International Journal of Nuclear Security

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Edited by Rachel Brooks & Ashley Humphrey

Last Newsletter of 2019!

Did you know the University of Tennessee publishes a peer-reviewed academic journal that focuses on research and policies related to nuclear security?

The International Journal of Nuclear Security was launched in 2015 to fill the need for an open, international, scholarly discussion about nuclear security issues and insights among scholars, students, practitioners, and experts from academia, government, industry, and the private sector—as well as from the intelligence, military, and law enforcement communities.

INSEN Special Issue Update

By Stephen Ray Associate Editor, Editorial Liaison for INSEN Special Issue

On behalf of IJNS, I am excited to introduce Matteo Gerlini as Guest Editor for the IJNS Special Issue on INSEN. Matteo comes to us from HoNESt and the University of Rome in Italy. As a historian in the "Machiavelli Centre," he is coordinating a research project on the history and documentation of Fast Breeder Reactors Programs in Europe. Additionally, Matteo is an Italian member of the International Nuclear Security Education Network (INSEN), about which we are creating this comprehensive special issue. Matteo brings to IJNS valuable contributor connections from within INSEN, intimate knowledge of the organization and their current proceedings, and much-needed editorial prowess. Matteo has authored various titles among edited books, articles, chapters and monographs in the field of international history. His inclusion in this special issue is invaluable for IJNS, and we look forward to working closely with him in the creation process! Please look out for future updates on this special project!

OVERVIEW:

- Upcoming Events
- INSEN Special Issue Update
- A Visit from Mr. Hubert Foy
- Congratulations to our Graduates!

ANNOUNCEMENTS:

U.S. Strategic Command (STRATCOM) will be visiting UT Knoxville in January! UT is a member of STRATCOM's Deterrence and Assurance Academic Alliance - watch out for further UT announcements on the event!

UPCOMING EVENTS:

- Nov. 22, 10:00-11:00 A.M. EST: Baker Cafe: "Critical Materials and Effects on National Security"; University of Tennessee, Knoxville, TN, USA
- Nov. 25-29: IAEA International Conference on Research Reactors; Buenos Aires, Argentina
- Dec. 3-5: WINS Workshop on Countering Violent Extremism and the Insider Threat in the Nuclear Sector; London, UK
- Dec. 11-12: PONI Winter Conference;
 Center for Strategic and International
 Studies, Washington, DC, USA

A Visit from Mr. Hubert Foy from AFRICSIS

By Rachel Brooks Assistant Editor

On October 31st, Mr. Hubert Foy visited the University of Tennessee, Knoxville and spoke in the English Global Communications in STEM class. Mr. Foy founded the African Centre for Science and International Security (AFRICSIS) and serves as Director and a Senior Research Scientist. He is also on IJNS's editorial board. AFRICSIS, a nonprofit security-focused think tank based in Accra, Ghana, primarily works with CBRN nonproliferation and issues in peaceful use. Mr. Foy stated that this falls into four categories of work: "research and analysis, capacity building, networking and policy engagement." A significant portion of AFRICSIS's work focuses on nuclear security. In his presentation titled "Regional Trends in National Strategies for Cancer Treatment," Mr. Foy spoke about the "treatment-notterror paradigm." As the number of cancer cases and deaths in Africa continues to rise, African states are racing to acquire additional radiotherapy machines. In doing so, these countries not only face financial challenges, but they also consider whether to use linear

accelerators (which both offers better cancer care and reduces radiological security risks), or cobalt-60 machines (which are inferior on care and security, but often costs less and operates more consistently in more challenging environments). AFRICSIS collaborates with other organizations and governments on regional efforts to transition to linear accelerators. They aim to facilitate cooperation among nuclear security experts and radiotherapy professionals, build awareness and understanding of nuclear security issues in the medical sector, and bring attention to both nuclear security and the continent's cancer burden. Mr. Foy explained that Co-60 sources are targeted by terrorists, armed merchants, and other potential criminal gangs. These sources present a security concern due to their potential use in radiological dispersal devices (dirty bombs) or radiological exposure devices. However, with the severe lack of radiotherapy treatment devices in Africa, many countries loathe to part with their old Co-60





sources. They face the decision of "treatment vs. not terror" - do they use cheaper but high-risk radioactive cobalt machines to treat cancer patients, or do they prioritize permanent risk reduction initiatives by phasing out the cobalt machines in favor of non-radioactive linear accelerators with less security concerns? Of course, Mr. Foy acknowledged, although there has not been an event in Africa involving intentional malicious use of highactivity radioactive sources, the African governments should consider nuclear security best practices and initiatives to feasibly minimize the footprint of risksignificant radiological cobalt sources. For more information on the initiatives of AFRICSIS, visit https://africsis.org/. Thank you to Mr. Hubert Foy for visiting our university and speaking in our class!

Congratulations to our Graduates!

By Rachel Brooks, Assistant Editor

Two members of our *IJNS* editorial team are graduating this semester! Ashley Humphrey, Associate Editor and Editorial Liaison for the upcoming Women in Nuclear Security special issue, will graduate with a B.A. in English (minor biology). She will continue to volunteer with *IJNS*.





Stephen Ray, Associate Editor and Editorial Liaison for the upcoming INSEN special issue, will graduate with a B.A. in English (minor in biology), and hopes to start dental school this summer. Thank you for your continuing work with IJNS!