JOINT IYNC2018-26TH WIN GLOBAL ANNUAL CONFERENCE
Dear Readers,

The International Youth Nuclear Congress (IYNC) was formed in 1997 by a group of enthusiastic young professionals. They believed that young generation organizations around the world could be more effective in the communication and transfer of knowledge regarding peaceful applications of nuclear science and technology if their efforts were integrated globally, thus, providing a platform for sharing ideas, transferring knowledge and networking.

After 20 years the IYNC mission remains the same. Sharing knowledge between generations and across international boundaries is a cornerstone of IYNC activities. This strong pillar is proven more important every day as the use of nuclear science and technologies is evolving rapidly.

Beyond knowledge transfer IYNC has also developed its activities further. The participation in the Nuclear4Climate initiative for a few years is a good example. The Innovation4Nuclear (I4N) contest launched this year is another illustration of the IYNC dynamism and the evolution of the network’s activities. I4N creation responds to the focus on innovation set for the 2016 – 2018 IYNC term. I am deeply convinced those developments support the IYNC mission further.

The organization of a bi-annual conference – IYNC’s original main activity – since 1998 remains IYNC’s largest effort. I am glad the next conference, IYNC-WiN2018, will be organized together with the Women in Nuclear (WiN) 2018 global conference in March 2018. For the first time IYNC will jointly organize its bi-annual with WiN and for the first time an IYNC conference will be held in Argentina.

According to the IAEA’s latest projection the “nuclear power’s long-term potential remains high” but will be linked to a geographical shift. It is a chance and a key driver for IYNC development. IYNC will continue to evolve further as the network is preparing itself for the future. Above all I would like to build an IYNC that’s durable. I am confident IYNC has the resources and strengths to tackle this challenge.

Our organization is a large network: 49 countries are represented at the Board of Directors, the steering body of the IYNC. 11 Officers, 20 Member at-large, six continental liaisons, four committees and many more volunteers are the reason of the network successes. We receive regularly requests from countries interested to join the network. This constantly growing interest highlights the relevance of the IYNC mission and its activities today.

In particular I am proud of the African development within the IYNC network. In March 2017 the regional African network – African Young Generation Network (AYGN) – was launched. I welcome the creation of the African YGN and wish a successful journey to this newly established organization and its leaders.

I wish you all an enjoyable reading of the 14th issue of the IYNC bulletin.

Warm wishes,
Denis Janin
IYNC President
IYNC2018 General Co-Chair
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IYNC Bulletin #14

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IYNC 2016 - 2018
Network Officers

Denis Janin
President

Mr Denis Janin is nuclear engineer at E.ON since 2011. He was responsible of core design and safety analysis activities for the NPP Grafenreinfeld until 2015. He then joined the department of energy economics at PreussenElektra, the nuclear subsidiary of E.ON, where he is 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.

Luca Capriotti
Vice President

Luca obtained his MSc in Nuclear Engineering at the Politecnico di Milano (Italy) in 2012 with an experimental work performed at Institute for Transuranium elements (European Commission JRC-ITU). From 2013 to 2016 he worked at JRC-ITU on the topic of post irradiation examination of fast reactor metallic fuel for transmutation. From April 2016 he is working as nuclear fuel researcher at Idaho National Laboratory. He is affiliated as Phd student at TU München. Luca got involved in IYNC in 2014. In IYNC2014 he was elected as Member at Large and he took part on the Executive Committee for IYNC2016 as Technical Program Chair. From July 2016 he is the Vice-President of IYNC Luca is passionate about energy & policy, European institutions and building a strong network.

Jing Hu
Executive Secretary

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, now as the Executive Secretary for IYNC 2016–2018. She now lives in Chicago and works at Argonne National Laboratory, Nuclear Engineering Division.
AJ Lambert
Treasurer
AJ Lambert received a BA in Electrical Engineering from the Pennsylvania State University. Following his studies, he began working for the Exelon Corporation as a Design and System Engineer at the at the Limerick Nuclear Generating Station outside of Philadelphia, PA, in the United States. Currently, AJ is studying to obtain a Senior Reactor Operator (SRO) license for two 3,515 MW Boiling Water Reactors (BWRs). In addition to his technical background, AJ recently graduated from Villanova University (Philadelphia, USA) with an MBA focused on Finance and International Business. He is very interested in learning more about the global business and diplomacy helping to safely expand nuclear power for the world's growing population.

