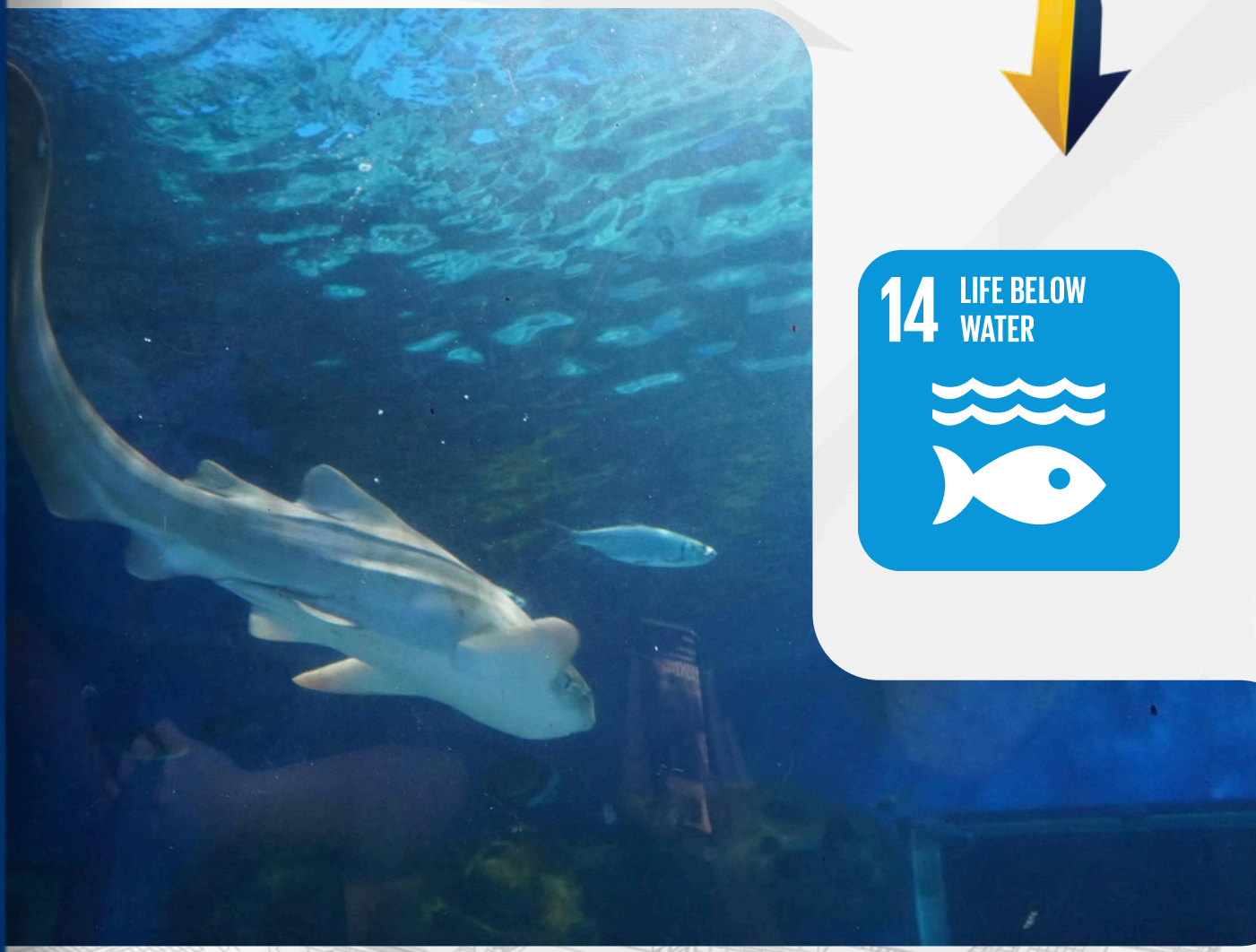
SAINT LOUIS UNIVERSITY

Baguio City, Philippines

Metric 14.5 Maintaining a local ecosystem



