

## Potential Hydrocarbon Degraders Present in Oil from WWII Wrecks in the Pacific

**Authors :** Awei Bainivalu, Joachim Larsen, Logesh Panneerselvan, Toby Mills, Brett Neilan, Megharaj Mallavarapu

**Abstract :** World War II (WWII) shipwrecks harbour up to 20 million tonnes of oil. More than 3000 wrecks are in the Pacific Ocean; 300 are oil tankers. Compared to other oil removal methods, bioremediation is environmentally friendly and cost-effective. Oil's microbial community and hydrocarbon properties from the Pacific WWII wrecks were identified. Dominant phyla are Proteobacteria, Actinobacteria, and Firmicutes. Native marine bacteria oil-degraders were isolated for bioremediation. Petroleum degradation data from the bacterial consortium will be analyzed over the next three months.

**Keywords :** oil bioremediation, marine bacteria, WWII shipwrecks, pacific

**Conference Title :** ICPWMR 2022 : International Conference on Petroleum Waste Management and Remediation

**Conference Location :** Sydney, Australia

**Conference Dates :** December 02-03, 2022