## CONSIGLIO NAZIONALE DELLE RICERCHE ISTITUTO DI SCIENZE MARINE

## **CICLO DI SEMINARI**

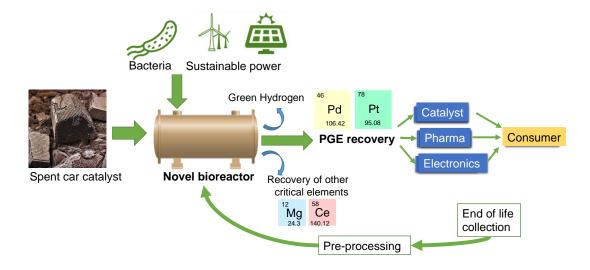
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## Resource recovery from wastes using bioleaching and electrodialysis

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Platinum-group elements (PGE), vital for various applications, are scarce resources found in spent car catalysts. Our study investigates the effectiveness of combining bioleaching and electrodialysis for PGE recovery. Results indicate significantly higher PGE concentrations using the combined approach compared to individual methods. Platinum concentrations increased by 66.7±19.3% over electrodialysis alone and 92.8±0.9% over bioleaching alone. Palladium concentrations followed a similar trend. This suggests the potential for enhanced PGE recovery from waste, pending further process optimization.