

How to improve nuclear security worldwide: Three young women win IAEA essay contest

By Jeremy Li

Three essays that provided actionable and innovative recommendations to strengthen nuclear security through stronger border controls, closer international cooperation and public education won the IAEA's first ever nuclear security essay contest.

"These essays demonstrate a clear and compelling understanding of nuclear security and its many intricacies," said Tim Andrews, Head of the Programme Development and International Cooperation Section at the IAEA. "They look to the future."

In preparation for the International Conference on Nuclear Security: Commitments and Actions, the IAEA invited students and young professionals to submit essays focusing on challenges and recommendations to strengthen nuclear security. A panel of experts from the IAEA and the International Nuclear Security Education Network selected three winners from among the 353 submissions received. The winners will present their papers at the conference, taking place in Vienna in December 2016.

The perspectives of young professionals have the potential to contribute fresh and compelling insights into the future of nuclear security, Andrews said, explaining the rationale behind organizing the contest. The three winners will each receive a 2000 euro cash prize with a certificate signed by IAEA Director General Yukiya Amano. The IAEA will also sponsor their attendance at the conference.

Community engagement for nuclear security

One of the winning submissions, an essay by Sudanese student Abeer Mohamed from Ritsumeikan University in Japan, entitled *Encouraging Community Engagement as a Strategy to Strengthen Nuclear Security in Our Borders*, highlights the threats and challenges in developing countries with porous borders and limited security control

resources due to the lack of sufficient equipment and finances. To improve border security, she suggests engaging the broader communities through education, establishing domestic policies, and channelling better communication between community and law enforcement agencies.

The importance of regional cooperation

The entry by Singaporean student Noor Azura Zuhairah Binte Abdul Aziz, from University College London, entitled *The Future of Nuclear Security in Southeast Asia: Commitments and Actions*, focuses on the importance and implications of nuclear security in the South-east Asia context. It discusses regional problems stemming from terrorism, maritime piracy and insufficient border controls. To address these challenges, she proposes to build closer international cooperation, especially among member countries of the Association of Southeast Asian Nations, to strengthen capacity building and to create training programmes for all countries within the region, as well as to establish a comprehensive regulatory framework.

A medical physicist's perspective

Katharine Thomson from Musgrove Park Hospital in the United Kingdom drew parallels between the common challenges of medical and other applications of radiation in her essay entitled *Future of Nuclear Security: Commitments and Actions — A Medical Physicist's Perspective*. She put forward three approaches to meet the challenges: engaging the public through education programmes, controlling access to dangerous material and thereby eliminating the risk of insider threats, and enhancing cybersecurity by building comprehensive, usable and respected cybersecurity systems.