## **ABOUT THE BOOK**

Book titled "Mining Impacts and their Environmental Problems" presents a comprehensive view on various mining activities and a wide spectrum of environmental challenges associated with it. Case studies presented across global south such as Asia, Africa, Latin America, are first of its kind which presents a holistic and deep insight about this pressing environmental issue. Thirteen chapters in this book presenting various issues ranging from gold, silver, chromium ,lead ,coal mining, and its impacts on ambient environmental (Soil, water, biodiversity) degradation and ultimately on human health living in the surrounding area. For this purpose, they have used different methodologies like using water quality index, hydro-chemic al characterization, numerical simulation to identify the extent of pollution caused due to mining activities. Later it advocates the usage of advance mining technologies such as advanced oxidation processes, decarbonization technologies, biotechnological approach for treatment of wastewater being generated due to mining activities or minimizing overall environmental degradation. Finally, it emphasizes on assessing risk zone delineation, vulnerability analysis using cutting edge tools like numerical simulation, GIS and remote sensing , which will help designing robust management plans and sustainable transitions, critically helpful for policy makers or decision makers.

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- 4) Impact of Heavy Metal Pollution on Soil and Groundwater Quality in the Vicinity of Coal Mines
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