Curriculum Vitae

Name: **DR. SANGEETA DAS**

Designation: **Assistant Professor**

Address for Communication: (office): Department of Mechanical Engineering
Girijananda Chowdhury University, Guwahati, Assam
Mobile No.: 9401389386
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Email: sangeeta_me@gcuniversity.ac.in

Gender: Female

Date of Birth: 01/03/1987

Educational Qualifications:

Sl. No.	Examination Passed	Year of passing	Board / Council / University	Specialization
1	HSLC/10th Std.	2003	SEBA	
2	HSSLC/10+2 Std.	2005	AHSEC	Science
3	Degree **B. Tech in Mechanical Engineering**	2010	Tezpur University	Mechanical Engineering
4	Master's Degree **M. Tech in Thermal Engineering**	2013	NIT Silchar	Thermal Engineering
5	Ph. D. **Mechanical Engineering (Materials Tribology)**	2019	NERIST	Material Characterization

Languages known: Assamese, English, Hindi, Bengali

(Read, Write & Speak)

Academic/ Administrative Experience:

1. Prospectus committee for the session 2021 – 2022 & 2022 – 2023
2. Disciplinary committee member from 08.11.2021

3. Even semester exam evaluation centre in-charge in 2022
4. Departmental Project Co-ordinator
5. Departmental Library Co-ordinator

List of Publications:

Journal Publications

1. Preetam Bezbarua, **Sangeeta Das**, Shubhajit Das, Machining investigation of textured tungsten carbide tools, Materials Today: Proceedings, 2022, https://doi.org/10.1016/j.matpr.2022.11.161
2. **Sangeeta Das**, Abhishek Madheshiya, Satyam Shivam Gautam, Diptimayee Tripathy & Chandkiram Gautam. Dielectric and Impedance Spectroscopic Characteristics of Lead Calcium Titanate Borosilicate Glass Ceramics. Glass Physics Chemistry 46, 514–525 (2020). https://doi.org/10.1134/S108765962101003X
3. **Sangeeta Das**, Abhishek Madheshiya, Shubhajit Das, Satyam Shivam Gautam, Chandkiram Gautam, Mechanical, surface morphological and multi-objective optimization of tribological properties of V2O5 doped lead calcium titanate borosilicate glass ceramics,Ceramics International, Volume 46, Issue 11, Part B, 19170-19180, 2020, https://doi.org/10.1016/j.ceramint.2020.04.252
4. **Sangeeta Das**, Shubhajit Das, S.S. Gautam, C.R. Gautam, Optimization of wear coefficient and coefficient of friction of borosilicate glass ceramics using Taguchi coupled grey fuzzy logic technique, Materials Today: Proceedings, Volume 27, Part 2, 1579-1589, 2020, https://doi.org/10.1016/j.matpr.2020.03.262
5. Ashish Kumar Singh, Kakoli Roy, Shubhajit Das, **Sangeeta Das**, WEDM investigation and fuzzy logic modelling of AA7075/SiC metal matrix composites, Materials Today: Proceedings, Volume 26, Part 2, 1988-1994, 2020, https://doi.org/10.1016/j.matpr.2020.02.434
6. Shubhajit Das, **Sangeeta Das**, Kakoli Roy, Modelling and turning investigations of Al2024 based metal matrix composites, Materials Today: Proceedings, Volume 26, Part 2, 1868-1871, 2020, https://doi.org/10.1016/j.matpr.2020.02.409
7. **S. Das**, A. Madheshiya, S. S. Gautam, C. R. Gautam, D. Tripathy, Electrical characteristics of PbO-CaO-TiO2-SiO2-B2O3 glass ceramics doped with germanium, Journal of Materials Science: Materials in Electronics, https://doi.org/10.1007/s10854-018-0516-9
8. **S. Das**, A. Madheshiya, M. Ghosh, K. K. Dey, S. S. Gautam, J. Singh, R. Mishra, C. R Gautam, Structural, optical, and nuclear magnetic resonance studies of V2O5-doped lead calcium titanate borosilicate glasses, Journal of Physics and Chemistry of Solids, 126, 17−26, 2019, https://doi.org/10.1016/j.jpcs.2018.10.030
9. **S. Das**, S. S. Gautam, C. R. Gautam, Mechanical and tribological characterization of lead calcium titanateborosilicate glass ceramic doped with ferric oxide, Materials Today: Proceedings, 5, 17746–17752, 2018, https://doi.org/10.1016/j.matpr.2018.06.098
10. **S. Das** ,C. W. Manpoong, S. S. Gautam, A. Madheshiya, C. R. Gautam, Tribological study of strontium bismuth titanate borosilicate glass ceramics, Materials Today: Proceedings, 5, 20306–20313, 2018, https://doi.org/10.1016/j.matpr.2018.06.403
11. **S. Das**, S.S. Gautam, C.R. Gautam, A. Madheshiya, U.S. Dixit, Parametric optimization of dry sliding wear and friction of germanium doped lead calcium titanate borosilicate glass ceramic, Ceramics International, 44, 6541–6550, 2018, https://doi.org/10.1016/j.ceramint.2018.01.056
12. C.R. Gautam, **S. Das**, S.S. Gautam, A. Madheshiya, A. K. Singh, Processing and optical characterization of lead calcium titanate borosilicate glass doped with germanium, Journal of Physics and Chemistry of Solids, 115, 180–186, 2018, https://doi.org/10.1016/j.jpcs.2017.12.038