14 LIFE BELOW WATER

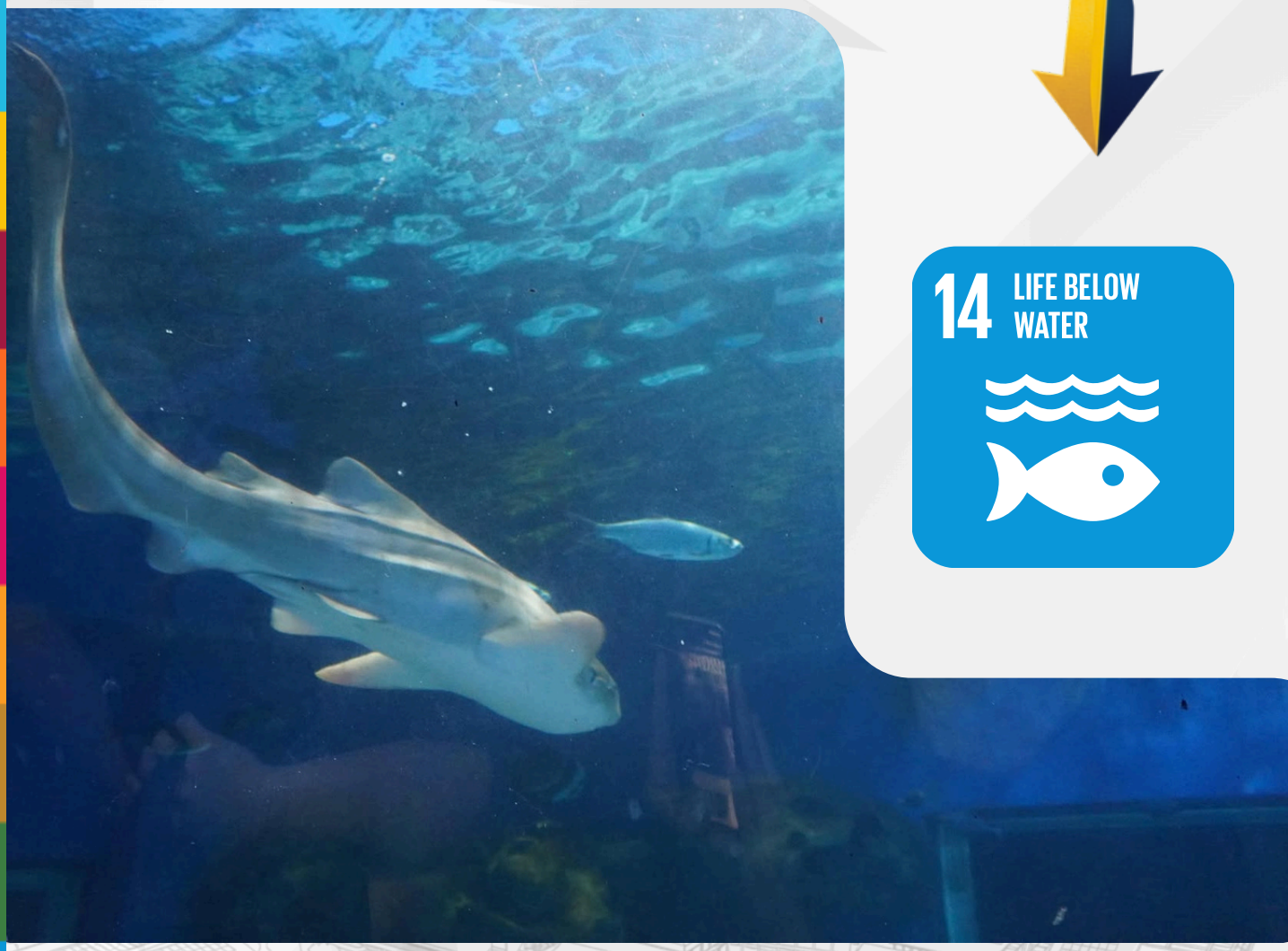
Times Higher Education Sustainability Impact Ratings

