



## **CAS-TWAS CENTRES: EXCELLENCE ON FILM**

by Edward W. Lempinen

A new film shows the excitement of young scientists who come to five Beijing-based centres of excellence to work on critical global challenges.

hey are young scientists from Kenya, Pakistan and Thailand, and they are focused on improving conditions in their countries by conducting research in areas such as satellite monitoring of farmland, water sanitation and climate modelling.

But they have one thing in common: As scientists from the developing world, they were in Beijing for extended research at one of five centres of excellence organized by the Chinese Academy of Sciences (CAS) and The World Academy of Sciences (TWAS).

The young scientists, and the five CAS-TWAS Centres of Excellence, are

the focus of a new film released by the two academies and posted on the TWAS website and its YouTube channel. The 10-minute film captures the centres' role as global centres of research, and the scientists' excitement to work with world-class faculty in sophisticated labs focused on high-priority human challenges.

"Science holds the promise of solutions, but many developing countries lack scientific and engineering resources", says Bai Chunli, the president of CAS and TWAS, to open the film. "TWAS and the Chinese Academy of Sciences are working together to change that... The Centres are serving as a powerful arm of TWAS in achieving its missions."

In mid-2013, CAS invested USD6.5 million in five existing centres of

◆ Oriola Olasunkanmi Bukola of Nigeria working in a lab at the Centre of Excellence for Biotechnology.

excellence in an effort to add staff and upgrade facilities, and to position them as hubs of high-impact research and training, especially for scientists from the developing world. Since then, hundreds of scientists have visited for programmes ranging from weeklong workshops and extended training courses to four-year PhD studies, all with a focus on key challenges and areas of practical need.

The five centres are:

- The CAS-TWAS Centre of Excellence for Green Technology (CEGT), based at the CAS Institute of Process Engineering;
- The CAS-TWAS Centre of Excellence for Biotechnology (CoEBio), based at the CAS Institute of Microbiology:
- The CAS-TWAS Centre of Excellence for Climate and Environment Sciences (ICCES), hosted by the CAS Institute of Atmospheric Physics;
- The CAS-TWAS Centre of Excellence on Space Science for Disaster Mitigation (SDIM), hosted at the CAS Institute of Remote Sensing and Digital Earth; and
- The CAS-TWAS Centre of Excellence for Water and Environment (CEWE), based at the CAS Research Centre for Eco-Environmental Sciences.

The film was written and produced by Nicole Leghissa, a filmmaker from Trieste, Italy, where TWAS is headquartered. Leghissa also produced Seeds of Science, a 2013 documentary about the close links between TWAS, Trieste and four scientists in Kenya who work to increase food production and clean water supplies.

See the film on the TWAS website: www.twas.org/node/8714 Or see it on the CAS English-language site: http://bit.ly/188vqwj