

CURRICULUM VITAE

Dr. Arijit Sinha

Associate Professor

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Education

Examination	Institution	University	Year	Subjects	Class/Div (% age)
Ph.D. (Engineering)	Bengal Engineering and Science University, Shibpur	Bengal Engineering and Science University, Shibpur	2012	Materials Science and Engineering Thesis: <i>A Study on the Effect of Deformation on the Performance of Ti- (~49 at.%) Ni Alloy</i>	—
M.Tech.	Bengal Engineering and Science University, Shibpur	Bengal Engineering and Science University, Shibpur	2005	Registration: 24/01/2007 Awarded: 04/02/2012 Materials Engineering	1 st (82.6)
B.E.	J.N.N.College of Engineering, Shimoga,Karnataka	Visveswariah Technological University, Belgaum, Karnataka	2002	Industrial Production Engineering	1 st (78.3)

A.I.S.S.C.E (10+2) th Std.	Burnpur Riverside School, Burnpur	C.B.S.E.	1998	Physics, Chemistry, Maths	1 st (80.4)
A.I.S.S.E (10 th) Std.	Burnpur Riverside School, Burnpur	C.B.S.E.	1996	Maths, Science	1 st (79.2)

Research and Teaching Experience

Position	Place	Duration
Associate Professor	Metallurgical Engineering, Kazi Nazrul University, Asansol	February 15 th 2021 to Present
Assistant Professor	School of Materials Science and Engineering, Indian Institute of Engineering Science and Technology, Shibpur.	March 12 th 2012 to February 2 nd 2021
Council of Scientific and Industrial Research- SRF	Bengal Engineering and Science University, Shibpur.	October 2008 to September 2011
Institute Fellowship- SRF	Bengal Engineering and Science University, Shibpur.	September 2008
Institute Fellowship- JRF	Bengal Engineering and Science University, Shibpur.	September 2006 to August 2008

Subjects Taught

At Diploma level [Diploma in Metallurgical Engineering]

- ❖ Engineering Mechanics (DIPEMETC104, Credit-4)
- ❖ Engineering Drawing Part -I (DIPEMETC105, Credit-4)
- ❖ Engineering Drawing Part-II (DIPEMETC-205, Credit-3)
- ❖ Strength of Materials (DIPEMETC-204, Credit-3)

- ❖ Fundamentals of Metallurgy (DIPEMETC-301, Credit-3)
- ❖ Mechanical Engineering (DIPEMETG-302, Credit-4)
- ❖ Metal Working (DIPEMETC-403, Credit-4)
- ❖ Computer Aided Drafting (DIPEMETCP-501, Credit-1)
- ❖ Industrial Management (DIPEMETG-601, Credit-3)

At Undergraduate level [B.Tech. in Metallurgical and Materials Engineering]

- ❖ Engineering Graphics & Design (BTCMTESC102, Credit-3)
- ❖ Engineering Mechanics (BTCMTESC301, Credit-4)
- ❖ Introduction to Materials Science (BTCMTPCC301, Credit-3)
- ❖ Mechanical Properties of Materials (BTCMTPCC 401, Credit-3)
- ❖ Mechanical Metallurgy Laboratory (BTCMTPCC 405, Credit-2)
- ❖ Materials Chemistry Laboratory (BTCMTPCC505, Credit-2)
- ❖ Materials Processing (BTCMTPCC 602, Credit-3)
- ❖ Processing Laboratory (BTCMTPCP 601, Credit-2)
- ❖ Modelling and Simulation Laboratory (BTCMTPCP 602, Credit-2)
- ❖ Surface Engineering (BTCMTPCC702, Credit-4)

At Doctoral level [Ph.D. Course Work]

- ❖ Research Methodology (PHDMETADSE 101, Credit-2)
- ❖ Composite Materials (PHDMETADSE 110, Credit-4)
- ❖ Computational Materials Engineering (PHDMETADSE 113, Credit-2)

At NSQF (National Skills Qualifications Framework) Certificate Course in **Iron Making Technology**

- ❖ Characterization and Beneficiation Technique of Iron Ore (CCIMTSCP101)

At Postgraduate level (Theoretical Sessionals) [M.Tech in Materials Science and Technology]

