

## Science Education Center Joins Taiwan Science Train, Guides Students in Hands-On Experiments

Campus focus

Former Dean of Research and Development, current Director of the Science Education Center, Professor Bo-Cheng Wang from the Department of Chemistry, along with Associate Director of the Center and Associate Professor of Chemistry Jin-Pei Deng, participated in the "2024 Taiwan Science Train" event, organized by the National Science and Technology Council (NSTC). The event's handover ceremony was held on October 21 at Banqiao Station of Taiwan Railways. Nearly 600 teachers and students from 8 elementary and middle schools attended, stepping out of their classrooms to conduct hands-on experiments on the train. Activities varied at each station at Banqiao Station, students used polarized light filters to appreciate artwork or view different color tones, having a great time. The Taiwan Science Train next stopped at Fulong Station in New Taipei City on October 26, inviting the public to join the experiments. On November 8, the train reached Shifen Station, where Jing-Tong Elementary School hosted the "Five-School Joint Science Experiment." Over the 3 stops—Banqiao, Fulong, and Shifen—an estimated 15 schools and nearly 1,000 teachers, students, and the public participated, allowing more families to enjoy the fun of science. Organized under Assoc. Prof. Deng's NSTC project, this event was part of the New Taipei Science Day activities. Assoc. Prof. Deng stated that the experiments on the Taiwan Science Train emphasize scientific principles, enabling students to gain abundant scientific knowledge. He noted the visible enthusiasm among children for exploring science.

The Taiwan Science Train helps enhance scientific literacy among rural students by taking them out of traditional classrooms, breaking the limitations of textbooks, and promoting rooted science education. Through hands-on activities, students gain unique learning experiences. Among the stations, the Shifen stop featured the Shadow Legend Drama Group, which

performed shadow plays combining art, science, and local characteristics. Students created their puppets and participated in shadow play performances, engaging closely with science while having fun. Prof. Wang and Assoc. Prof. Deng, along with students from the Department of Chemistry, collaborated with the New Taipei City Education Bureau to implement various projects supporting science education in elementary and middle schools. These included the "Taiwan Science Train," the "Science+ Project," and "New Taipei Science Day" initiatives. They also worked to integrate industry, government, and academia resources to organize STEAM-related science competitions, combining "fun science activities" with "scientific research" to help students explore themselves and develop research interests.



