



WINTER 2018-19 | ISSUE NO. 17

IYNC BULLETIN

INTERNATIONAL YOUTH NUCLEAR CONGRESS



IYNC2020
SYDNEY

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INTERNATIONAL YOUTH NUCLEAR CONGRESS

8 - 13 MARCH 2020

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8-13 MARCH
IYNC 2020

INNOVATION FOR NUCLEAR NEVER STOPS

MILLENIAL NUCLEAR CAUCUS

ENHANCING AFRICA'S CAPACITY ON NUCLEAR SAFETY,
SECURITY AND SAFEGUARDS

Welcome Message from IYNC President



Dear IYNC community,
Dear Climate Heroes,

As 2018 came to an end and the network of young professionals at the International Youth Nuclear Congress moved into 2019, I believe we have a good opportunity to look back at a very successful year for our international organization.

In March, our IYNCWIN18 Congress was a true success with more than 400 participants from 37 countries. Young professionals, senior leaders and mentors all came together for an unforgettable week-long event in beautiful San Carlos de Bariloche, Argentina. The conference was splendidly co-organized with WIN Global, WIN Argentina and Argentina YGN. The conference was the biggest nuclear event in South America and it was supported by the most prominent companies and organizations of the nuclear industry, posing the IYNC biennial event as a must attend.

In May, we had the honour to moderate the kick-off event of an important initiative at the Clean Energy Ministerial - the Nuclear Innovation: Clean Energy Future (NICE Future). As we move forward, we continue to cooperate with this initiative in various parts of the world reaching outside of the nuclear industry, establishing platforms with all the clean energy sources where a more inclusive dialogue around a clean energy future can occur.

June was the time of the World Nuclear Exhibition in Paris with IYNC receiving a prestigious award from WIN for a successful and well organized IYNCWIN18. During the same week, IYNC happily participated in and supported the final stage of the innovation contests: Spark and Innovatome, which form part of the first edition of Innovation4Nuclear (I4N). I4N enabled several teams of young professionals and students across the world to discuss and evaluate their innovative ideas / projects in front of an international jury and audience.

August and September were months full of important activities. We witnessed the formation of the first Rosatom Youth Council (RYC) after a week-long conference in St. Petersburg with 700 young professionals coming from every part of Russia. As one of the major companies in the nuclear sector, Rosatom strongly supports the young professionals and IYNC is very happy to partner with RYC.

In September, we focused our energy on the IAEA General Conference with a large delegation, many meetings and network opportunities. Most importantly, we co-organized and moderated a side event together with the UAE Permanent Mission to the IAEA on the role of young professionals in the future of nuclear energy, which was very well received and I would like to congratulate all the parties and people involved.

In the same month, IYNC and the Africa YGN teamed up for the first innovation contest I4N-AYGN as part of the I4N 2020 cycle. This continental contest will run in 2019 with different regional phases and a final one. The winner will have the opportunity to attend IYNC2020 in Sydney, Australia. I am really looking forward to hearing all the incredible ideas!

Over the last months and weeks of 2018, we have seen IYNC take part in numerous events in many parts of the world. While co-hosting a Millennial Nuclear Caucus in Tokyo (at the margins of the IF-NEC meeting), a large delegation from IYNC and IYNC2018 participated in the Nuclear Youth Summit and Festival in Indonesia and the Philippines.

Last but not least, in December, we attended COP24 as part of the Nuclear4Climate initiative in order to highlight the role of nuclear as part of the solution to combat climate change.

Finally, I cannot wait to see what 2019 will bring. We have already a number of events confirmed for the first half of the year in the IYNC calendar. One will be the IYNC midterm Board of Directors meeting in Abu Dhabi, UAE. The the IYNC annual meeting will follow to review the activities of the organization with members coming from all around the world. The Clean Energy Ministerial 2019 (CEM10) in Canada will be an important event to reinforce the message of a balanced energy mix and also to engage the broader energy community. This event is preceded by a series of workshops that IYNC is developing and running in collaboration with the NRC and different local YGNs in preparation for CEM10 and ENYGF2019; the biennial gathering of the European YGN under the theme of "Nuclear for Health" being held in Belgium.

Together, we continue writing the IYNC success story and this would not possible without the many volunteers and the Young Generation Networks, all committed to and passionate about youth, the future, and nuclear energy.

Thank you to everyone of you from the IYNC Officers team and myself.

