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André Fernandes, Patrycja Makoś, Grzegorz Boczkaj

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Treatment of bitumen post oxidative effluents by Sulfate radicals based Advanced Oxidation Processes (S-AOPs) under alkaline pH conditions

André Fernandes, Patrycja Makoś, Grzegorz Boczkaj*

Gdansk University of Technology, Faculty of Chemistry, Department of Chemical and Process Engineering, 80 – 233 Gdansk, G. Narutowicza St. 11/12, Poland * Corresponding author: Dr Grzegorz Boczkaj, PhD. DSc. Eng. Fax: (+48 58) 347-26-94; Tel: (+48) 697970303; E-mail: grzegorz.boczkaj@gmail.com or grzegorz.boczkaj@pg.edu.pl

ABBREVIATIONS

AOPs, advanced oxidation processes; BOD₅, biological oxygen demand after 5 days; COD, chemical oxygen demand; HO[•] hydroxyl radicals; HSO₅⁻, peroxymonosulfate anion; O-VOCs, oxygen related volatile organic compounds; PMS, peroxymonosulfate; PS, persulfate; S-AOP, sulfate radical related advanced oxidation processes; S²⁻, sulfide ions; S₂O₈²⁻, sulfate anion; SO₄^{•-}, sulfate radicals; VNCs, volatile nitrogen compounds; VOCs, volatile organic compounds; VSCs, volatile sulfur compounds; WW, wastewater.

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