- ❖ Advanced Materials Characterization (MT-5102, Credit-3)
- ❖ Metallic Materials (MT-5103, Credit-3)
- ❖ Composite Materials (MT-5202, Credit-3)
- ❖ Polymeric Materials (MT-5203, Credit-3)
- ❖ Bio-materials (MT-5261, Credit-3)

At Postgraduate level (Laboratory Sessionals) [M.Tech in Materials Science and Technology]

- ❖ Heat Treatment and Materials Processing Laboratory (MT-5171, Credit-2)
- ❖ Materials Characterization Laboratory (MT-5172, Credit-2)
- ❖ Ceramic and Polymer Synthesis Laboratory (MT-5173, Credit-2)

Administrative Responsibilities

- ❖ **Director**, School of Materials Science and Technology, Kazi Nazrul University, Asansol-713340 **w.e.f. 28/01/2022.**
- ❖ **Members**, Internal Quality Assurance Cell, Kazi Nazrul University, Asansol-713340 **w.e.f. 05/05/2022.**
- ❖ **Coordinator**, UGC KNU STRIDE Project Component-1, Kazi Nazrul University, Asansol-713340 **w.e.f. 24/05/2022.**
- ❖ **Members**, Centre of IoT and AI Integration with Education-Industry-Agriculture, Kazi Nazrul University, Asansol-713340 **w.e.f. 01/09/2022**

Research Areas

Composite Materials, Manufacturing Technology, Mechanical Characterization at macro to sub-micron range, Mechanical Property Evaluation, Tribology, Bio-materials, Mechanical Alloying, Shape Memory Alloys.

Achievements /Awards/Laurels

- Recipient of **IEI Young Engineers Award 2014-2015**, The Institution of Engineers (India).
- Recipient of **second prize** for poster presentation at the 63rd Annual Technical Meeting of the Indian Institute of Metals (IIM) held in Kolkata during 16 -17th November, 2009.
- Recipient of **first prize** for oral presentation at International Conference on “Nanomaterials and Devices- Processing and Applications (NADPA) organized by Indian Institute of Technology, Roorkee, India, December 11-13, 2008.
- Recipient of **Metallurgical and Materials Division Medal**, The Institution of Engineers (India), for best paper (2006-2007) at 22nd Indian Engineering Congress, 2007.
- Recipient of **University Medal** for securing highest marks in Master of Technology (Materials Engineering), 2005.
- Graduate Aptitude Test in Engineering (**GATE**) Scholarship in Production and Industrial Engineering, 2003, awarded by Department of Education, Ministry of Human Resource Development, Government of India.

Professional Membership

- ✓ **Fellow** of The Institution of Engineers (India) (**Membership Number: F-1291161**), Metallurgical and Materials Engineering (MME) Division.
- ✓ **Life Member** of Electron Microscope Society of India (**Membership Number: LM 1211**).
- ✓ **Life Member** of The Indian Institute of Metals (**Membership Number: BO1-LM-50967**).
- ✓ **Life Member** of Materials Research Society of India (**Membership Number: LMB 2541**).
- ✓ **Life Member** of Powder Metallurgy Association of India (**Membership Number: L 1008**).
- ✓ **Life Member** of Indian Society for Advancement of Materials and Processing Engineering (**Membership Number: L-2014**).
- ✓ **Life Member** of Tribology Society of India (**Membership Number: LM # 6031**).

Professional Recognitions

Total Work Experience (Post Ph.D): ~ 10 years and continuing

➤ Research Supervision:

Degree	Thesis Awarded	Thesis Ongoing	Total
Ph.D.	02	05	07
M.Tech	27	01	28
B.Tech	00	03	03
Diploma	02	00	02

➤ **Current Research Supervisions:**

Degree	Research Area
	➤ Synthesis of Hydroxyapatite from Biogenic Resources. (Awarded: 09/12/2019)
Ph.D.	<ul style="list-style-type: none"> ➤ Natural fibre and inorganic particulate reinforced unsaturated polyester composites for improved mechanical, thermal and degradation behaviour (Awarded: 23/08/2021) ➤ Design and Development of PEEK based Composites ➤ A Study on Corrosion Inhibitors of various Rebars for Concrete Application <ul style="list-style-type: none"> ➤ Low Carbon High Strength Bainitic Steel ➤ Graphene/CNT and ZrO₂ dispersed Al-7075 matrix composite ➤ Computational Materials Engineering
M.Tech	➤ Prediction Mechanical Properties of Al based Alloys using Machine Learning System