Luca Capriotti,
IYNC President 2018-2020

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IYNC Bulletin #17

Editor-in-chief

Alina Constantin

Editor

Lubomir Mitev

www.iync.org

IYNC 2018 - 2020 Network Officers

Luca Capriotti President

Luca Capriotti has a master degree, with honors, in Nuclear Engineering at the Politecnico di Milano, Italy. Until early 2016 he worked, as a grantholder, at JRC-Karlsruhe (European Commission, Germany) on the topic of post irradiation examination of fast reactor metallic fuel for transmutation. He is affiliated as PhD student at TU-München. From April 2016, he is working as nuclear fuel engineer at Idaho National Laboratory in the division of Advance Characterization & Post Irradiation Examination with particular involvement in the Advance Fuel Campaign. Luca is passionate about energy & policy, building a strong network and young professional organization / societies in which he fulfills different leadership role such as Vice President at International Youth Nuclear Congress (IYNC, 2016-2018) and Local Chapter Leader at NAYGN (Idaho Chapter). He is IYNC President for the 2018-2020 term.



Lena Andriolo Vice President

Lena Andriolo is a research engineer in EDF, France, her activities being related to severe accidents simulations for light water reactors and fast reactors. She has a PhD from the Université Grenoble Alpes on the Impact of innovative spheropac fuels on safety performance of sodium cooled fast reactors. She was the IYNCWIN18 Program Chair and IYNC16 Workshop Chair. Now she will support even more IYNC being elected the IYNC Vice President.



James Hardiman Executive Secretary

James completed his Engineering degree (Industrial Chemistry) at the University of New South Wales in Australia. James joined the Australian Nuclear Science and Technology Organisation (ANSTO) in 2011 as a graduate engineer and has worked on a number of key projects including the Synroc waste treatment facility and the National Radioactive Waste Management project aimed at siting a national waste management facility for Australia. James has recently completed a diploma of Project Management and now manages a team of 20 professionals in his role as Leader of Waste Operations at ANSTO. James has developed a strong passion for knowledge transfer since attending his first IYNC in Burgos, 2014. James is an advocate for student development and also holds the role of Dean of Basser College at the University of New South Wales where he focuses on student leadership.



Denis Janin

Past President

Denis is nuclear engineer at E.ON since 2011. He was responsible for core design and safety analysis activities for the NPP Grafenhreinfeld until 2015. He then joined the department of energy economics at PreussenElektra, the nuclear subsidiary of E.ON, where he is in charge of assets optimization, energy systems simulation and power hedging. Denis Janin is involved in the French Nuclear Society Young Generation (SFEN-JG) activities since 2010. He has held various roles and responsibilities within the SFEN-JG but also at the European (ENS-YGN) and international (IYNC) level.



Steven Ward

Treasurer

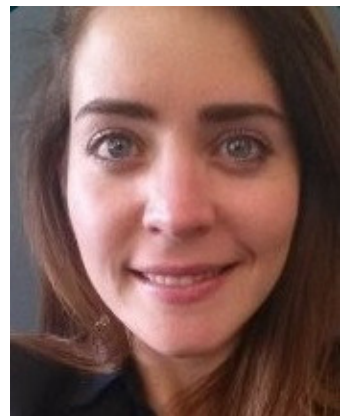
Steve Ward has been a leader in various professional societies since 2008, including Institute of Nuclear Materials Management, American Nuclear Society, North American Young Generation in Nuclear (NAYGN), and IYNC. Steve most recently served as Treasurer for NAYGN's Board of Directors. Steve has a Masters degree in Nuclear Engineering from the University of Michigan in the US. Steve's career includes work in IAEA safeguards, nuclear material accountancy and control, security, licensing, and regulatory inspections. Steve has worked for the US Nuclear Regulatory Commission, Entergy Operations at Grand Gulf Nuclear Station, DTE Energy at Fermi Nuclear Power Plant, ENERCON Services Abu Dhabi, and Nawah Energy. He currently works as a Team Leader on regulatory issues for the Barakah Nuclear Power Plant in the UAE. Steve also works as an advisor to several start-up companies around the world and loves Lean Six Sigma



Fabricia Pineiro

External Relation Chair

Fabricia Pineiro is Marketing, Strategy and External Relations Manager in SNC-Lavalin. She is involved in market research and analysis for nuclear engineering services, new build and decommissioning and waste management, engagement of nuclear industry organizations and participation in joint initiatives for the promotion of CANDU reactor technology. She supports international nuclear business development activities and strategy and conducts communications strategy and delivery for nuclear stakeholders engagement. She actively supported past editions of IYNC, being the Publication Chair for IYNCWIN18 and now she took the position of External Relations Chair. She is also the program coordinator for seminars, workshops and other initiatives for the Canadian Nuclear Society (CNS).