13. **S. Das**, A. Madheshiya, S.S. Gautam, C.R. Gautam, Fabrication and optical characterizations of lead calcium titanate borosilicate glasses, Journal of Non-Crystalline Solids, 478, 16–22, 2017, https://doi.org/10.1016/j.jnoncrysol.2017.10.004

Book Chapters

1. **Sangeeta Das**, Preetam Bezbarua, Shubhajit Das (2023) Sustainable Nanomaterial Coatings for Anticorrosion: A Review, Nanomaterials for Sustainable Tribology, Edited By Ankush Raina, Mir Irfan Ul Haq, Patricia Iglesias Victoria, Sudan Raj Jegan Mohan, Ankush Anand, https://www.routledge.com/Nanomaterials-for-Sustainable-Tribology/Raina-Haq-Victoria-Mohan-Anand/p/book/9781032306902#
2. Shubhajit Das, **Sangeeta Das** & Kakoli Roy (2022), Investigation and Modeling for Energy Consumption During Conventional Machining: A Case Study, In: Mahanta, P., Kalita, P., Paul, A., Banerjee, A. (eds) Advances in Thermofluids and Renewable Energy . Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-16-3497-0_41
3. **Sangeeta Das**, Shubhajit Das (2021) Green Machining Techniques: A Review. Green Tribology, https://doi.org/10.1201/9781003139386-10
4. **Sangeeta Das**, Shubhajit Das (2021) Properties for Polymer, Metal and Ceramic Based Composite Materials. Encyclopedia of Materials: Composites, Volume 2, Pages 815-821. https://doi.org/10.1016/B978-0-12-803581-8.11897-1
5. **Shubhajit Das**, Sangeeta Das, Tage Nampi, Kakoli Roy (2021) Functionally Grade Composite Material Production. Encyclopedia of Materials: Composites, Volume 2, Pages 798-803. https://doi.org/10.1016/B978-0-12-803581-8.11880-6
6. **Sangeeta Das**, Shubhajit Das (2021) Composites for Sensors and Actuators. Encyclopedia of Materials: Composites, Volume 2, Pages 873-878. https://doi.org/10.1016/B978-0-12-803581-8.11906-X
7. **Sangeeta Das**, S.S. Gautam, C.R. Gautam (2020). Electrical Study of Lead Calcium Titanate Borosilicate Glass Ceramics. In: Praveen Kumar, A., Dirgantara, T., Krishna, P.V. (eds) Advances in Lightweight Materials and Structures. Springer Proceedings in Materials, vol 8. Springer, Singapore. https://doi.org/10.1007/978-981-15-7827-4_36
8. K. K. Pathak, **Sangeeta Das** (2020). Impact of Bioenergy on Environmental Sustainability. In: Praveen Kumar, R., Bharathiraja, B., Kataki, R., Moholkar, V. (eds) Biomass Valorization to Bioenergy. Energy, Environment, and Sustainability. Springer, Singapore. https://doi.org/10.1007/978-981-15-0410-5_10
9. **Sangeeta Das**; Shubhajit Das (2019) Applications of Tribology on Engine Performance. Automotive Tribology, pp 307–325. https://doi.org/10.1007/978-981-15-0434-1_16

Conference papers

1. Shubhajit Das, **Sangeeta Das** & Kakoli Roy (2022), Investigation and Modeling for Energy Consumption During Conventional Machining: A Case Study, International Conference on Recent Trends in Developments of Thermo-Fluids and Renewable Energy (TFRE 2020), Department of Electrical Engineering and Department of Mechanical Engineering, NIT Arunachal Pradesh in collaboration with Knowledge Incubation Cell for TEQIP (KIT), IIT Guwahati, NIT Mizoram, NIT Nagaland, NIT Manipur and NIT Meghalaya, 26^{th} – 28^{th} November, 2020.
2. **Sangeeta Das**, Shubhajit Das, Effect of surface textures on wear rate and coefficient of friction of high speed steel (HSS) cutting tools, International Tribology Research Symposium, Jointly organized by SRMIST, SMVDU & CAS AKTU, 5^{th} to 7^{th} November, 2020,

3. **Sangeeta Das**, S. S. Gautam, C. R. Gautam, Mechanical and tribological characterization of lead calcium titanate borosilicate glass ceramic doped with ferric oxide, 8th International Conference on Materials Processing and Characterization (ICMPC-2018), Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, 16−18 March, 2018.
4. **Sangeeta Das** ,C. W. Manpoong , S. S. Gautam, A. Madheshiya , C. R. Gautam, Tribological study of strontium bismuth titanate borosilicate glass ceramics, 8th International Conference on Materials Processing and Characterization (ICMPC-2018), Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, 16−18 March, 2018.

Research & Teaching Experience: 14 years

Research interest: Green and sustainable manufacturing

Research & Consultancy Projects:

SI No.	Title	Agency	Period	Scheme	Grant Amount (in Rs.)
1	Enhancement of tribological properties of various cutting tools through micro-texturing during manufacturing	TEQIP-III of MHRD funded by World Bank	2019 - 2021	Collaborative Research Scheme	Rs 3,00,000/-

Membership of Professional bodies:

1. Lifetime member of '**Tribology Society of India**' from 16.05.2017 till date (LM # 5830)

Award, Fellowship & Recognition:

1. Received **Gold Medal** from **Tezpur University** in 2010 for securing 1st Class First in B.Tech in Mechanical Engineering

Sangeeta Das

Date: 09/10/2024 Dr. Sangeeta Das