News from WiN-JAEA

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IYNC-WiN Global Conference 2018

11–17th
March
Bariloche,
Argentina



The 26th WiN Global Annual Conference was successfully held for the first time in a Latin American country in March 2018. It was organized jointly with the International Youth Nuclear Congress (IYNC) and provided a forum for women and young professionals from the nuclear sector to discuss and to collaborate on knowledge transfer, nuclear science and technology research and implementation, professional development, and communication. A special highlight was the mentoring programme, which linked mentors of high professional standing and young scientists starting their carrier. The conference attained very positive feedback from all involved: the organizers and the participants. The programme was concluded with technical visits in Bariloche (INVAP, Centro Atomico, Huemul Island), Buenos Aires (Atucha) and Rio de Janeiro (Angra).

Photos and summaries can be downloaded from the conference website: http://www.iync.org/iync2018-bariloche-argentina/

Please see the next WINFO NEWSLETTER AND VISIT http://win-global.com



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eting

& Annual Assembly



The major outcomes of the Executive and Board Member meetings, approved by the General Assembly were:

- confirmation of the second term of the WiN Global President and Vice-President
- presentation of the Financial Report
- reassembly of the Strategic Committee ASAP
- establishment of a new WiN award for young women contributing to WiN Global
- proposal for a WiN Global special team award, to be presented during WNE in June 2018, for the IYNCWIN18 Co-Chairs.







Reported by Juana Gervasoni, WiN Argentina President

During the IYNCWIN18 conference, several side events took place: the NICE initiative, the WNU Alumni Workshop on Leadership and a workshop for professional women from Latin America organized by WiN Argentina on carrier development for females. More than 70 people working in science and technology attended the event organized by Women in Nuclear (WiN) Argentina — Mujeres del Sector Nuclear — on 16 March 2018.

This free-of-charge activity aimed at providing a forum for both the local community and IYNCWIN18 participants to share ideas and experience on gender topics and the role of women in science, especially in the nuclear industry.

Representatives from WiN Bolivia, WiN Mexico and WiN Brazil shared their views and provided an update on their involvement in WiN activities.

"What role do women play and have played in the professional and academic field?"

"Is access to scientific or technological careers the same for both men and women?"

"How can we articulate action strategies to address gender issues?"

These were some of the questions that guided the discussions among students, teachers, researchers and professionals, mainly from different Argentine institutions.

Ms Juana Gervasoni recalled how valuable it was for our country to be part of WiN since its foundation, and outlined: "Our vision as WiN Argentina, and within WiN Global, is to pave the way for young people who have just begun their professional careers and to provide them with tools to achieve equality between men and women in the scientific-technological field. For this", added the researcher, "we have developed a motivating space to exchange ideas, experience and initiatives. We aim to establish fluid dialogue with society to promote awareness, contribution and education concerning nuclear technologies".

The presentations were followed by a poster session where participants had the chance to present their research and past work. It turned out to be an ideal opportunity for all attendees to interact in a relaxed environment, and to further discuss future collaborative activities.





WiN-IAEA Brown Bag Luncheon

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https://youtu.be/mFfYrmGgdSw



Speaker

Asel Khamzayeva is from Kazakhstan. She has worked for uranium mining operations at National Atomic Company for more than 15 years (joining the company in 2001) in various assignments related to natural uranium concentrate marketing and sales, logistics, and international relations at the very front end of the nuclear fuel cycle (NFC). She led the natural uranium division procuring natural uranium concentrate (U3O8) to utilities worldwide, directly working with NPPs and international organizations involved in the NFC.



CTBTO and its Verification Scheme

ve held a lunchtime meeting to hear about the Preparatory Commission for the Women in Nuclear Test Ban Treaty Organization (CTBTO) and its verification regime from Ektimal Al-Nemri, who is has been an evaluation officer at the CTBTO since 2012. There were 15 attendees and we learned about the 337 global facilities in the International Monitoring System (IMS), and the civil uses of the CTBTO data in disaster risk reduction of nuclear accident and tsunami warning.

Ektimal gave us details about the types of instrumentation used in the IMS — seismic, hydrooacoustic, infrasound, radionuclide, noble gas monitors — in 89 countries around the world and by the network of 16 radionuclide laboratories. She discussed the CTBTO's detection of North Korea's nuclear tests and how the data were interpreted to determine the types of tests. All data collected from the monitoring sites are sent to Vienna for processing, analysis, and storage, and are available to the CTBTO Member States for their own analysis.