➤ **Collaborative Partner: National**

- ✓ **Dr. Supriya Bera**, Associate Professor and Head, Department of Metallurgical and Materials Engineering. National Institute of Technology, Durgapur-713209, India. (*Research Areas: Mechanical Alloying; Composite Materials*).
- ✓ **Dr. Mitun Das**, Principal Scientist, Bioceramics & Coating Division, CSIR-Central Glass and Ceramic Research Institute, Kolkata-700032, India (*Research Areas: Bioceramics*).
- ✓ **Prof. Shubhabrata Datta**, Research Professor, Department of Mechanical Engineering, SRM Institute of Science and Technology (formerly known as SRM University), Kattankulathur 603203, Tamil Nadu, India (*Research Areas: Composite Materials; Computational Materials Engineering*).
- ✓ **Prof. Amit Karmakar**, Professor and Head, Department of Mechanical Engineering, Jadavpur University, Kolkata-700032, India. (*Research Areas: Composite Materials; Functionally Graded Materials; Additive Manufacturing*).
- ✓ **Dr. Apurba Das**, Design Head, Titagarh Wagons Limited, 756 Anandapur, Kolkata-700107, India. (*Research Areas: Composite Materials; Functionally Graded Materials; Additive Manufacturing, Mechanical Property Evaluation*).

- ✓ **Dr. Parijat Pallab Jana**, Scientist, Materials Science and Technology Division, CSIR-National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram, Kerala-695019, India. (*Research Areas: Non-Equilibrium Processing*).
- ✓ **Dr. Avijit Metya**, Principal Scientist, Materials Science and Technology Division, National Metallurgical Laboratory, Jamshedpur. India. (*Research Areas: Non-Destructive Evaluations of Materials*).

➤ **Collaborative Partner: International**

- ✓ **Prof. Kazuaki Inaba**, Department of Transdisciplinary Science and Engineering, Tokyo Institute of Technology, Japan (*Research Areas: Functionally Graded Materials; Additive Manufacturing*).
- ✓ **Dr. Su Ziyi**, Department of Electrical and Mechanical Engineering, Nagoya Institute of Technology, Japan (*Research Areas: Functionally Graded Materials; Additive Manufacturing*).

➤ **External Examiner:**

- ✓ Paper setter and examiner of the **Materials Science and Engineering (AN 202/AD 302/ 1402)** subject for the winter/summer examinations organized by The Institution of Engineers (India).
- ✓ Paper setter and examiner of the **Materials Technology (5487)** subject for the winter/summer examinations organized by The Institution of Engineers (India).
- ✓ Paper setter and examiner of the subjects **Mechanical Working Processes [(MM 435 (1531))], Mechanical Behaviour of Materials [(MM 405 (1518)) and Physical Metallurgy [(MM 406 (1519))]** for the winter/summer examinations organized by The Institution of Engineers (India).
- ✓ Examiner of thesis entitled "*Synthesis and characterization of ceramic particulate reinforced age hardenable Al alloy composite via stir casting route*" submitted in Mechanical Engineering Department, B. S. Abdur Rahman Crescent Institute of Science and Technology, Chennai 600048, Tamil Nadu.

➤ **Potential Reviewer:**

- Tribology International (Elsevier).
- Journal of Tribology (ASME DC).
- Materials Science and Engineering A (Elsevier).
- Metallurgical and Materials Transactions A (Springer).
- Metallurgical and Materials Transactions B (Springer).

- Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering (SAGE).
- Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science (SAGE).
- Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology (SAGE).
- Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering (SAGE).
- Journal of The Institution of Engineers, Metallurgical & Materials and Mining Engineering, *Series D*: (Springer).
- Journal of The Institution of Engineers, Chemical and Textile Engineering, *Series E*: (Springer).
- Journal of Materials Engineering and Performance (Springer).
- Polymer Composites (Wiley-VCH).
- Journal of Composite Materials (SAGE).
- JESTCH Engineering Science and Technology: an International Journal (Elsevier).
- Rare Metals (Springer).
- Shape Memory and Superelasticity (Springer International Publishing).
- High Performance Polymers (SAGE).
- Transactions of the Indian Ceramic Society (Taylor & Francis).
- Composites Part B: Engineering (Elsevier).
- Cellulose (Springer).
- Chemical Papers (Springer).
- Journal of Asian Ceramic Societies (Taylor & Francis).
- Advances in Natural Sciences: Nanoscience and Nanotechnology (IOP Science)
- Project Proposal of Science and Engineering Research Board, Department of Science and Technology, Government of India.

➤ **Invited Lectures:**

- ❖ Invited talk in 27th National Convention of Metallurgical and Materials Engineering & National Seminar on Multifunctional and Adaptive Materials, 6-7th February, 2014, organized by The Institution of Engineers (India), Karnataka State Centre. (*Topic: Nanomechanical Characterization of Martensite in Cryogenically Deformed Ti - (~49 at.%) Ni Alloy*)
- ❖ Invited talk in seminar on “Microstructure of Materials” and METALLUM 2014, 12-14th March, 2014 organized by Department of

Metallurgy and Materials Engineering, IEST, Shibpur, India. (*Title: Nanomechanical Characterization of Martensite in Cryogenically Rolled Ti - (~49 at.%) Ni Alloy*)

- ❖ Invited talk in 28th National Convention of Metallurgical and Materials Engineering & National Seminar on Frontier in Materials Processing, 23-24th February, 2015, organized by The Institution of Engineers (India), Andhra Pradesh State Centre. (*Title: Effect of Cryogenic Treatment on the Shape Recovery Behavior of Martensitic Ti-Ni Alloy*)
- ❖ Invited talk in national seminar on “Recent Trends and Future Advancements in Manufacturing Technology (RTFAMT 2015)”, 28th February, 2015, organized by Swami Vivekananda Institute of Science and Technology, Kolkata, India. (*Title: Manufacturing: A Materials’ Perspective*)
- ❖ Invited talk in Fourth International Conference on Natural Polymers, Bio-Polymers, Bio-Materials, their Composites, Blends, IPNs, and Gels: Macro to Nano Scales (ICNP-2015), 10-12th April, 2015, organized by Mahatma Gandhi University, Kottayam, Kerala, India. (*Title: Effect of aluminium addition on the thermal stability and scratch behavior of jute/unsaturated polyester composites*)
- ❖ Invited talk in the International Conference on Frontiers in Materials Science & Technology, National Institute of Science and Technology, Berhampur, Odisha, India, 10th-12th December, 2015. (*Title: Nanomechanical Behaviour of Ti-(~49 at.%) Ni Shape Memory Alloy Subjected to Rolling Near Cryogenic Temperature*).
- ❖ Invited talk in 29th National Convention of Metallurgical and Materials Engineering & National Seminar on Green Technologies for Iron & Steel Production, 30-31st January, 2016, organized by The Institution of Engineers (India), Durgapur, India. (*Title: Recovery Behaviour of Cryogenic Treated on the Shape Recovery Behavior of Martensitic Ti-Ni Alloy*)
- ❖ Invited talk in 2nd national seminar on “Recent Trends and Future Advancements in Manufacturing Technology (RTFAMT 2016)”, 23th April, 2016, organized by Swami Vivekananda Institute of Science and Technology, Kolkata, India. (*Title: Manufacturing: Correlation between Processing, Property and Performance*).