Melissa Crawford
Past President
After university, Melissa began working with Siemens and AREVA on the design and security of Instrumentation & Control projects for nuclear power plants around the world. She has since taken this detailed knowledge of the I&C systems into her role as Global Consultant for cybersecurity of the industrial control systems at the headquarters for Siemens Plant Security Services, specializing in development of cybersecurity strategies for multinational corporations and remote incident handling.

Lenka Kollar
Communication Officer
Lenka Kollar is the Director of Business Strategy at NuScale Power where she is working to bring NuScale's small modular reactor to market through business plan development and clean energy outreach. She obtained her Bachelor of Science and Master of Science in Nuclear Engineering from Purdue University in the U.S. and Master of Business Administration (MBA) from INSEAD in France, Singapore and the United Arab Emirates. Ms. Kollar has been extensively involved with the American Nuclear Society for several years, serving in various committee and executive positions focusing on nonproliferation and public outreach.

Fidelma Di Lemma
Research Project Chair: Innovation Officer
Fidelma Di Lemma (Ph.D.) is currently working as a Metallography Scientist at Idaho National Laboratory. In the past she worked at the Japan Atomic Energy Agency studying the behavior of materials during severe accidents, and at the European Commission performing source term characterization. Since 2014 she has been Member at Large in IYNC, participating in the organization in IYNC2014 and IYNC2016. Currently she is the Research Chair for Innovation focused on developing an IYNC international innovation contest, and also acts as secretary for the Grants committee.
Gaopalelwe Santswere
Strategy Officer

Gaopalelwe Santswere is a nuclear physicist with more than 10 years’ experience of Nuclear Regulation and Licensing working for Department of Energy, Eskom and Necsa. He serves as National Executive Chairperson of South African Young Nuclear Professional Society (SAYNPS) and President of the newly established African Young Generation in Nuclear (AYGN).

Nicholle Turnipseed
Research Project Chair: YGN Liason

Nicholle has experience working at the Legacy Plant, Unit 1, as well as in the new construction of Units 2 & 3. As a graduate of Louisiana State University she majored in Biological Sciences with an emphasis in Chemistry. In 2013, after completing her initial Chemistry training, in 2014 she became the NAYGN Community Service Chair where she has led numerous philanthropic events. Most recently, the 2014 Back-to-School Drive. In that one event NAYGN was able to accumulate enough school supplies and monetary donations to contribute to 6 different schools in the Richland, Fairfield, Lexington, and Newberry Districts. Nicholle also serves as a board member for the Freedom and Hope Foundation, an organization dedicated to the wounded members of the military — both active duty and veterans. She is a member of WIN, Women in Nuclear, where she serves as a MEBA/ STEM Initiative Representative. Nicholle is the Research Project Chair-YGN Liason for the International Youth Nuclear Congress committee and is responsible for assisting new applicant countries interested in beginning their local chapters. She advises new applicants with grant applications for the IYNC Network Start Up Grant.

Alexander Gladtsin
Webmaster

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 Non-destructive Control. After graduation, he continued to work in the Laboratory of Non-destructive Control as a design engineer. His field of interest include a data acquisition and processing systems, non-destructive controls, ARM-based telemetry and automation systems, Linux-like operation systems. In his free time he goes hunting, doing exercises with a barbell, archery among others.