Jing Hu

Strategy & Impact Chair

Jing recently got her doctor degree in Materials Science from University of Oxford where she worked in an international consortium on how to design better and safer nuclear fuel cladding alloys with Westinghouse and EDF. She later joined the IAEA working in the Fuel Cycle and Materials section, using her scientific background to promote nuclear knowledge across different member states. She has been working for IYNC since 2015, first as the Communication Chair for IYNC2016 in Hangzhou, China, Executive Secretary for IYNC 2016–2018 and now Strategy & Impact Chair. She now lives in Chicago and works at Argonne National Laboratory, Nuclear Engineering Division.



Lubomir Mitev

Communication Chair

Lubomir Mitev has been working as a Strategic Communications Specialist at the Emirates Nuclear Energy Corporation since May 2016. Prior to this, he was a Communications Manager at the European Atomic Forum (Foratom) in Brussels, and supporting the European Nuclear Society (ENS). His previous experience includes being a journalist for a number of publications, mainly on energy and environmental topics. Lubomir holds a BA in Philosophy, as well as an MA in European Studies and an MSc in European Politics and Policies. He has been engaged with IYNC since 2014



Everlyne Achieng Onyango

Innovation Chair

Everlyne Achieng' is the Co-Founder of Uthabiti App and a finalist doctor-on-training particularly interested in health policies and leadership. She has a passion for Nuclear Medicine. This is a field that uses radionuclides for diagnosis and treatment of cancer. Data from Ministry of Health shows that cancer is the number one cause of mortality in Kenya, having surpassed Malaria. She is the Innovation Chair for International Youth Nuclear Congress. Through collaboration with African Young Generation In Nuclear, Everlyne promotes nuclear innovation especially among people in High Schools and Universities.



Myra Liyana Razali IYNC Grant and YGN Diversity

Graduated with a Bachelor of Human Sciences in English Language and Literature from the International Islamic University Malaysia (UIA) in 2006, her foray into nuclear energy started in 2007 when she joined the Malaysian Nuclear Agency as a Publication Officer.

At present, as the Corporate and Strategic Communications Manager at the Malaysia Nuclear Power Corporation (MNPC), she is responsible for stakeholder engagement and corporate communications for the nuclear power programme development in Malaysia. She is a passionate advocate of inclusive, effective youth and women empowerment, as well as building positive relationships between youth and women, albeit differing backgrounds and generations.



Kristine Madden Project Chair (Climate Change)

Kristine Madden has a bachelors of science in Nuclear Engineering and Radiological Sciences from the University of Michigan, Ann Arbor, USA and is currently completing her Masters in International Service at American University, Washington D.C., USA. Kristine began her career as a nuclear engineer and senior reactor operator at USA based utilities before moving to Ukraine, where she led the pre-commissioning and commissioning of the Chernobyl ISF-2 project. Kristine has worked at the IAEA in Vienna, Austria for the past three years. Kristine has been a part of the IYNC Board of Directors since 2010. For the last three years, she has led IYNC activities related to climate change and assisted IYNC in developing numerous international partnerships. Kristine is an avid reader and traveler. She's explored 39 countries thus far.



Alexander Gladtsin Web Chair

Alexander works as a system administrator and security engineer at the National Research Nuclear University «MEPhI» in Moscow. He graduated from the faculty of «Nuclear systems and materials» and has a Diploma in Nondestructive Control. After graduation, he continued to work in the Laboratory of Non-destructive Control as a design engineer. His field of interest includes a data acquisition and processing systems, non-destructive controls, ARM-based telemetry and automation systems, Linux-like operating systems. In his free time he goes hunting, exercises with a barbell, archery among other activities.





IYNC Network News

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IYNC and the UAE Discuss the Way Forward for Global Nuclear Energy at IAEA General Conference

- *The International Youth Nuclear Congress and the UAE Permanent Representation to the International Atomic Energy Agency co-hosted a side-event at the 62nd IAEA General Conference in Vienna, Austria*
- *Young professionals from the UAE, USA, China, Russia and France shared their views on the future of nuclear energy and technology*

The International Youth Nuclear Congress (IYNC) and the United Arab Emirates (UAE) Permanent Representation to the International Atomic Energy Agency (IAEA) facilitated a discussion on the role of young people in the future of the nuclear industry with representatives from around the globe. On 20 September 2018, the two organizations co-hosted a side-event at the 62nd IAEA General Conference today, with opening remarks from Ambassador Hamad AlKaabi, Permanent Representative of the UAE to the IAEA.