- ❖ Invited Speaker on “Scratch Testing in the Sub-micron Scale” in Workshop on **Materials Characterization: Principles and Practices**, July 25-August 5, 2016, IEST, Shibpur, Howrah, India, Organized by Centre of Excellence (CoE) TEQIP II, Indian Institute of Engineering Science and Technology, Shibpur, India.
- ❖ Invited talk in the 4th International Conference on Advances in Materials & Materials Processing (ICAMMP-IV), 5-7th November, 2016, organized by Department of Metallurgical and Materials Engineering, Indian Institute of Technology, Kharagpur, India. (*Title: Effect of Aluminum Coating on the Surface Modification of Martensitic TiNi Alloy*).
- ❖ Invited talk in Workshop on “**Recent Trends in Manufacturing: Materials Perspective**”, 9-10th February, 2018, organized by Mechanical Engineering Department, Narula Institute of Technology, Agarpara, Kolkata, India.
- ❖ Invited talk in a One-week online Faculty Development Programme on “**Modeling, Simulation and Experimental Approaches of Mechanical Systems**” 24-28th August, 2020 organized by the Department of Mechanical Engineering, Government College of Engineering, Kalahandi, Bhawanipatna, Odisha, India.
- ❖ Invited talk in the **Two Day National Webinar (Virtual mode) on “Analysis of Advanced Structural Material (AASM-2021)”** organized by **Department of Civil Engineering**, Haldia Institute of Technology, Purba Medinipore, India on 15-16th December , 2021.
- ❖ Invited talk in the **AICTE-ISTE Induction/Refresher Program on “Introduction to Hybrid and Electric Vehicle Technology in Automotive Sector”**, organized by Department of Automobile Engineering, MCKV Institute of Engineering, Howrah, India on 23-30th December, 2021

➤ **Session Chairs:**

- ❖ **Joint Chairpersons** of the Session “**Renewal Materials / Green Composites /Green Materials-I**” in *4th International Conference on Natural Polymers, Bio-Polymers, Bio-Materials, their Composites, Blends, IPNs, and Gels: Macro to Nano Scales (ICNP-2015)*, 10-12th April,

- 2015, organized by Mahatma Gandhi University, Kottayam, Kerala, India.
- ❖ **Session Chair** of “**Interdisciplinary Session-I**” in *1st IEEE International Conference for Convergence in Engineering (ICCE 2020)*, 5-6th September 2020, organized by Netaji Subhash Engineering College and co-sponsored by the IEEE Kolkata Section, Kolkata, India.
 - ❖ **Session Chair** in *International Conference on Advances in Materials Processing (ICAMP-2022)*, 8-9th January 2022, jointly organized by Department of Metallurgical & Materials Engineering and Department of Chemical Engineering, National Institute of Technology Raipur, India.
 - ❖ **Session Chair** of “**Track II-Renewable Energy technologies including hydrogen**” in IEEE IAS Global Conference on Emerging Technologies (GlobConET), 20-22nd May 2022, organized through hybrid mode by IEEE Industry Applications Society USA.

➤ **Professional Responsibilities:**

- ❖ **Joint Organizing Secretary**, A Two days Workshop On “Health Analysis of Steel Structure by Non-Destructive Testing (NDT)” held on 11-12th March, 2022, Conducted by DUTTCO Consultant and Engineers Pvt. Ltd., Kolkata, Jointly Organized by Department of Metallurgical Engineering, IIE Cell, KNU Centre for Entrepreneurship and Skill Development, Kazi Nazrul University, Asansol.
- ❖ **Secretary**, Materials Research Society of India (MRSI), Kolkata Chapter since April 2018 to March 2020.
- ❖ **Conference Convener**, 2nd Materials Conclave and 31st Annual General Meeting, Materials Research Society of India (MRSI), 11-14th February, 2020 at Saha Institute of Nuclear Physics, Kolkata.
- ❖ **Coordinator** of Young Scientist Colloquium-2017 held on 11th October 2017 Organized by Materials Research Society of India (MRSI), Kolkata chapter & Dr. M. N. Dastur School of Materials Science and Engineering (MND-SMSE), Indian Institute of Engineering Science and Technology (IEST), Shibpur, India.
- ❖ **Coordinator** of the International Conference on Functional Nanomaterials, IEST, Shibpur, India, 28-29th September, 2016 Organized by Center of Excellence (CoE) on Micro-structurally Designed Advanced Materials under TEQIP II & Dr. M. N. Dastur

School of Materials Science and Engineering (MND-SMSE), Indian Institute of Engineering Science and Technology (IIST), Shibpur, India.

