Environmental

Technologies to

Treat Sulfur Pollution

IWA



Environmental Technologies to Treat Sulfur Pollution: Principles and Engineering, 2nd edition



Editor(s): Piet Lens

Also available: Chinese translation [1] and Portuguese

translation [2]

This second edition is fully updated with new material to create a comprehensive and accessible reference book:

New chapters on sulfur removal via bioelectrochemical systems, use of sulfate radicals in advanced oxidation processes and sulfur nanoparticle biosynthesis.

New sections on: sulfur cycle chemistry and microbiology; sulfate removal vs. recovery of resources from sulfate-rich wastewaters; microaeration for biogas desulfurisation; biological treatment of gypsum and sulfur-rich solid waste; up-to-date process control for treatment of sulfur-rich waste streams.

- New case studies with emphasis on practices for sewer and steel corrosion control, odour mitigation, autotrophic denitrification and bioremediation of acid mine polluted sites in both developed and developing countries have been included.
- Novel concepts of environmental technologies to treat sulfur pollution of wastewater, off-gases, solid waste, soils and sediments are presented.
- Up-to-date research findings and innovative technologies for recovering resources, i.e. metals, fertiliser, biofuels and irrigation water, from sulfur polluted waste are provided.

This book may serve both as an advanced textbook for undergraduate and graduate students majoring in environmental sciences, technology or engineering as well as a handbook for tertiary educators, researchers, professionals and policymakers who conduct research and practices in the sulfur related fields. It is essential reading for consulting companies when dealing with sulfur related environmental (bio)technologies.

Publication Date: 15/09/2020 ISBN13: 9781789060959 eISBN: 9781789060966

Pages: 544

Print:

Standard price: £125 / €156 / \$188 **Member price:** £94 / €117 / \$141

eBook:

Standard price: £0 / €0 / \$0 Member price: £0 / €0 / \$0 Open Access eBook