Seeking an answer to the question "How are young professionals shaping the future of nuclear power?", the side-event panel discussion demonstrated that the investment in advanced nuclear reactor technologies requires an influx of young minds which also sets the stage for future innovations in the industry. With global challenges such as climate change, nuclear security and safeguards, the panel concluded that young, highly-skilled and qualified human resources are needed to continue tackling these issues.



"Since the launch of the UAE Peaceful Nuclear Energy Program in 2008, we have invested in education and training to ensure that we have the people we need to build and operate the four nuclear reactors at the Barakah Nuclear Energy Plant," said Ambassador Hamad AlKaabi, Permanent Representative of the UAE to the IAEA. "Once fully operational, the Barakah plant will supply about 25 percent of the UAE's electricity."

"Nuclear science and technology is a global industry that provides millions of people with highly-skilled jobs, contributing significantly to the knowledge-based economy," commented Luca Capriotti, IYNC President. "The IYNC, as a global network of young professionals, acts as a platform for sharing knowledge and experience across disciplines and national borders. Tackling global challenges such as climate change, food security, and nuclear non-proliferation requires international efforts and young professionals in the industry are committed to addressing these issues".

In February 2018, the IYNC and the IAEA signed an agreement for joint work in various outreach activities related to climate change, innovation and knowledge transfer in nuclear technologies. IYNC has been an observer at the IAEA General Conference since 2013.

The IAEA General Conference meets annually to consider and approve the Agency's Program and decide on other matters brought before it. This year marks the 62nd edition of the Conference's Annual Regular Session.

IYNC participating in "Progressing towards the Sustainable Development Goals (SDGs) with Nuclear Energy", a side event at the IAEA General Conference 2018

Every year during the exciting week of the IAEA General Conference many parallel events are held at the side of the main diplomatic plenary session.

This year IYNC was delighted to take part in the side event organized by Friends of Nuclear Energy (FONE) entitled *"Progressing towards the Sustainable Development Goals (SDGs) with Nuclear Energy"*. The FONE event was organized in two main parts. The first half hour was dedicated to discussing the environmental advantages of nuclear energy and then the Nuclear Innovation: Clean Energy Future (NICE Future) initiative was presented. This session benefited by the presence of Ms. Suzie Jawarowski (USA), Senior Advisor in the Office of Nuclear Energy, Department of Energy, and Mr. Christopher Evans (Canada), Deputy Director of Strategy Policy in the Nuclear Energy Division, Natural Resources.

In the second half of the program many countries showcased their experiences with SDGs and nuclear energy with technological and socio-economic considerations, from the very interesting experience of a local French mayor and the benefits that nuclear power plants bring to the local communities to complimentary uses of nuclear energy to produce heat in China. There was also a panoramic of the SDGs roadmap and implementation from India delegate and the UK perspective to achieve SDGs with deploying Small Modular Reactor (SMRs). Finally, a ROSATOM point of view of the benefits of nuclear energy to mitigate the climate change in Russia closed the round of presentations.

YINC had the honor to represent and present the voice and ideas of the next generation of professionals in the nuclear sector. The young generation of professionals are environmentalists that care about the future of our planet and support all the low carbon energy sources in a balanced mix.

The young generation in nuclear is working together as part of a large low carbon platform (e.g., Nuclear for Climate, IGOs, NGOs, IAEA member states, etc.) in collaboration with key climate change stakeholders, developing partnerships and organizing events such as YOUNGO, the UNFCCC youth organization.

YINC has partnered from the beginning with NICE future supporting and recognizing the value that nuclear energy can play in mitigating climate change. The young generation is up to the challenges in the climate arena, and with the NICE partners, we have developed a series of workshops with the aim to develop joint messages with other clean energy associations to promote a balanced energy mix and innovative approaches to communicate key messages on clean energy.



IYNC co-hosting the Millennial Nuclear Caucus "Innovation and Jobs in Clean Energy"

On October 13th, International Youth Nuclear Congress (IYNC) co-hosted the Millennial Nuclear Caucus "Innovation and Jobs in Clean Energy" in Tokyo, Japan, together with the U.S. Department of Energy (DOE) and the NICE Future initiative under the Clean Energy Ministerial. Japanese young generation in nuclear (YGN) supported this event on behalf of IYNC attracting more than one hundred participants.