- ❖ **Associate Guest Editor** in Editorial Board of Materials Today Proceedings: Published the special issue containing the selected peer-reviewed papers of the International Conference on Functional Nanomaterials (IC-FNM 2016)
- ❖ Served as **Member** of the Center of Excellence (CoE) on Microstructurally Designed Advanced Materials under TEQIP II, Indian Institute of Engineering Science and Technology (IIST), Shibpur, India.
- ❖ Served as **Programme Committee Member** in the International Conference on Data Science and Computing Technologies (ADSC) organized by the Department of Computer Science, Kazi Nazrul University, Asansol during June 23-24th 2022 at Kolkata, India.

Publications (SCI/ Scopus Indexed Journals)

1. Adil Wazeer, Apurba Das, Chamil Abeykoon, **Arijit Sinha**, Amit Karmakar, "Phase change materials employment for battery thermal management system in electric and hybrid vehicles: A review", Energy Nexus **07** (2022) 100131 doi: [10.1016/j.nexus.2022.100131](https://doi.org/10.1016/j.nexus.2022.100131).
2. Adil Wazeer, Lokesh Sarkar, Apurba Das, **Arijit Sinha**, "Plasma Sprayed Cr₂O₃ Ceramic Coating for the Surface Modification of Al-Si (LM13) Alloy: Morphology and Hardness Study", Materials Today: Proceedings (2022) doi: [10.1016/j.matpr.2022.07.348](https://doi.org/10.1016/j.matpr.2022.07.348).
3. Adil Wazeer, Apurba Das, **Arijit Sinha**, "Smart Materials for 4D Printing: An overview", Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering (2022) doi: [10.1177/09544089221117945](https://doi.org/10.1177/09544089221117945).
4. K. Balamurugan, Deepthi. T, Ananda Kumar Subramanian, Amit Banerjee, Daksh Agarwal, Arindam Biswas, **Arijit Sinha**, "A Study on the Mechanical Properties of Rare Earth based Aluminium Composite", Journal of The Institution of Engineers (India): Series D (2022) doi: [10.1007/s40033-022-00373-7](https://doi.org/10.1007/s40033-022-00373-7).

5. Adil Wazeer, Apurba Das, **Arijit Sinha**, Amit Karmakar, “*Nanomaterials Synthesis via Laser Ablation in Liquid (LAL): A Review*”, Journal of The Institution of Engineers (India): *Series D* (2022) doi: [10.1007/s40033-022-00370-w](https://doi.org/10.1007/s40033-022-00370-w).
6. Rahul Samanta, Agrha Majumdar, Apurba Das, **Arijit Sinha**, Gurudas Mandal, “*A case study on metallurgical aspects of ‘Dhokra’ art: An ancient traditional lost wax casting technique of Cu-Zn/Cu-Sn alloy*”, Journal of The Institution of Engineers (India): *Series D* (2022) doi: [10.1007/s40033-022-00359-5](https://doi.org/10.1007/s40033-022-00359-5).
7. Biplab Bhattacharjee, Nabarun Biswas, Ram Naresh Rai, Kishan Choudhuri, Ankuran Saha, Apurba Das, **Arijit Sinha**, “*Stir Cast Al-Cu-SiCp Metal Matrix Composites: Effect of SiC particles on the mechanical properties and optimization of EDM process parameters*”, Journal of The Institution of Engineers (India): *Series D* (2022) doi: [10.1007/s40033-022-00352-y](https://doi.org/10.1007/s40033-022-00352-y).
8. Bhabatosh Biswas, Tanmoy Chakraborty, Gurudas Mandal, Apurba Das, **Arijit Sinha**, “*Swelling, degradation and thermal behaviours of cellulosic fibre reinforced fly ash dispersed hybrid polymer composites*”, Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering (2022). doi: [10.1177/09544089221080280](https://doi.org/10.1177/09544089221080280).
9. Tanmoy Chakraborty, Apurba Das, Bhabatosh Biswas, Sunit Sarkar, Nillohit Mukherjee, **Arijit Sinha**, Shubhabrata Datta, “*Hydroxyapatite dispersed Sulphonated PEEK Composite Membrane: Synthesis, Structural and Mechanical Characterization*,” Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering (2022) doi: [10.1177/09544089221076799](https://doi.org/10.1177/09544089221076799).
10. Balamurugan Karnan, Arunkarthikeyan Kuppusamy, Thamarai Pugazhendhi Latchoumi, Amit Banerjee, **Arijit Sinha**, Arindam Biswas, Ananda Kumar Subramanian, “*Multi Response Optimization of Turning Parameters for Cryogenically Treated and Tempered WC-Co Inserts*”, Journal of The Institution of Engineers (India): *Series D* **103** (2022) 263-274 doi: [10.1007/s40033-021-00321-x](https://doi.org/10.1007/s40033-021-00321-x).
11. Bhabatosh Biswas, Nillohit Mukherjee, **Arijit Sinha**, “*Indentation behaviour of cellulosic fibres/fly ash incorporated polymer composites at sub-micron scale*”,

Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology **236** (2022) 242-249, doi: [10.1177/13506501211030049](https://doi.org/10.1177/13506501211030049).

12. Souriddha Sanyal, Ashoktaru Chakraborty, Angshuman Sarkar, Susanta Pradhan, Utpal Madhu, Sumit Chabri, Apurba Das, **Arijit Sinha**, "*Tribological characteristics of thermomechanically processed 7075 Al alloy through nano-scratch characterization*" Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology **236** (2022) 225-232, doi: [10.1177/13506501211039736](https://doi.org/10.1177/13506501211039736).
13. Bhabatosh Biswas, Gurudas Mandal, Apurba Das, **Arijit Sinha**, "*Cellulosic fibre incorporated ZrO₂ dispersed unsaturated polyester composites: Thermal Stability, Swelling and Degradation behaviour*", Journal of The Institution of Engineers (India): Series D **102** (2021) 291-300, doi: [10.1007/s40033-021-00299-6](https://doi.org/10.1007/s40033-021-00299-6).
14. Bhabatosh Biswas, Biplab Hazra, Subhabrata Chakraborty, Nillohit Mukherjee, **Arijit Sinha**, "*Mechanical behaviour of cellulosic fibres incorporated modified fly ash dispersed polymeric composites*", Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering **235** (2021) 2201-2208, doi: [10.1177/09544089211034025](https://doi.org/10.1177/09544089211034025).
15. Bhabatosh Biswas, Nil Ratan Bandyopadhyay, Gurudas Mandal, **Arijit Sinha**, "*Effect of alkaline treatment on mechanical properties of composites: unsaturated polyester reinforced ZrO₂/jute and sisal*", Polymers and Polymer Composites **29** (2021) S1000-S1008, doi: [10.1177/09673911211033949](https://doi.org/10.1177/09673911211033949).
16. Bhabatosh Biswas, Biplab Hazra, Nillohit Mukherjee, **Arijit Sinha**, "*Nanomechanical behaviour of ZrO₂ dispersed sisal based polymeric composites*", Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications **235** (2021) 1841-1849, doi: [10.1177/14644207211016015](https://doi.org/10.1177/14644207211016015).
17. Apurba Baral, Arnab Dhara, **Arijit Sinha**, Nillohit Mukherjee, "*Chemically synthesized Sb₂S₃ hollow-spheres for significantly fast and reliable visible light driven dye photodegradation*", Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy **250** (2021) 119368, doi: [10.1016/j.saa.2020.119368](https://doi.org/10.1016/j.saa.2020.119368).

