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# BALANCE FOR BETTER

MARCH



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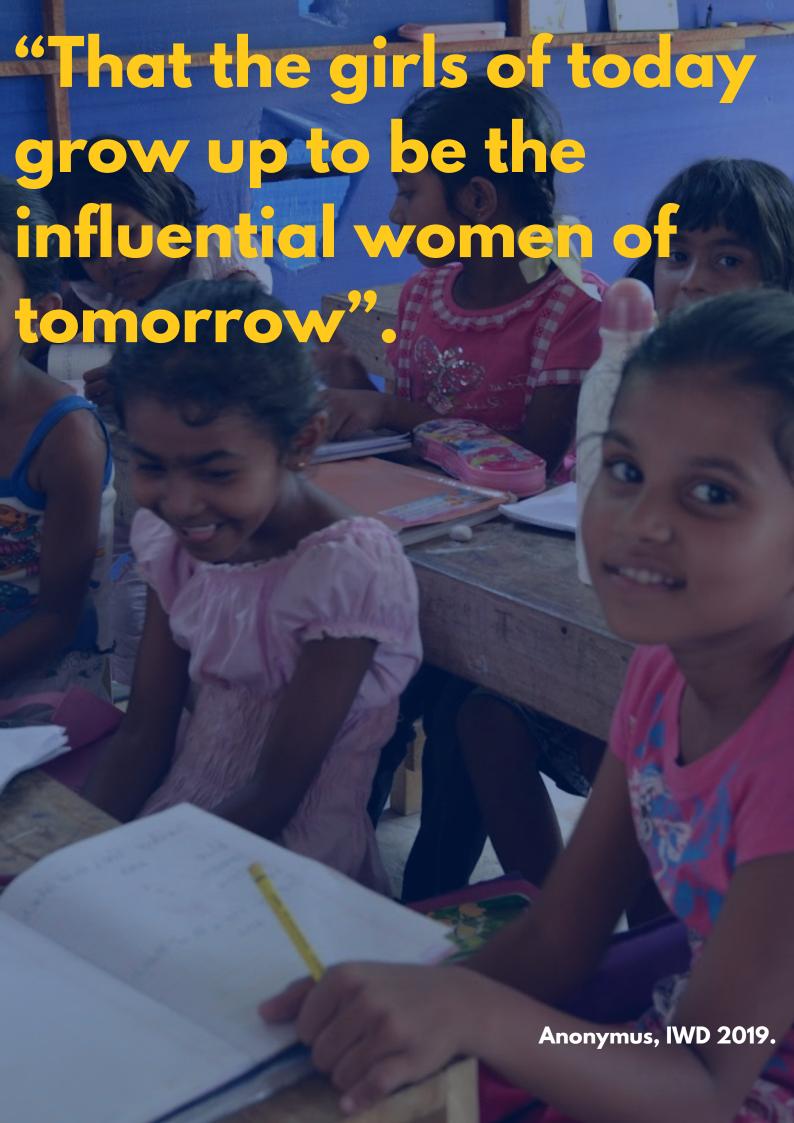
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### 12th Campus Party of Brazil São Paulo For the first time in the history of Campus





For the first time in the history of Campus Party Brazil, Nuclear Energy, its applications and benefits were openly discussed in the event. The Campus Party is one of the biggest technology events in the country with more than 10 thousand participants focused on youth. The 12th Brazilian Campus Party edition happened last February in São Paulo and counted on the presence of NASA engineers, the Brazilian Minister of Mines and Energy, astronauts and other important figures in the Science and Technology field.

WiN Brazil partnered up with the ONG STEM for Girls, who is one of the organizers of the event, to include, for the first time, a series of activities related to Nuclear. Six Brazilian WiNners took turns in the event preparing different activities like: Nuclear trivia, presentations on Radiation is Natural, interviews and even presentation on radiation using pop culture as base talking of super heroes and cartoons that inform the youth about nuclear.



## WOMEN IN STEM

Mackenzie University / São Paulo, in an event organized by Aline Carvalho, Brazilian winner founder of STEM for Girls organization. Brazilian Winners Alice Cunha da Silva (Westinghouse), Karla Lepetitgaland (Eletronuclear) and Prof. Sueli Borrely (Nuclear and Energy Research Institute-IPEN), took part and talked about the difficulties females face in STEM careers. The event counted on the participation of women from several fields of science, in addition to representatives of UNESCO and the Consul of Canada in Brazil. The four Winners brought to attention not only the difficulties of being a woman in STEM but also were able to share information about the nuclear technology that was not known by the other participants.





Chapter organized also an event for the International Day of Women and Girls in Science at the auditorium of IPEN, Sao Paulo. This event comprised a series of round table discussions on the advancements of females in STEM fields and the challenges ahead.