Millennial Nuclear Caucus is a series of events, launched by the U.S. DOE, that bring together the next generation of leaders in nuclear innovation. This was the first caucus organized outside of the U.S. with local support from the Tokyo Institute of Technology (Tokyo Tech), the Ministry of Education, Culture, Sports, Science and Technology (MEXT), the Ministry of Economy, Trade and Industry (METI) of Japan, and the Japan Atomic Energy Agency (JAEA).



Following a networking session at the beginning of the caucus, representatives of local organizations delivered a welcome address. Professor Kenji Takeshita; Director of the Laboratory for Advanced Nuclear Energy (LANE) of Tokyo Tech, described how LANE contributes to nuclear education and Mr. Takashi Kiyoura; Director of the Atomic Energy Division of MEXT, explained Japan's policy and programs for nuclear research and education. Mr. Yuta Tonegawa; Deputy Director of the Office for Nuclear Technology and Human Resources of METI, described the overall energy policy and the role of nuclear energy in Japan.

Mr. William Magwood; Director-General of the OECD/NEA and the keynote speaker of the caucus, kicked off the discussion by sharing his observations, beliefs, and highlighted challenges faced by the industry. Because energy is crucial for mankind and the use of energy continues to expand, he firmly believes that nuclear, and the new generation of reactors particularly, will have a large role to play in the future uncertainties of energy. He highlighted innovation as one of the key challenges of the industry, encouraging the audience to teach young people about nuclear energy and its advantages and become an advocate on nuclear issues to ensure a future for the nuclear energy industry.

At the following panel session, moderated by Ms. Suzanne Jaworowski; Senior Adviser of the DOE's Office of Nuclear Energy, young professionals from Tokyo Tech, JAEA, Hitachi-GE Nuclear Energy, and the Idaho National Laboratory shared their experiences in the nuclear field and discussed a variety of issues such as advanced reactors, waste management, and human resource development.

Innovation for Nuclear never stops



The first edition of Innovation for Nuclear (I4N) ended at IYNC2018 in Bariloche, Argentina, with the final contest and the winner announcement (see <https://www.iync.org/finalist-i4n-competition-at-iyncwin18/>). At IYNC, innovation never stops and we also never stop supporting our partner YGNs around the world. So, we are excited to continue the I4N initiative and to support innovation and new technology solutions for sustainable development.

While we wait for the 2nd edition of I4N to launch, IYNC has been supporting Innovatome, Spark!, and the ANS Student Conference. We are happy to share with you their ideas and their experience in these contest.

The ANS Student Conference took place in April 2018 at the University of Florida (Gainesville, USA) and saw three groups of young professionals being awarded:

- (1) The **Fusioneers team from Texas A&M Kingsville**, with their project on Fusion-based Neutron Source called "*Neutrons at the Flick of a Switch*". A portable, market-competitive, miniature neutron-testing apparatus which utilizes Deuterium gas to fuel a D-D fusion reaction induced by high-temperature plasma. Such a reaction allows for the generation of neutrons, that can then be utilized for a wide array of applications including material composition analysis via neutron scattering, tomography, petroleum well logging, and radioisotope production.

The team believes that their neutron source allows for safe, inexpensive, modular, and semi-mobile neutron testing capabilities.

They describe their experience in the contest: "It was a great experience for us. We had to "pitch" our idea to them (business-style) in 5 minutes, and we had to explain its feasibility, its desirability, and its viability. We were also able to advance our designs because of the feedback we received from the judges and the audience, and were given a lot of valuable insights. This experience gave us an insight about how the nuclear industry is advancing, and the major problems we are facing across the industry. It is a valuable experience from which we learned a lot. It definitely reinforced and strengthened our interests and passions for the industry, and the entire nuclear science field as a whole."

- (2) **Kyle E. Brumback from Oregon State University** presented their innovative idea of "*Enhancing Geothermal Resources with Spent Nuclear Fuel*". Kyle was unavailable to be interviewed but we are sure he had an amazing experience.

- (3) Gerrit Bruhaug, Samuel D'Amico, Jacob Lehmer from Idaho State University were awarded for their proposal for "Magnetically Shielded IEC Neutron Generators". While neutron radiation is used all across the world for materials analysis, cancer treatments, isotope production, and various nuclear physics experiments. The team highlighted the current limitations of these methods (large size, expenses, and in some instances, the use of expensive, and rare, radioisotopes).

