

President's Commendation

Individuals whose academic achievements, graduation theses, etc. are recognized as excellent.

◎Academic Category

TORI MAKO

Graduate School of Natural Science and Technology,
Division of Biological Science and Technology [Master's Level Section]

Conducted research on the development of artificial seed production technologies for the blackthroat seaperch (*Doederleinia berycoides*), commonly known as Nodoguro, a commercially and ecologically important fisheries resource in the Hokuriku region of Japan. This research elucidated the previously undocumented process of gonadal development and reproductive maturation, providing fundamental insights into the species' reproductive biology. In addition, a novel method for early sex determination was developed, enabling more efficient broodstock management and supporting the advancement of aquaculture and stock enhancement programs. Continued contributions to fisheries science and aquaculture research in the Hokuriku region and the international scientific community are highly anticipated.

PRANTA SARKER

Graduate School of Natural Science and Technology
Division of Material Chemistry [Doctoral Level Section]

A new technology has been developed to selectively recover critical metals—such as lead, nickel, and cobalt—from complex aqueous and organic waste streams by using functionalized sorbents. The research focused on chelating agents and hydrophilic organic solvents as inhibitory factors in actual waste streams; it systematically elucidated their theoretical impact on metal adsorption and established a separation and recovery process applicable to waste streams containing these interfering substances. His research results are internationally recognized for academic quality and practical value as a technology for reclaiming unused metal resources from industrial waste.

HAFEEZ ABDUL

Graduate School of Natural Science and Technology
Division of Natural System [Doctoral Level Section]

A new technology has been developed to manufacture a biodegradable water absorbent polymer using a solvent free "dry process". The polymers were derived from agricultural waste and designed to aid plant growth, for example cotton, rice and corn. This achievement earned the Best Poster Award at the Royal Society of Chemistry's Mechanochemistry international conference. It also received the Best Poster Award at the 19th Pacific Polymer Conference, a long standing international conference in the world of polymer science. The effectiveness of water absorbent polymer in promoting rice growth was further demonstrated through a large scale field test covering 80,000 square meters in Saitama and Niigata prefectures. These research findings were highly acclaimed both in Japan and abroad.

KAMIJIMA TAIKI

Graduate School of Medical Sciences
Division of Medicine [Doctoral Program]

In double-negative castration-resistant prostate cancer (DNPC), a highly intractable disease state, it was revealed that the interaction between cancer cells and stromal cells within the prostate microenvironment activates KRAS signaling, leading to cancer progression. These findings are expected to contribute to the establishment of novel therapeutic strategies and have been highly evaluated both domestically and internationally.