## **WIN MX**

#### STRENGTHENING TIES

Strengthening relationships between chapters is always of great importance. In this way we can keep note of what is happening in the industry and of the activities carried out by inspiring women around the world every day.

On January 30, in London, the Women in Nuclear UK conference was held. Raquel Heredia, president of WiN MX, had the opportunity to attend this event and get in touch with Jack Gritt, president of WiN UK. This with the intention of strengthening ties between chapters for the exchange of information and future activities for women of both countries. The day was composed of different workshops and conferences of great interest focused on leadership issues, role models and inclusion.

Trough the use of different exercises the attendees were invited to reflect on the bias that we sometimes emit both personally and with those around us and how this affects us in the workplace and personally.

IIn solving complex problems workshop, attendants where thought to identify complex problems, what entails them and strategies to address them. It was a pleasure for WiN MX to be able to attend and learn more about the activities of other chapters, as well as share with other Latin American colleagues like Denise Cárdenas from Colombia, who currently works at TRADEBE.



s an Australian living overseas and working in the civil nuclear energy sector, I often get asked "why doesn't Australia have nuclear power plants?". My standard answer mentions our coal, our gas and generalizations about public acceptance of nuclear energy in Australia. The follow-up question is often "but doesn't Australia have a lot of uranium?". "Indeed", I respond, "resource-rich Australia also has the world's largest known uranium reserves (about one third of the global total) and is the third largest producer behind Kazakhstan and Canada. But, no nuclear power."

There are many voices in Australia advocating that nuclear energy should at least be part of the discussion of Australia's energy future. Some of those voices were in the room when I presented to the annual meeting of the Australian Institute of Energy, the Australian Nuclear Association, the Nuclear Engineering Panel of the Sydney Branch of Engineers Australia and the Royal Society of New South Wales (the "Four Societies"). On 25 February 2019, in the Sydney offices of my own former law firm, Allens, I delivered a presentation on "Legal considerations pertaining to nuclear energy as an option for Australia". The focus of the presentation was not "should Australia add nuclear energy to its generation mix" but, rather, "what if?"... What if Australia decided that it wanted to consider nuclear energy as an option for the future or decided affirmatively to build nuclear power plants, then, what would it need to do from a legal perspective? In setting out the relevant international nuclear treaties and conventions, it is clear that Australia has excellent international nuclear credentials in the areas of nuclear non-proliferation and nuclear security, in particular.

Australia has also implemented international treaty commitments in national law. But, most of Australia's existing domestic law and regulatory regime relates to the activities of export of uranium and operation of its nuclear research reactor, the OPAL reactor at Lucas Heights in Sydney. As an initial roadblock, two Federal laws currently prohibit the construction of nuclear power plants in Australia. So, should Australia wish to develop nuclear power plants in the future, existing prohibitions would need to be removed and a comprehensive legal and regulatory framework covering the nuclear and radiation safety regime would need to be established. The second part of my presentation focused on the commercial side and the challenges faced by developing viable commercial largest challenge for Australia - for nuclear structures and financing schemes for new nuclear policy development and implementation. power plant projects in today's market. I reviewed · the status of current projects, in both newcomer nuclear countries and established nuclear markets, and discussed many of the "lessons learned", all of which should be carefully considered for any future nuclear new build in Australia.

I concluded with the following comments:

- **Timing:** A decision to build nuclear power plants is not an overnight decision or outcome the International Atomic Energy Agency says it takes 10-15 years to develop a nuclear power programme. The United Arab Emirates established a new model (but it won't be a model for all countries).
- Legal/regulatory framework: The legal and regulatory framework is complex but Australia has existing legal and regulatory foundations.
- Nuclear liability: Treaty and national law in the area of third party liability for nuclear damage will be required.
- **Leadership:** It will be important that Australian global leadership continues in nuclear security and nuclear non-proliferation.

- **Technology:** Timing is an important factor in technology availability - there are large, small and advanced options, but not all are ready today for commercial deployment.
- Preparation: Preparation prior to procurement/contracting is essential for timely delivery and appropriate risk allocation.
- Lessons learned: There are many, many lessons to be learned.
- Human resources: Experienced resources cannot be created overnight short-term hires and long-term local planning needed.
- Public acceptance: May be the single
- Government policy: Strong and clear government policy would be required. A nuclear power programme is a 100+ year commitment and needs a "whole-ofgovernment" approach.
- **Government role:** Must have clarity on the Government's role in the nuclear power programme. That role can take many forms, but clarity is key.
- Foundations: Australia has excellent nuclear credentials and a strong foundation on which to build a nuclear power programme, should such a decision be made.