AY 2025-2026

SAINT LOUIS UNIVERSITY

Baguio City, Philippines

Indicator 14.5.2 Monitoring the health of aquatic ecosystems



14 LIFE BELOW WATER

Times Higher Education Sustainability Impact Ratings

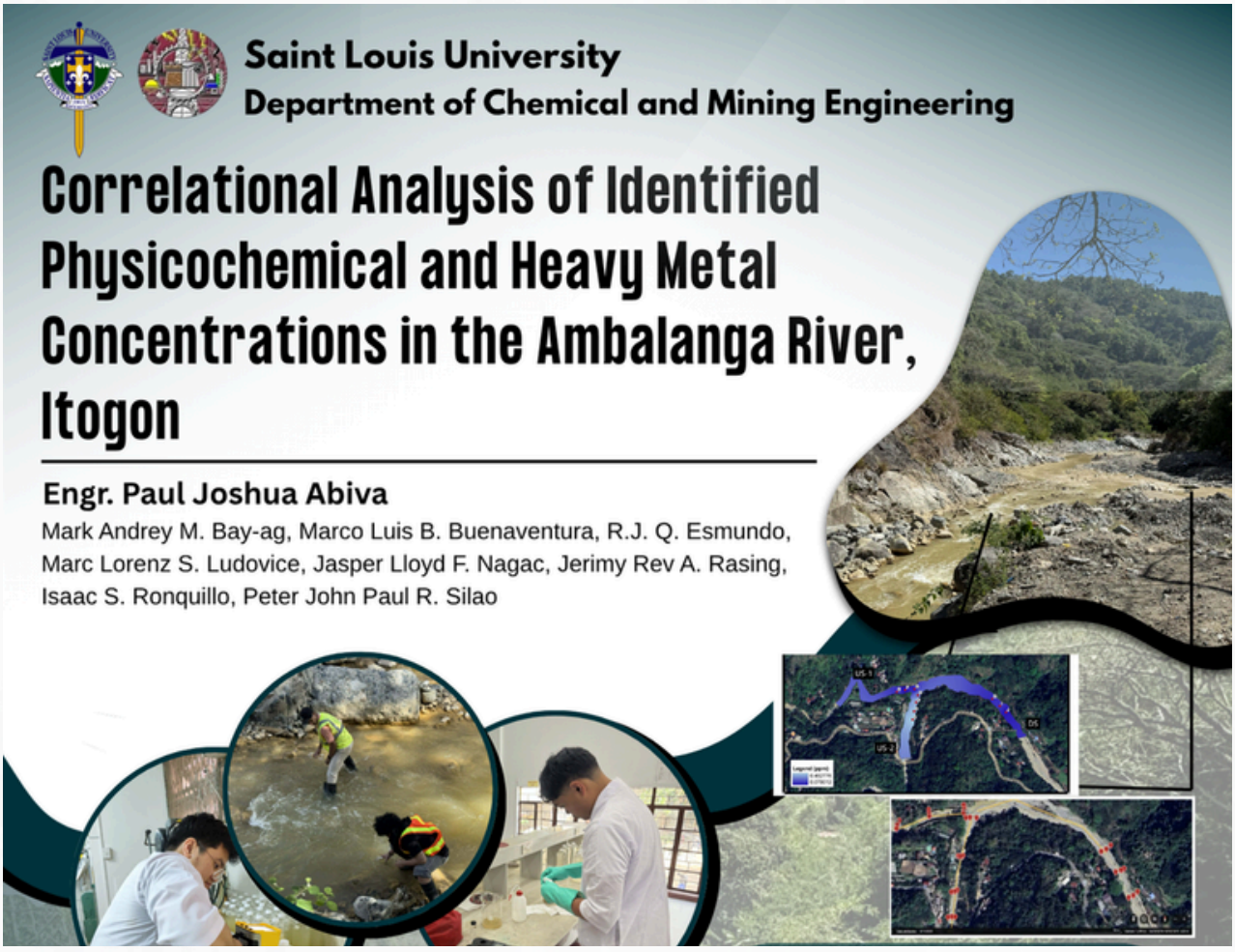
AY 2025-2026

Monitoring River Health

SLU Researchers Analyze Heavy Metal and Physicochemical Dynamics in the Ambalanga River

In mining-impacted regions, rigorous environmental monitoring provides the empirical baseline necessary to identify contamination trends, mitigate ecological degradation, and safeguard downstream communities.

At Saint Louis University (SLU), faculty researchers and students demonstrate this monitoring mandate by conducting comprehensive spatial and correlational analyses of physicochemical properties and heavy metal concentrations along the Ambalanga River in Itogon, Benguet.



Monitoring River Health

SLU Researchers Analyze Heavy Metal Contamination and Spatial Hotspots



Environmental Impact and Policy Application

Generating empirical scientific data on the Ambalanga River is turning academic research into actionable environmental intelligence:

- Informing Municipal Conservation: Findings provide the Municipal Local Government Unit (LGU) of Itogon and Barangay officials with localized scientific data to guide river zoning, small-scale mining regulation, and environmental rehabilitation plans.
- Supporting DENR Water Quality Baselines: Data feeds into regional monitoring frameworks established by the Department of Environment and Natural Resources – Environmental Management Bureau (DENR-EMB), helping track long-term water quality compliance under the Philippine Clean Water Act (RA 9275).
- Protecting Downstream River Basins: Because the Ambalanga River flows into larger regional water systems—including the Agno River basin—monitoring upstream heavy metal dynamics protects aquatic life, agricultural irrigation, and public health far beyond Benguet's mountain borders.

By combining academic rigor with environmental field monitoring, Saint Louis University faculty and students establish a vital scientific baseline that directly contributes to the preservation, understanding, and long-term recovery of vulnerable aquatic ecosystems.





Source:

Department of Chemical and Mining Engineering, School of Engineering and Architecture, Saint Louis University, 2025





The SLU SDG Report 2026