**, B Kranthi Kumar, Abhishek Kumar, *Mechanical behaviour and corrosion study of 304L austenitic steel processed by constrained groove pressing*, **Indian Journal of Engineering and Materials Sciences** 28(3) (2021) 258-264. (SCI, IF- 0.615)
- 12) **Samarjit Singh**, Sushil Kumar Singh, Rahul Singh, Abhishek Kumar, *Effect of Ni on the dielectric behaviour and microwave absorption performance of ZnO composites*, **Materials Physics and Mechanics** 47(3) (2021) 416-422. (SCOPUS, IF- 0.733)
- 13) **Samarjit Singh***, Sushil Kumar Singh, Pappu Kumar Harijan, Sunil Kumar Yadav, Abhishek Kumar, *Investigation on the effect of Fe impurity pickups during ball milling and Ni dispersion on the microwave absorption performance of ball milled Fe impurities-Ni/SiC composites*, **Journal of Material Sciences: Materials in Electronics** 33 (2022) 17828-17841. (SCI, IF- 2.779).
- 14) Gorrepotu Surya Rao, Ritam Paul, **Samarjit Singh***, Kishore Debnath, *Influence of conventionally drilled and additively fabricated hole on tensile properties of 3D printed ONYX/CGF composites*, **Journal of Materials Engineering and Performance**. (Accepted,

SCI, IF- 2.036, <https://doi.org/10.1007/s11665-022-07529-2>).

Note: Asterisk ‘*’ represents role as Corresponding author

CONFERENCES

- 1) **Samarjit Singh**, Gaurav Biswas, Abhishek Kumar, “*Influence of pH and calcination temperature on magnetic properties of nanosized Zn-ferrite synthesized by sol–gel citrate method*”, International Conference on Emerging Trends in Nanomaterials Science and Technology (ICETNMST-2017) from 4th Jan. 2017 to 6th Jan. 2017 at **National Institute of Technology Nagaland, India**.
- 2) Abhishek Kumar, **Samarjit Singh**, Dharmendra Singh, “*Development of Double Layer Microwave Absorber using Genetic Algorithm*”, International Conference on Advanced Technologies in Design, Mechanical and Aeronautical Engineering (ATDMAE 2017) from 12th Jul. 2017 to 14th Jul. 2017 at **Nanyang Technological University, Singapore**.
- 3) Abhishek Kumar and **Samarjit Singh**, “*Development of Coatings for Radar Absorbing Materials at X-Band*”, International Conference on Recent Advances in Materials, Mechanical and Civil Engineering (ICRAMMCE-2017) held at **Marri Laxman Reddy Institute of Technology and Management, Hyderabad** during June 01-02, 2017.
- 4) Sushil Kumar Singh, Amit Kumar, **Samarjit Singh**, Abhishek Kumar and Anuj Jain, “*Investigation of thermo-mechanical properties of surface treated SiO₂/epoxy nanocomposite*”, in the International Conference & Exposition on Mechanical, Material and Manufacturing Technology (ICE3MT2020) organized by **CVR College of Engineering Hyderabad**, held on 9-10 October, 2020.
- 5) Sushil Kumar Singh, **Samarjit Singh**, Raunak Kohli, Anuj Jain and Abhishek Kumar, “*Effect of TiO₂ Dispersion on Mechanical Properties of Epoxy Polymer*”, International Conference on Condensed Matter & Applied Physics (ICC-2015) held at **Bikaner (Rajasthan) India** during October 30-31, 2015.
- 6) **Samarjit Singh**, Sushil Kumar Singh, Abhishek Kumar, “*Material selection for nickel based microwave absorbing materials in 2-18 GHz frequency range using different multi-criteria decision making methods*”, NMD-ATM 2016 from 11th Nov. 2016 to 14th Nov. 2016 at **IIT Kanpur**.
- 7) Sushma Yadav, **Samarjit Singh**, Abhishek Kumar, “*Synthesis and Anti-bacterial Study of Zinc Oxide Doped Hydroxyapatite Nanocomposites with Potential Biomedical Applications*”, in national conference Industrial application of Nano-Science and NanoTechnology (IANN-2019) organized by **MNNIT Allahabad**, held during November 15-16, 2019.

Recent Books/Book Chapters/Monographs etc.:

Research Supervision:

Administrative Responsibilities:

Additional Information:

WORKSHOPS ATTENDED

- 1) Global initiative of Academic Network (GIAN) course on *Thermal sprayed coatings and composites: Science, Engineering and Applications*, 20/06/2016 to 01/07/2016 in Applied Mechanics Department, **MNNIT Allahabad**, Prayagraj, India.
- 2) Global initiative of Academic Network (GIAN) course on *Active learning techniques and robust assessment methods in “Train the Trainer” format*, 10/07/2017 to 15/07/2017 in Applied Mechanics Department, **MNNIT Allahabad**, Prayagraj, India.
- 3) Workshop on “Advanced scanning electron microscopy and microanalysis” conducted by the Advanced Centre for Materials Science from 11th-15th March, 2019 at **IIT Kanpur**.
- 4) Workshop on “Advanced material characterization techniques and applications” conducted by the Department of Production and Industrial Engineering & Department of Electronics and Communication Engineering from 06th-10th January, 2021 at **NIT Jamshedpur**.
- 5) Attended FDP on “MATLAB - Artificial Intelligence and Optimization Techniques” organized by **NITTTR Chandigarh** from 21th-25th November, 2022.

PEER REVIEWED JOURNAL REVIEWER

- Chemical Engineering Journal (**SCI, Elsevier**)
- Materials Chemistry and Physics (**SCI, Elsevier**)

RESEARCH IDs

- **Google Scholar ID: 71BdG3EAAAAJ**
- **Orchid ID: 0000-0002-2764-7037**
- **Scopus ID: 57190939994**



(Dr. Samarjit Singh)