rther inquires, please email elen.Cook@gneadvisory.com

## 27TH WIN GLOBAL CONFERENCE



#### WWW.WINGLOBALMADRID2019.ORG

Be part of the annual Women in Nuclear Global conference

The deadline for receipt of abstracts to receive support from the IAEA is March 22, 2019

#### OUTSTANDING WOMEN



#### Patricia Wieland.

Brazilian WiNner and chapter founder Patricia Wieland a joined the Cambridge Judge Business School celebration, whose theme this year of 2019 was "Balance for Better". Professor Sucheta Nadkarni, Director of the Wo+Men's Leadership Centre (WLC) at Cambridge Judge Business School, shared results from her latest research on why and when gender diversity matters most in firm performance and chaired a guest panel on Building Balance. It's great to see Brazilian WiNners marking presence and representing the national chapter all over the world!



#### Karen Hallberg.

Was awarded with by the L'Oréal-UNESCO For Women in Science Award, for her development of cutting-edge computational approaches that allow scientists to understand the physics of quantum matter. Karen has a PhD in Physics, she is head of the Department of Condensed Matter of the Physics Management of Bariloche Atomic Center, and she is in charge of research groups and students at the Balseiro Institute.



#### Natalia Campos Rivera.

Mexican PhD student and uses the use of radioactive elements in medicine to design a machine that uses the energy of radiation to mark altered areas of the brain. This can be used in the diagnosis and treatment of diseases.



#### Luz María Moya Rodríguez

Born in the province of Limón, she has more than 13 publications on topics such as Sensitivity in X-ray Fluorescence, multi-elemental analysis by computerized processes in X-ray Fluorescence and with this same technique, the elaboration of analysis of elements in trace of coffee samples. In addition, she has produced documents that allow the incorporation of elementary subjects of physics in university and secondary education.



#### Paola Tello

Colombian Physics graduate, working in England using an X-ray scanner and other equipment to describe rocks. In 2017, she was selected in the Australian Homeward Bound program for the largest expedition of women scientists to Antarctica.

#### **NOTICIAS RÁPIDAS**

#### Bolivia goes strong

The Nuclear Medicine Institute, which is being built in El Alto province, is 30% complete in terms of physical infrastructure and it is expected that by the last quarter of this year the work will not only be completed, but will start operations.

This was stated today by the director of the Bolivian Nuclear Energy Agency (ABEN), Hortensia Jiménez, during a progress inspection of works that was carried out with the president of the Health and Education Commission of the Chamber of Deputies, Franklin Flores, deputies Toribia Pomacusi and Cristina Choque, leaders of the Federation of Neighborhood Juntas (Fejuve) of that city, neighborhood leaders of District 8, as well as some media.

## CNEA Argentina becomes a Collaborative Center of the IAEA in Latin America

The International Atomic Energy Agency (IAEA) granted the National Commission of Atomic Energy of Argentina (CNEA) the recognition as an IAEA Collaborative Center. In this way, a joint work plan was established for the next four years (2019-2022) with the objective of providing assistance to other countries in the region and the world.

Based on the agreement with the CNEA, assistance will be provided from Argentina to other countries in the region and the world, specifically in the areas of nuclear power, fuel cycle, nuclear sciences, nuclear techniques for development and environmental protection. CNEA will carry out the activities included in the framework of this work program of the Collaborative Center through its Institutes: Balseiro, Sabato and Dan Beninson.

#### PROFESSIONAL TRAINING

IEEE Women in Engineering Argentina organized a free day open to the community in the framework of International Women's Day. The event took place on Saturday, March 9, from 2:00 pm to 8:00 pm. at the postgraduate campus of the University of La Matanza, located at Moreno Street 1623, area of the National Congress.

The conference was composed of various talks / workshops, where the aim was to make visible, support and empower women who work in STEM, so that from their professions they can use scientific and technological resources to create proposals with added value, and thus solve the problems in a framework of diversity and teamwork.



### The Subregional Course in Nuclear Knowledge Management in Costa Rica was successfully completed

Between December 3 and 7, 2018, the "First Subregional Course on Nuclear Knowledge Management" was held for the Central American and Caribbean region, based in Heredia, Costa Rica. This activity was sponsored by the International Atomic Energy Agency (IAEA) through the Regional Technical Cooperation Project RLA0057, and by LANENT. Locally, the organization was in charge of the Physics Department of the National University (UNA) and the Atomic Energy Commission of Costa Rica (CEA).

The event gathered 22 participants from seven countries of the subregion and experts from Costa Rica, Spain, Brazil and Argentina for five days. It is important to highlight that on this occasion, 50% of the participants, and more than 60% of the experts, were women, which continues to support the development of professional women in the nuclear sector in this area.





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