Alina Constantin
Bulletin Officer

Alina is currently scientific researcher at the Institute for Nuclear Research, Romania with a PhD in chemical engineering at the Politehnica University of Bucharest. Her activities are related to radioactive waste management and international cooperation. She worked on various European projects related to the nuclear business. Since 2015, she is advisor in the Developing Spent Fuel Strategies (DSFS) project of the Nuclear Threat Initiative, USA. Alina is World Nuclear University Summer Institute Alumni and President of the Romanian Nuclear Young Generation.
IYNC Mid-Term BoD Meeting

On 11 June 2017, the IYNC Board of Directors met in Manchester, United Kingdom, prior to the start of the European Nuclear Young Generation Forum (ENYGF) 2017. Delegates from 21 countries were represented, as well as, several observer and continental organizations.

Each delegate updated the group on the activities of their respective young generation in nuclear (YGN) organizations.

From the reports, it is clear that young professionals in nuclear continue to be active and engaged even though nuclear energy programmes in many nations, especially in Europe and the U.S., are declining or being phased out. YGNs continue reach out to the public to educate people on nuclear science and technology and show the value of nuclear for generating energy.

YNGs in Italy and the UN in Vienna were reactivated this year. IYNC will continue to support these and other organizations in their activities.

Country representatives update IYNC Board members on YGN activities.
IYNC Grants
By Fidelma Di Lemma

The International Youth Nuclear Congress supports its partner young generations and the young professional in nuclear by employing its funds to develop their activities.

The aim of these grants is to increase young members participation in local nuclear YG networks and IYNC, and to contribute to achieving the IYNC Network goals stipulated in the Mission Statement (e.g. communicate the benefits of nuclear technologies, Promote the peaceful uses of nuclear science and technology, and Transfer knowledge between generation and across international boundaries).

Since 2008 IYNC supported more than 70 grants worldwide. These grants have been used to finance regional and national event, or to permit to young student and professional to attend our congresses and meetings. Our grants are divided in 5 areas, as follows:

- **National network start-up**, up to $3,000, to support the expansion of the IYNC network and the establishment of new nuclear young generation network worldwide.
- **Regional event**, up to $5,000, to support our continental liaison in organizing an international event. We are very proud this year, in particular, to have awarded the 1st grant to the African Youth Nuclear Summit. More info on this successful event can be found at [http://www.iync.org/african-youth-nuclear-summit-report/](http://www.iync.org/african-youth-nuclear-summit-report/).
- **International project**, up to $7,500 to support an event or activity focused on the collaboration of 3 or more nuclear YG networks.
- **National project**, up to $5,000 to support an event or activity in your national network.
- **Travel grants** to provide financial support to young student and professional to attend our exciting congress. Learn more about our congress in 2018 in Bariloche, co jointly organized with WIN global, at [http://www.iync.org/iync2018-bariloche-argentina/](http://www.iync.org/iync2018-bariloche-argentina/).

We are happy to support your original activities. You can apply to our grant system by visiting our webpage ([http://www.iync.org/grants/](http://www.iync.org/grants/)). Your international grant committee team is here to help you out. For questions and concern do not hesitate in contacting your grant committee team at grants@iync.org.

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*Group Photo at the African Youth Nuclear Summit 2017*
IYNC Continues Celebrating
20th Anniversary
By Luca Capriotti

2017 is a special year for IYNC, since it marks the celebration of the 20th anniversary of this successful network of nuclear passionate students and young professionals. The first idea of IYNC, as a platform for young people to connect, dates back to 1997 from an international group of nuclear enthusiasts. During the international "Youth and Plutonium challenge 1996" conference, the IYNC adventure officially begun, and two years later (2000) when the first successful conference was organized in Nice, France.

To celebrate our 20th anniversary, the current officers have proposed to launch 20 events to foster and enlarge our network, and to promote our next congress, which will be held in March 11-17th 2018 in Bariloche, Argentina. Between February and March 2017 five events, promoted by IYNC, already took place, such as the webinar for the Italian Young Generation, the Nuclear Power Asia Event in Kuala Lumpur, Malaysia, the International Nuclear Power Plants Summit in Istanbul where the current president Denis had an invited talk, the Nuclear Industry Summit in Buenos Aires, Argentina, and the first African Nuclear Summit in Nairobi, Kenya.

