## Underwater Detection Technology Course Graduation Ceremony - Certificates Awarded to 17 Participants

The Center for Ocean and Underwater Technology Research (TKU-COUTR), commissioned by the Bureau of Cultural Heritage, Ministry of Culture, organized an Underwater Detection Technology training program to cultivate professionals in underwater cultural assets. On September 23rd, the graduation ceremony was held at the Nanhai Administrative Office of National Museum of History, where certificates of completion were awarded to 17 participants.

Ms. Yen-Ju Zhou, the Chief of the Division of Antiquities and Archaeological Sites at the Cultural Heritage Bureau, first congratulated the qualified students, acknowledging their hard work during this period and admiring their perseverance in sacrificing weekends for the coursework. She also expressed gratitude to TKU-COUTR and the team of instructors for their assistance in offering the program to cultivate relevant talents. She hoped that more people in society would become aware of underwater cultural assets. Mr. Hung-Lung Lin, the Head of the Section of Underwater Cultural Heritage in the Division of Antiquities and Archaeological Sites, emphasized that the development of water areas for significant national projects and the investigation of underwater cultural assets are highly specialized fields. He encouraged the students to continuously improve their skills and also hoped that relevant technologies in Taiwan could continue to advance, thus furthering the goal of protecting underwater cultural assets.

Director of TKU-COUTR, Distinguished Chair Professor Jin-Yuan Liu of the Department of Electrical and Computer Engineering, explained that the establishment of the Regulations Governing the Investigation and Handling of Underwater Cultural Assets Before Water Area Development and Utilization and the active development of offshore wind energy policies in Taiwan have led to a rapid increase in water area development projects. This has created an urgent demand for Underwater Cultural Asset Interpreters and Underwater Detection Technicians. The Cultural Heritage

Bureau encourages universities and colleges to offer related training programs to industry professionals and students, thereby enhancing our country's capabilities and standards in underwater cultural asset investigation, which aligns with the needs arising from domestic water area development. He further emphasized that this course is rigorous in all aspects, including curriculum planning, teaching quality, and learning outcomes assessment. It is a high-standard and practical Underwater Detection Technology course, aiming to establish a foundation for nurturing talent in the field of underwater cultural assets.

Participants in this course are required to complete 54 hours of theoretical classes and 16 hours of practical offshore training. Those who pass the evaluation and assessment conducted by the Cultural Heritage Bureau will be awarded a qualification certificate in accordance with Article 6 of the Regulations Governing the Cultivation of Professionals in Underwater Cultural Assets. The theoretical classes are held at our Taipei campus and are taught by several instructors, including Dr. Chen-Fen Huang, Professor & Director of the Institute of Oceanography, Dr. Jen-Hwa Guo, Professor in the Department of Engineering Science and Ocean Engineering, and Dr. Char-Shine Liu, the CEO of the Ocean Center at National Taiwan University; Tsing Hua Distinguished Chair Professor Chen-Hwa Tsang; and Professor Jin-Yuan Liu, along with Professor Chi-Lin Lee from the History Department from our university. The content covers relevant regulations on underwater cultural assets, an introduction to marine geology and environments, aquatic systems, and sonar applications, as well as the use of various instruments and tools. The practical offshore training course took place in the Chao-Jing Bay resource conservation area of Wanghai Lane, Keelung. During this training, participants engage in practical operations involving instruments such as side-scan sonar, sediment profiler, multibeam echo sounding systems, marine magnetometer, and remotely operated underwater vehicles.

Participant Chi-Wei Hung expressed gratitude to the Cultural Heritage Bureau for organizing the relevant course. He saw underwater cultural asset detection as a new challenge for himself. After completing the training program, he believed that not only had he acquired new skills, but his cultural awareness had also improved. This had added a sense of purpose for him, stating, "In the future, I will actively seek opportunities in related detection work, and I hope to discover more underwater cultural assets to achieve personal accomplishments." Participant Fang-Ju Rao shared her enthusiasm, stating that she was delighted to learn about the importance of underwater cultural assets through this course. She mentioned, "In addition to its application in cultural heritage, underwater detection technology can also contribute to better interpretations for various other underwater exploration missions."

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