They proposed an alternative with their nuclear fusion device. The team highlight that *"Our group has become the first to ever test the concept of a magnetically shielded IEC neutron generator, and we are currently in the process of testing this concept. The economic value in IEC neutron generators is obvious when compared to other neutron sources. They have lower costs for maintenance and fuel, along with a longer lifespan. Their prototype under construction and testing at Idaho State University has been built at an incredibly low cost and commercial construction of an IEC neutron generator will be at a competitive level for the current industry."* Speaking about their experience, the team greatly enjoyed the contest and the conference and are all looking forward to their next conference.

The second contest supported by IYNC was the Innovatome contest which took place in two steps. First in March, around twelve teams - half of them in Paris, the other half in Lyon - had to figure out their idea for the contest. After several presentations on challenges the nuclear industry has to address, as well as on solutions that were brought in from other industries, the teams held brainstorming sessions with an innovation coach. At the end of the sessions, they had to pitch their idea to a jury of experts from the nuclear sector in France. As a result, four of the teams were selected to continue - two in Paris and two in Lyon.

Second, from April to June, the teams had to work on their ideas from the technical and business aspects, and at the end of June, each team presented their idea in front of a jury of senior directors in France. The Framatome team composed of Stanislas Quere, Guillaume Rondeau, and Julien Gardiol with their Arobase robot was selected as the winner.

The Arobase (Automated RObot with Assisted Shaving Execution) is a robot that can be used to automatize shaving operations of concrete and thus limit dust inhalation by operators. Moreover it will improve the efficiency of decommissioning by shortening the length of dismantling activities and can reduce the quantity of very low level waste produced during these operations.

The team described their experience as rewarding and insightful. *"Innovatome is a great occasion to meet people interested or involved in the nuclear industry, to learn innovation methods and to put them into practice."* They believe that Innovation *"is one of the keys of nuclear power, it increases safety, security and performance. I learned that there is always an innovation to discover, whatever the field and its maturity."*

And finally, IYNC also supported the Spark! contests. The aim of Spark! is to unite the leaders of today's energy industry with those of tomorrow. Each year, up to 45 brilliant young men and women (15 teams of 2-3 people) compete to take home The Spark! Contest crown. Each team must write 5000 words (10 pages) focusing on various technical, commercial and geopolitical aspects to voice a sound argument to underwrite their proposal.

In 2017-18, the contest asked the question "*The Energy Transition: What is the role of nuclear technology in a world of growing alternative power and digital technology?*". It challenged participants to think about the next 20 to 30 years of nuclear power, and how it could play a role in the Energy Transition. Antonio VAYÁ SOLER Supélec won this edition. "*My first feeling when I arrived at the British Embassy was that I was being part of something big and quite unique. The fact of being surrounded by young talent and the best senior professionals in the sector just gave me more motivation to develop my ideas. The Spark! Contest is the perfect platform to enlarge your network, share ideas and make them grow, and, most important of all: with the best. Looking back, it was also a good opportunity to develop new skills and to test myself. I must admit that pitching about the paper was a challenging but fruitful experience*".

IYNC is happy to support the youth in the development of their innovative ideas that will shape the future of nuclear technology. We cannot wait to see the fantastic ideas from our upcoming I4N contest. Stay tuned for more innovation!



Africa Young Generation in Nuclear Organizes Innovation4Nuclear Contest

The AYGN I4N is the first ever nuclear contest to be organized by AYGN in partnership with IYNC. For a long time now Africans have participated in competitions that were not tailored to their needs and the challenges they face on a daily basis. Many high school and university students are excited about this competition that came right to their doorstep and are up for the challenge. It is important for Africans themselves to come up with innovative and sustainable solutions for the issues they face instead of implementing projects that were tried in the western worlds.

Through the I4Ncontest, we hope to nurture and mentor the participants into future nuclear scientists and professionals. We would also like to encourage many young girls to submit their projects as part of the AYGN agenda of promoting and encouraging women to pursue STEM careers.

We are glad that partners like IYNC and Rosatom are already on board and are willing to work closely with AYGN in order to promote nuclear activities in the region especially on matters like health, education, agriculture and energy which the region struggles with from decade to decade.

YGN News



Argentina Elects New Youth Nuclear Generation President

In September 2018, the Argentinean Youth Nuclear Generation (AYNG) held an Extraordinary General Assembly with the objective of electing a new President.

The President-elect is Juan Pablo Gómez Omil, a graduate of the Balseiro Institute, who currently works in the Nuclear Department of TECNA. He will lead AYNG for a term of two years.