18. Bhabatosh Biswas, Nil Ratan Bandyopadhyay, Nillohit Mukherjee, **Arijit Sinha**, “Mechanical behaviour of jute/ZrO₂ based polyester composites at microstructural scale”, *Fibers and Polymers* **22** (2021) 1731-1742, doi:[10.1007/s12221-021-0114-y](https://doi.org/10.1007/s12221-021-0114-y).
19. Jaideep Adhikari, Avinava Roy, Anindya Das, Manojit Ghosh, Sabu Thomas, **Arijit Sinha**, Jin Ku Kim, Prosenjit Saha “Effects of processing parameters of 3D bioprinting on the cellular activity of bioinks”, *Macromolecular Bioscience* **21** (2021) 2000179, doi: [10.1002/mabi.202000179](https://doi.org/10.1002/mabi.202000179).
20. Anindya Pal, Avijit Kumar Metya, Amit Roy Chowdhury, **Arijit Sinha**, “Structural and mechanical behaviour of mechanochemically synthesized nanocrystalline hydroxyapatite from *Mercenaria clam shells*”, *Transactions of the Indian Ceramic Society* **79** (2020) 175-181 doi: [10.1080/0371750X.2020.1792806](https://doi.org/10.1080/0371750X.2020.1792806)
21. **Arijit Sinha**, Anindya Pal, A. Santra, S. Murmu, U.K. Ghorai, Amit Roy Chowdhury, D. Banerjee, “Calcination Temperature-Dependent Structural and Photoluminescence Properties of Hydroxyapatite Derived from *Labeo Rohita* Fish Scales”, *Journal of The Institution of Engineers (India): Series D* **101** (2020) 223-232 doi:[10.1007/s40033-020-00232-3](https://doi.org/10.1007/s40033-020-00232-3).
22. Arnab Dhara, Dipak Kr. Chanda, Anupam Nandi, **Arijit Sinha**, Nil Ratan Bandyopadhyay, Nillohit Mukherjee, “Synergistic interaction in metal oxide/silicon bulk heterostructures for efficient photo-carrier generation and photodegradation of toxic dye contaminants”, *Journal of Environmental Chemical Engineering* **8** (2020) 103672 doi: [10.1016/j.jece.2020.103672](https://doi.org/10.1016/j.jece.2020.103672).
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Patent

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Books/Book Chapters

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9. Adil Wazeer, Apurba Das, **Arijit Sinha**, Amit Karmakar, *Graphene and Graphene based Sustainable Composites*, In: Mahdi Fathi, Enrico Zio, Panos M. Pardalos (Eds.), **Handbook of Smart Energy Systems**, ISBN: 978-3-030-72322-4, Publisher: Springer, doi: <https://doi.org/10.1007/978-3-030-72322-4>.
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Workshops/Seminars/Symposium/Faculty Development Programme

1. Participated in Preconference Workshop on “**Basics of Electron Back Scattered Diffraction (EBSD), Electron Energy Loss Spectroscopy (EELS) and Electron Diffraction in Materials Science**” organized by Department of Metallurgical Engineering, IIT(BHU), Varanasi, 30th May-1st June, 2016.
2. Participated and presented (Oral) in “**Surface Engineering of Metals and Alloys**” organized by Department of Metallurgy and Materials Engineering, Bengal Engineering and Science University, Shibpur, Howrah and Indian Institute of Metals, March 1-2, 2012.

3. Participated in the Symposium on “**Mechanical Behavior of Materials**” organized by UGC NETWORKING RESOURCE CENTRE FOR MATERIALS Department of Materials Engineering, Indian Institute of Science (IISC), Bangalore, January 30-31, 2012.
4. Participated in the “**Short Course on Electron Microscopy**” organized by Central Glass and Ceramic Research Institute (CGCRI), Kolkata, India, June 29-July1,2009.
5. Participated in the “**MICRO-09**”, Workshop on Microstructural Engineering organized by UGC NETWORKING RESOURCE CENTRE FOR MATERIALS Department of Materials Engineering, Indian Institute of Science (IISC), Bangalore, May 25-30, 2009.
6. Participated in a short term course on “**Advanced Material Characterization Techniques**” at Central Glass and Ceramic Research Institute (CGCRI), organized by Materials Research Society of India (MRSI), Kolkata Chapter, India, October 29 - November 02, 2007.
7. Participated in the Short term course on “**Transmission Electron Microscopy**” Organized by Department of Metallurgy and Materials Engineering, Bengal Engineering and Science University, Shibpur, Howrah, February 17-21, 2006.
8. Participated in the One-Day Online Workshop on “**How to Conduct the Student Induction (SIP) Program**” Organized by All India Council for Technical Education (AICTE), 20th September 2021.
9. Participated in the Online Six-days Faculty Development Program on “**Recent Trends in Composites and Advanced Materials Research**” Organized by Centre for Composites and Advanced Materials (CCAM), Department of Mechanical Engineering, SRM Institute of Science and Technology, Kattankulathur -603203, Tamil Nadu, India, 29th September-1st October & 4th-6th October 2021.

Research Citations (Academic Identity)

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Declaration

I hereby declare that the above-mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.

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