Some civilian applications of the monitoring and data analysis are related to earthquake and tsunami warnings. The data can also be used for research on climate change, meteorology, observing iceberg changes, and other ocean and marine life tracking and trending. When the Argentinian submarine was lost in late 2017, CTBTO monitors detected underwater explosions leading to inferences about the fate of the submarine.

Ektimal kept us fascinated by the topic for almost an hour. There were many questions from the audience, all of which she answered with great patience and clear explanations. She provided us with some brochures as take-away information as well. Many thanks to Ektimal for the information and a great presentation.

More information can be found at: www.ctbto.org and

https://www.ctbto.org/the-treaty/developments-after-1996/2017-sept-dprk/





Combating Zika Virus

On 7 February, we held a lunchtime meeting to learn about the sterile insect technique (SIT) from Ms Hanano Yamada, an entomologist at the IAEA's Insect Pest Control Laboratory in the Nuclear Applications Department. She is engaged in research to adapt this insect control technique to combat the Aedes aegypti mosquito, which is a vector of the zika virus (and several other viruses). There were 10 attendees and we learned that the IAEA has been developing the SIT for more than four decades, to control diseases-carrying mosquitoes and other pests such as fruit flies, moths, and screwworm flies, successfully diminishing their populations. The benefits of the SIT, compared to conventional chemical control, are that it is species specific, there are no non-target effects (collateral damage) to other species, it reduces dependence on insecticide use, there is no development of resistance, it is environmentally-friendly, it doesn't use GMO/transgenes, the technique is controllable/reversible, it is safe for humans and animals, and it deploys males only (males cannot bite).

Mosquitoes are of particular interest because they are the world's deadliest creature in terms of how many people are killed per year – 725,000, compared to only about 10 people per year killed by sharks. Unfortunately, mosquitoes carry many different types of diseases, and there are almost as many types of mosquitoes as there are mosquito-borne diseases. The Zika virus was first identified in humans in 1952, near the Zika forest in Uganda, but it has spread in recent years to almost all tropical regions. One challenge in tracking Zika is that it presents symptoms like dengue fever and chikungunya, so tracking these diseases individually and mapping outbreaks can be difficult.

Each mosquito type needs to be researched for the optimum use of the SIT to control the population. The steps in the SIT include mass rearing of the mosquito species of interest, sex separation, sterilization of the males via exposure to gamma radiation (they do not become radioactive), packaging and transport sterilized mosquitoes, release of the males into the target territory, monitoring the inspect populations and infection rates, and quality control of all the steps. The IAEA participates in research of all of these steps. Currently, there are over 70 countries (on five continents) participating in SIT-related research projects.

It was a very thorough and interesting presentation, and the audience had many questions, which Hanano answered readily and it was a shame that we had to end the Q&A as there were many more questions still to be asked. Thank you to Hanano for the great presentation.







all women
who have
worked in the
nuclear sector
for > 3 years!

The registration for the FEM'Energia awards is starting!

Please encourage and urge other WiN ladies to apply for this award or consider yourself. It is a special moment for all women working in professional positions, in public communication or in academia activities in the nuclear energy sector to show their achievements and projects with outstanding results and to gain recognition and appreciation for exceptional contributions to nuclear activities in Europe and France.

The WiN Global Executive and Board meeting will be organized by WiN France in conjunction with the award ceremenoy on 16 October 2018 in Paris. WiN wishes you success!

All information how to apply is available at: http://www.win-france.org/english/femenergia-award/

INMM Science Fair 2018



A tradition for several decades, the INMM Science Fair was co-sponsored by WiN IAEA, and WiN IAEA members served as judges to evaluate the presented projects.

Unfortunately, due to an oversight, this year we were not able to present a WiN award to deserving girls. However, it was a great experience to talk to the young students and discuss and judge their projects.





Final Matters...

Miscellaneous

- As WiN IAEA thrives from active members, please consider becoming engaged in one of the working groups. We need more volunteers urgently!
- WiN IAEA offers free memberships to interns and encourages them to join!

Do not forget to pay your membership fee of € 40 for 2018!

Upcoming Events

- WiN retreat
- Visit to the IAEA NA Laboratories

For more, contact the event's team (a.roca-jachmann@iaea.org)



A warm welcome to all our new members!

Please become active and get involved!



