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From the Editor's Desk

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From the Editor's Desk

Dear Colleagues,

We are happy to present to you IJNS issue 5.1, 2019. This issue contains a welcome variety of articles speaking to many practical matters in nuclear security and safety, and in education and international policy. All these themes are invaluable as we continue our worldwide conversations among scholars and professionals, as well as with global citizens concerned for keeping our world safe from nuclear accident and aggression. We are pleased to include five articles and four book reviews in this issue.

Our conversation begins with "Measurement and Analysis of the Extreme Physical Shock Environment Experienced by Crane-Mounted Detection Systems," by Matthew Boyd of Texas A&M University – College Station, Jennifer Erchinger of Los Alamos National Laboratory, Craig M. Mariano of Texas A&M University, and Gene Kallenbach of Sandia National Laboratory—all of whom are deeply involved in advancing research and scholarship in nuclear security. Boyd et al. present their findings on improving crane-mounted radiation-detection systems, due to their immense level of exposure to shock and, consequently, the possibility of their reduced reliability. The authors conclude by stating how their data shows detection systems mounted in the appropriate manner will ensure the systems' reliability in high-shock environments, particularly in the setting of naval cargo ports.

The next article, "Risk-Based Approach in the Self-Assessment of Nuclear Security Culture for Users of Radioactive Sources," by Igor Khripunov—a leading expert on nuclear security and CBRN proliferation and a Nonresident Fellow of the Stimson Center—takes the reader through nuclear security from a cultural perspective, helping fill what he sees as gaps in the IAEA's proposed security culture models. Khripunov's emphasis on key considerations, such as continued safety orientation, security awareness, and attention to diverse work environments, are a few areas of improvement in which he hopes his risk-based approach can improve worldwide nuclear security practices.

The following article, "Nuclear Security Education in Nigeria: University of Port Harcourt Approach," by Ayode Kuye and Lucky Uyigue—both prominent researchers and educators at the University of Port Harcourt, Nigeria—present findings associated with their nuclear security programs at the Centre for Nuclear Energy Studies. Kuye and Uyigue use a graded approach to strengthen their master's program in nuclear engineering, producing trained professionals needed in a world that requires more robust cooperation among local and international nuclear experts.

The article "Weaponizing Radioactive Medical Waste – The Looming Threat" by Shreekumar Menon and Vagish Kumar L.S. addresses the often overlooked issue of radioactive waste dump sites, and the consequences of ignoring these sites' poor attention to security measures. Menon and Kumar uncover the dirty realities of "nuclear medicine" dump sites, urging the nuclear security community to affect change. The authors conclude that security for radioactive waste, including disposal sites, must be taken more seriously in order to prevent malignant actors from abusing these dangerous materials. The authors include a helpful list of recommendations that could be implemented by officials.

Finally, "Nuclear Ban Treaty and the Southern Asia 'Nuclear Troika'," by Sitakanta Mishra, Assistant Professor of International Relations at Pandit Deendayal Petroleum University in Gujarat, India, offers an analytical perspective on what this treaty means for three nuclear weapons states avoiding the nuclear ban treaty process--while also trying to ensure their responsibility with nuclear capability and disarmament. Since this situation puts these states in a somewhat contradictory position when it comes to their international nuclear security policy, the author brings this to the attention of the community and concludes with suggested direction for the forthcoming treaties that the discussed countries claim to be interested in developing.

We close the issue with four reviews of recent contributions to the fields of nuclear security history, international relations, and technological advancement: *Insider Threats*, by Matthew Bunn and Scott D. Sagan, *AI Superpowers: China, Silicon Valley, and the New World Order*, by Kai-Fu Lee, *The Future of War*, by Lawrence Freedman, and *Nuclear Deviance: Stigma Politics and the Rules of the Nonproliferation Game*, by Michal Smetana.

Thank you spending time with us and our ongoing conversations in nuclear security and international relations. We encourage you to engage with us by submitting your own contributions to the journal, chatting with us through our Twitter and Facebook pages, and reading the important work published in this and previous issues. Please also share these fine examples of nuclear security scholarship with your colleagues!

We thank you for your ongoing support and contributions.

Very best regards,

Adam Swift, Associate Editor, Davis Editorial Fellow Russel Hirst, Managing Editor International Journal of Nuclear Security