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ACCEPTED MANUSCRIPT

Biodegradation of Acenapthene and Naphthalene by Pseudomonas mendocina: Process

Optimization, and Toxicity Evaluation

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Highlights

- First report of biodegradation of two PAHs with Pseudomonas mendocina
- ~99% removal of both acenapthene and naphthalene respectively was achieved
- RSM optimization reduced cost and time required for total study
- Toxicity analysis revealed benign and ecofriendly nature of treated solutions
- Results established biodegradation as an efficient approach for PAH removal

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