Western Australian STEM Students Win Gold in Beijing

Two Western Australian secondary high school students have won Gold after presenting their science research projects at the 39th Beijing Youth Science Creation Competition (BYSCC), held 23 – 26 March at the University of Chinese Academy of Sciences.

Violette Otto from Karratha Senior High School and Shona Kiely from St. Mary MacKillop College in Busselton were chosen to represent Western Australia through the annual Scitech and Rio Tinto partnership program, Beijing Bound.

In answer to this year’s competition theme of Discovery, Innovation and Responsibility, Violette Otto presented her project “Exploring the effects of methane on global warming and identifying the largest local (Karratha) livestock contributor”, and Shona Kiely presented on the “Effects of Phytophthora Dieback on Banksia Shrubs” in the category of Environmental Science and Engineering.

They explained their projects to a panel of judges and over 300 international students and scientists, vying for 5 gold and 5 silver medals in their category.

Ms Deb Banning (formerly Hancock), Scitech Chief Executive Officer, said “Beijing Bound is a once-in-a-lifetime opportunity for Western Australian students to present their ideas, research and capabilities on an international stage. It creates a bridge between education and industry to give students a realistic understanding of what a career in science, technology, engineering and maths (STEM) involves and it encourages an innovative approach to traditional education that inspires and informs with extremely positive results. Scitech is incredibly proud to partner with Rio Tinto to inspire and mentor future generations in the practical and vital world of STEM education and careers.”

Matthew Holcz, Rio Tinto Managing Director, Planning, Integration and Assets, said “The Beijing Bound program provides an incredible opportunity for two talented students and we are very proud to support it. As miners in the 21st century, Rio Tinto is committed to building STEM capacity in future generations to help equip Australians with the skills needed for the jobs of the future. We’re excited to be supporting this program and making our employees available as mentors to inspire these students to pursue long and rewarding careers following a STEM-related pathway.”

Beijing Bound pairs selected secondary students with Rio Tinto mentors, to undertake a research project in their local area. Over five months, students develop and carry out a scientific research plan, write a literature review and report and deliver a scientific presentation at a science fair-style event.

This incredibly popular program has run in the Pilbara since 2006, and in 2018 was introduced to Busselton secondary students for the first time. Previously, two students from the Pilbara were selected to travel to China, however now one student from Busselton and one student from the Pilbara are offered this opportunity.

In 2019, 196 projects were selected from over 1000 submissions to compete in the Beijing Youth Science Creation Competition. 157 were from Beijing, and 39 were from international delegations, including the Czech Republic, Denmark, Indonesia, Italy, Malaysia, Korea, Russia, South Africa, Thailand, Ukraine, USA and Australia.