Juan Pablo, born in the Argentinean province of Tucumán, is a nuclear engineer with an MBA from the Universidad Torcuato Di Tella. He is one of the founding partners of the AYNG and member of the Board of Directors. Additionally, he was a member of the Executive Committee that organized this year, the International Youth Nuclear Congress and Women in Nuclear Joint conference (IYNCWIN18), in the city of San Carlos de Bariloche, Argentina.

During the election process, the Board of Directors highlighted both the professional and academic experience of Juan Pablo to develop and carry out projects of great importance as well as their commitment to the Association since its foundation.

"Cristian Vega (immediate Past President) has been a great promoter of the AYNG and of all the projects we have carried out so far. My mission is to continue the work of institutionally strengthening the Association and look for new areas of collaboration with other organizations to bring more young people to the team. Although the challenges that lie ahead are highly demanding, we have an extremely capable and qualified team that has already demonstrated what it takes to develop projects working side by side," remarked Juan Pablo after ratifying the commitment of the entire Board of Directors.

Finally, the AYNG takes the opportunity to congratulate Cristian Vega for the hard work during two years of intense dedication and extend the commitment to continue working based on the collective effort and the institutional consolidation.



Enhancing Africa's Capacity On Nuclear Safety, Security And Safeguards

The African Young Generation in Nuclear (African YGN) marked yet another successful conference at the Mulungushi Conference Center in Lusaka, Zambia from 29 to 31 August 2018. The conference on Enhancing Africa's capacity on Nuclear Safety, Security and Safeguards in SADC countries saw over 100 participants from various African countries including Kenya, Tanzania, South Africa, Malawi, Democratic Republic of Congo (DRC), Ghana and the host country, Zambia. The event was a collaborative activity under the project MC. 5.01/15B: Support to Southern African States in Nuclear Safety and Safeguards, funded by the European Union through International Science and Technology Center (ISTC).

The Zambian government played the perfect host as well as the implementers of the project through its Radiation Protection Authority and the Nuclear Programme Implementing Organization (NEPIO) with close support from Southern African National Nuclear Regulatory body as project implementing partners. The activity was aimed at creating public awareness on matters such as nuclear safety, security and safeguards in SADC countries and Africa at large as well as designing a roadmap for building sustainable nuclear safety regimes in the project participating countries - Namibia, Zambia, Malawi and Tanzania. The event also provided a platform to spread the word on the peaceful uses of nuclear science and technology in Africa and highlighted the progress made by Zambian government in making nuclear part of its strategy to address challenges facing the Zambian people.



African YGN presented the idea on Innovation for Nuclear (I4N) as one of the main activities of the International Youth Nuclear Congress (IYNC) to promote innovation among young people all over the world. It was well supported and various organizations shared it across their websites and social media pages.

The last day of the event was dedicated to a Rosatom-sponsored activity that targeted 100 students from the local top performing high schools with the aim to familiarize them on Science, Technology, Engineer & mathematics (STEM) careers and the role of nuclear science and technology in national development. The students were curious and delighted about milestones realized by the Zambian government in pursuit of peaceful uses of nuclear science and technology, creating education opportunities for young people both locally and overseas. The students were also excited with the I4N idea and showed their interest to participate in the student competition. The representatives from Rosatom Africa, Mr Ryan Collyer, hinted their commitment to partner with Africa YGN to sponsor the I4N 2019.

To bolster the AYGN efforts, a Zambian YGN was officially launched as a national network for which the government announced full support.

The 3-day event culminated in technical tours and the inaugural Nuclear Walk. The participants in technical tour visited the Zambia Cancer Diseases Hospital in the morning and had the opportunity to observe a state-of-the-art facility that has brought hope to cancer patients in Zambia and the SADC region at large. The 5km Nuclear Walk within the city was marked in the afternoon and it drew a lot of attention from the public. Participants in the walk distributed pamphlets, brochures and books on nuclear in order to enlighten the public with this wonderful message of benefits of nuclear technology. The message was well accepted with some of the local citizens joining the walk that was well secured by the traffic police to win the confidence of the public.

First Inaugural Nuclear Walk in Zambia

Group meeting for Women in Nuclear



From San Carlos de Bariloche to Saint Petersburg

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In March 11-17th 2018 in Bariloche, Argentina an international meeting of young generations from all around the world took place at IYNC2018. Young professionals had the opportunity to talk about their research and communicate with colleagues around the world.

It was the first time in IYNC history when the delegation from Russia (State Atomic Energy Corporation ROSATOM) was represented by 19 members.

