

## **CS22: an Ocean Science summer school dedicated to the transfer of scientific knowledge and capacity building in developing countries**

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Nearly 40% of the world's population lives within 100 km of the coast. Coastal ecosystems are subject to growing anthropic pressures putting at risk many vital services for the development and well-being of populations. Monitoring these ecosystems efficiently is thus a necessity in order to evaluate and reduce marine pollution, as prioritized by the United Nations Sustainable Development Goals (SDG target 14.1). As recommended in the Global Ocean Science Report<sup>1</sup>, it is crucial to improve the scientific knowledge through actions aiming at strengthening the capacities of regions and communities to protect the marine ecosystems.

The “Chemical monitoring of Coastal environments Summer School” (CS22) was created to transfer operational skills for the protection and sustainable management of marine resources in developing countries. In October 2022, 10 trainees from Nigeria, Ghana, Cameroon, Togo, Brasil, Vietnam and The Philippines attended a 2-week program in Nantes (France) to gain scientific knowledge and practical guidelines in sampling, marine chemical data analysis and interpretation for marine coastal chemical monitoring.

This action, funded by the Agence Française de Développement (AFD), addresses two main goals: 1) creating a worldwide mentored network of experts able to monitor the Ocean pollution in areas where chemical data is scarce, and 2) transferring educational program to academic staff including targeted scientific knowledge and standardized analytical protocols. Topics such as monitoring network design, sampling strategy, chemical analysis (metals, organic pollutants, nutrients) or chemical risk assessment were addressed by combining scientific lectures (including Biogeochemistry, Ecotoxicology, Environmental Psychology, ...) and practical work from the field to the lab.

This presentation intends to share feedback experience after completion of the first session of the summer school that will be renewed in 2024. The CS22 was endorsed by the UN Decade of Ocean Science for Sustainable Development under the framework of the Global Estuaries Monitoring Program (Program 176).