



Department of Materials Science and Engineering
Khulna University of Engineering & Technology
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Biography

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Wahidur Rahman Sajal

Assistant Professor

Research Area Materials Recycling

Nanostructured Materials

Education

Master of Science in Materials and Metallurgical Engineering

Bangladesh University of Engineering and Technology (BUET), Bangladesh (2018-2022)

Thesis Title: [Thermodynamic Analysis of Caustic Roasting and Investigation of Caustic Roasting-Leaching Parameters of Electric Arc Furnace Dust](#)

Bachelor of Science in Materials and Metallurgical Engineering

Bangladesh University of Engineering and Technology (BUET), Bangladesh (2013-2018) Achievement: Passed with an Honors (CGPA > 3.75)

Higher Secondary Certificate

Shahid Smrity College, Bangladesh (2011-2013) Achievement: General Scholarship

Secondary School Certificate

Maluhar Wazedia Secondary School, Bangladesh (2006-2011) Achievement: Talent Pool Scholarship

Service Records

- **Assistant Professor**
Department/Section: Materials Science and Engineering
Khulna University of Engineering & Technology (KUET) From 2022-12-15 00:00:00 to 1970-01-01 06:00:00
- **Lecturer**
Department/Section: Materials Science and Engineering
Khulna University of Engineering & Technology (KUET) From 2019-07-28 00:00:00 to 2022-12-14 00:00:00
- **Research Fellow**
Department/Section: Materials Science Division, Pilot Plant and Process Development Centre
Bangladesh Council of Scientific and Industrial Research (BCSIR) From 2019-06-16 00:00:00 to 2019-07-27 00:00:00

Research Interest

Materials Recycling

Extracted Iron and Zinc from electric arc furnace dust using a combination of pyro and hydrometallurgical route. Systematic thermodynamic caustic-roasting assessments of electric arc furnace dust using thermochemical FactSage software and caustic roasting-leaching experimental investigations were carried out to assess the suitability of this important hybrid process.

Nanostructured Materials

Synthesis Gold (Au) and Silver (Ag) nano particles by co-precipitation method. Immobilized AuNPs and AgNPs using the polydopamine as linker on the magnetic Graphene Oxide. Then I studied its rapid catalysis and recyclability for waste water treatment.