



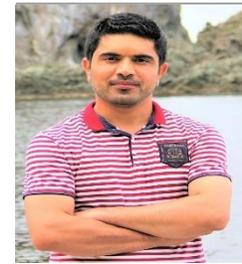
BUITEMS

Quality & Excellence in Education

ISO 9001-2008 certified

www.buitms.edu.pk

UAN: 081- 111-717-111



Name		Dr. Muhammad Bilal		
Designation		Assistant Professor		
Department		Mining Engineering		
Research Profile		ORCID ID: https://orcid.org/0000-0003-3043-2800		
		Research Gate ID: https://www.researchgate.net/profile/Muhammad-Bilal-34		
		Google Scholar Profile ID: https://scholar.google.com/citations?user=mP9g0yIAAAJ&hl=en		
E-mail address		Official	Muhammad.bilal1@buitms.edu.pk	
		Personal	-	
Telephone Number		Office Extension	324	
		Mobile	-	
Qualification				
Year	Degree/Certificate	Name of the Institute/ University		Field of study
2022	PhD	Hokkaido University, Japan		Mineral Processing
2017	MS/ Mphil	BUITEMS, Quetta, Pakistan		Mining Engineering
2012	Graduation	BUITEMS, Quetta, Pakistan		Mining Engineering
Publications in HEC Recognized journals				
S. No	Title of Paper	Name of Journal	National/ International	Publication date
1	Effects of Sec-Octanol and Terpeneol on Froth Properties and Flotation Selectivity Index for Microcrystalline Graphite	Separations (IF: 2.6)	International	2023
2	Carrier Flotation Using Coarse Pyrite for Improving the Recovery of Finely Ground Chalcopyrite: Development of Post-Process of Carrier Flotation to Separate Finely Ground Chalcopyrite Particles from Coarse Pyrite Particles	Minerals (IF: 2.6)	International	2023
3	Effects of Mechanical Stirring and Ultrasound Treatment on the Separation of Graphite Electrode Materials from Copper Foils of Spent LIBs: A Comparative Study	Separations (IF: 2.6)	International	2023
4	Effect of ultrasound power on HCl leaching kinetics of impurity removal of aphanitic graphite	Ultrasonics Sonochemistry (IF: 8.4)	International	2023
5	Effect of water-in-oil and oil-in-water with Span 80 on coal flotation	Fuel (IF: 7.4)	International	2023

6	Recovery of Carbon and Cryolite from Spent Carbon Anode Slag Using a Grinding Flotation Process Based on Mineralogical Characteristics	Separations (IF: 2.6)	International	2023
7	Effects of Flotation Reagents on Flotation Kinetics of Aphanitic (Microcrystalline) Graphite	Separations (IF: 2.6)	International	2023
8	Ranking Management and Engineering Risks Associated with Roof Fall in Underground Coal Mines in Pakistan Using FAHP-FMABAC Method	International Journal of Fuzzy Systems (IF: 4.3)	International	2022
9	Recovery of carbon and cryolite from spent carbon anode slag of electrolytic aluminum by flotation based on the evaluation of selectivity index	Frontiers in Chemistry (IF: 5.5)	International	2022
10	The preparation of hydroxypropyl starch grafted acrylamide and its enhancement on flocculation of coal slime water	Energy Sources, Part A: Recovery, Utilization and Environmental Effects (IF: 2.9)	International	2022
11	The Challenges and Prospects of Recovering Fine Copper Sulfides from Tailings Using Different Flotation Techniques: A Review	Minerals (IF: 2.6)	International	2022
12	Effects of surface roughness on the hydrophilic particles-air bubble attachment	Journal of Materials Research and Technology (IF: 6.4)	International	2022
13	Heterogenous carrier flotation technique for recovering finely ground chalcopyrite particles using coarse pyrite particles as a carrier	Minerals Engineering (IF: 4.8)	International	2022
14	Characterization and Removal Potential of Fluorine in Lignite from a Mine in Shaanxi Province, China: A Case Study	Minerals (IF: 2.6)	International	2022
15	Prediction of coal flotation performance using a modified deep neural network model including three input parameters from feed	Energy Sources, Part A: Recovery, Utilization and Environmental Effects (IF: 2.9)	International	2022
16	Pickering emulsion prepared by nano-silica particles- A comparative study for exploring the effect of various mechanical methods	Ultrasonics Sonochemistry (IF: 8.4)	International	2022
17	Enhancement of Flotation Performance of Oxidized Coal by the Mixture of Laurylamine Dipropylene Diamine and Kerosene	Minerals (IF: 2.6)	International	2021

18	Empirical Support Design for Proposed Diversion Tunnels at Dasu Dam Site Pakistan	Pakistan Journal of Scientific and Industrial Research Series A: Physical Sciences	National	2021
19	Effect of scrubbing medium's particle size distribution and scrubbing time on scrubbing flotation performance and entrainment of microcrystalline graphite	International Journal of Coal Preparation and Utilization (IF: 2.1)	International	2021
20	Effects of coarse chalcopyrite on flotation behavior of fine chalcopyrite	Minerals Engineering (IF: 4.8)	International	2021
Paper Presented				
S. No	Title of Paper	Name of Conference	National/ International	Date
1	Development of post floatation detachment method of finely ground chalcopyrite particles from coarse Cu+2 pyrite particles	International Conference on Minerals and Ore Processing in Pakistan	International	2023
2	Heterogenous carrier flotation technique for finely ground chalcopyrite particles using coarse pyrite particles as carrier	Flotation 21	International	2021
3	Study of autogenous carrier flotation technique for finely ground chalcopyrite particles – a review	International Symposium on Earth Science and Technology	International	2021
4	A study of autogenous carrier flotation technique for selective separation of fine chalcopyrite	International conference on Innovations for Sustainable and Responsible Mining (ISRM 2020)	International	2020
Awards and Achievements				
S. No	Awards & Recognition	Organization	Year	
1	The Challenges and Prospects of Recovering Fine Copper Sulfides from Tailings Using Different Flotation Techniques: A Review. "Review" (Editor's Choice Article)	MDPI Minerals	2022	
Work Experience				
S. No	From (year)	To (year)	Name of the Institution/ Organization	Position held
1	2018	Date	BUIITEMS, Quetta, Pakistan	Assistant Professor
2	2013	2018	BUIITEMS, Quetta, Pakistan	Lecturer
Area of specialization			Mineral Processing and Extractive Metallurgy	

Research Interest	Fine particles flotation, Recovery of Rare Earth Elements
Future Research Plans	Recovery of Copper from Mine Tailings of Saindak
HEC Approved supervisor	Yes
If Yes, provide HEC URL	https://www.hec.gov.pk/english/scholarshipsgrants/ASA/Pages/APS-EPORTAL.aspx
Additional Information	
<p>Dr. Muhammad Bilal is a distinguished academic with a Ph.D. in Mineral Processing from Hokkaido University, Japan, which he earned on the prestigious MEXT Scholarship. His groundbreaking work in the field of flotation of fine particles has led to the development of a novel flotation method, Carrier flotation using pyrite/chalcopyrite, for recovering fine copper sulfides.</p> <p>In addition to his academic achievements, Dr. Bilal was part of a team that collaborated with JICA to establish the Mineral Processing Laboratory at BUITEMS, further demonstrating his commitment to advancing the field of Mineral Processing.</p>	