They were young scientists and specialists from different divisions and companies, that already had various experiences in scientific research, projects and organizational activities. Many of them presented reports during IYNC2018.



Group Photo at the IYNC2018, Bariloche

It was an excellent experience for all participants. They learned how to cooperate and collaborate internationally.

During the three-days of 14-16th May 2018, Cristian A. Vega, the Past President of Argentine Youth Nuclear Generation, the participants of Russian delegation IYNC2018, employees of the nuclear industry and students from nuclear area universities (TEMP 2018) met in Sochi, Russia on the Anniversary X International Forum ATOMEXPO 2018. At the end of the meeting, it was announced that this year ROSATOM will host a large-scale event (ROSATOM Youth Congress) for the first time, at which all modern challenges of the nuclear industry would be discussed.



First ROSATOM Youth Congress 2018, Saint-Petersburg

In August 26–30th 2018 in St. Petersburg, Russia about 700 companies from 7 divisions of atomic industry attended the First ROSATOM Youth Congress. The leadership of State Corporation ROSATOM took part in all the events of the Congress.

Luca Capriotti, the IYNC2020 General Co-chair and IYNC President took part in an international plenary session. He organized specifically for the Congress participants to talk about IYNC, about international cooperation of young scientists and the opportunity to communicate "without Borders".



Group Photo at the ROSATOM Youth Congress 2018, Saint-Petersburg

"That's great that there is an event in ROSATOM that can gather so many young scientists and experts to exchange best practices" said the IYNC2020 General Co-chair and IYNC President, Luca Capriotti.

He also participated in other sessions at the Congress and gave his views on the current challenges in the nuclear industry.

The international plenary session was attended by Nathan Peterson, organizer of European Nuclear Youth Generation Forum, who works at Rolls-Royce Company. Nathan shared with Congress participants his experience of developing young scientists, as well as which opportunities and prospects are found in Europe. As a foreign speaker, Nathan had the opportunity to provide his presentation on several fronts throughout the congress.



European Nuclear Youth Generation Forum President Nathan Peterson

Riccardo Chiarelli, Chair of the World Association of Nuclear Operators (WANO) presented several reports about current trends in the development of nuclear energy. Congress participants had a unique opportunity to talk with IYNC representatives and asked some questions about current trends in nuclear energy. It is very important for future development of nuclear industry in Russia.

At the congress, Luca Capriotti, the General Co-chair and IYNC President, and Vladislav Shcherbina, ROSATOM Youth Council President signed an agreement on cooperation.

It was a really long journey from St. Carlos de Bariloche to Sochi and then to St. Petersburg. But we did it all together and we will do even more.



Plenary session at the ROSATOM Youth Congress 2018



**IYNC2020
SYDNEY**

SAVE THE DATE

INTERNATIONAL YOUTH NUCLEAR CONGRESS

8 - 13 MARCH 2020

SAVE THE DATE: 8-13 MARCH 2020

INTERNATIONAL YOUTH NUCLEAR CONGRESS

The International Youth Nuclear Congress (IYNC) and the Australian Young Generation in Nuclear (AusYGN) will hold the IYNC2020 conference in Sydney, Australia, in March 2020. Under the theme "Diversity in Nuclear," the mission of the conference is to promote and enable the diversity of people engaged in the many peaceful uses of nuclear science and technology.

Diversity comes in many forms, including gender, culture, educational background, professional experience, and geographical location. The IYNC2020 aims to promote and encourage diversity of people, showcasing the diversity in the peaceful uses and applications of nuclear science and technology. We will encourage interaction between participants, particularly in the sharing of knowledge and ideas between professionals of different personal and professional backgrounds, as well as different generations of nuclear experts.

The Local Organising Committee (LOC) has continued to build momentum in the early stages of conference preparation and regularly meet to ensure that a proactive and strategic approach is maintained. A major milestone that has been achieved is the finalized and signed contract for the conference venue, the International Convention Centre Sydney, for the dates 8 - 13 March 2020. This is a significant achievement and has enabled for the progression of marketing materials and other public-facing promotion. More work over the coming weeks will focus on the website, launching initial sponsorship engagements and working towards major 2019 milestones.

The IYNC2020 Team also continues to meet on a regular basis, discussing various challenges and opportunities for the conference as they arise. The team is made up of a diverse group of people from 19 different countries. The organizing team is an important platform for bringing together a range of perspectives to produce the best outcomes and approach for the conference as we draw closer to the new year.

Over the next few months, look for more announcements regarding open calls for the technical program. We look forward to hosting you in Sydney!



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