In April, May and June IYNC featured several events. We had the chance to promote our innovation contest ([i4n, http://www.iync.org/i4n/]) and select our first participant, during the American Nuclear Society Student Conference in Pittsburgh, USA. Moreover IYNC was invited at a panel discussion (View from the next generation: Sharing vision from nuclear energy) held at the Japan Atomic Industrial Forum annual conference in Tokyo, Japan. IYNC was also able to show case its activities and it was involved in many interesting discussion in Vienna for the IAEA technical cooperation conference.

An important event in June was the European Nuclear Young Generation Forum (ENYGF2017), a large IYNC delegation attended the forum in Manchester (UK). This event and the IYNC participation were a truly success. The schedule was full with technical events, networking opportunities, discussion in which IYNC promoted its mission and goals. The ENYGF2017 was preceded by IYNC Board of Director in which more than 21 countries were represented and they had the opportunity to describe their own YGN activities. June finished with the IYNC delegation attendance to the IAEA Fast Reactor 2017 conference in which IYNC organize, in collaboration with UN and Russian YGN a workshop entitled Filling the gap – Training Young people, whilst of course making some advertisement for the fantastic event in March next year. The workshop was well attended and received by the audience.
IYNC delegations will continue celebrating its anniversary together with its global partners, and with the help of all of you and by visiting all the different world regions, North America, Latin America, Europe, Africa, and Asia-Pacific to show case our successful history and worldwide expansion. In the upcoming months IYNC will be present in event all other the world such as, Women in Nuclear Global (Beijing, China), IAEA General Conference (Vienna, Austria), World Nuclear Association Symposium (London, UK), WANO Biannual General Meeting (Gyeongju, South Korea), ANS - Young Professional Congress (Washington DC, USA), United Nation Convention on Climate Change (Bonn, Germany).

All of these events will climax at the IYNC 2018, with a unique opportunity for students, scientist and young professionals to discuss advancements in research and exchange knowledge on the fascinating world of nuclear technologies. Furthermore, IYNC will look back on the last twenty years showing how far we have come and where the next 10 years will bring us. Be part of it!

Please follow our newsletters and webpage for further updates. We are looking forward to receive your feedback, ideas and help in making this year a special year to remember!

Luca Capriotti, IYNC Vice President is coordinating the IYNC Anniversary activities. Please address all specific note about 20th Anniversary to him (luca.capriotti@iync.org).

**Innovation for Nuclear Contest**

IYNC is launching its first-ever international innovation contest – **Innovation for Nuclear (I4N)** – at the 2018 Congress in Bariloche, Argentina on 11 - 17 March 2018. The purpose of the Innovation Contest is to propose new and innovative nuclear technologies, applications, or systems that will contribute to the United Nations Sustainable Development Goals. The contest will also give a platform for the visibility and discussion of these ideas and catalyze young energy into thinking about and creating innovative solutions.

**How does it work?** Winners of selected national or regional nuclear innovation contests may apply to receive grants to attend IYNC2018. In Bariloche, a panel of experts will judge the contestants to choose an overall international winner for I4N. Read the full rules of the contest on our website at [http://www.iync.org/i4n/](http://www.iync.org/i4n/)

To become an innovation contest partner or to learn more, please contact Fidelma.Dilemma@iync.org

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Current Contest Partners

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September 2017 / IYNC Bulletin
**YGNs Around the World**

**WANT TO ESTABLISH A LOCAL YOUNG GENERATION NETWORK IN YOUR COUNTRY?**
IYNC can offer know-how, experience and financial support for the creation of new networks.
Please visit www.iync.org/grants/ for more information.

**WANT TO BECOME A NATIONAL REPRESENTATIVE OF YOUR COUNTRY TO IYNC?**
Here are the three possibilities to become NR
- Be nominated by the Young Generation Network in your country
- If a Young Generation Network does not exist, you may be nominated by the local Nuclear Society
- If none of the above exist, the IYNC Board of Directors may approve your nomination

**YGNs by country**

- Argentina
- Australia
- Austria
- Belarus
- Belgium
- Bolivia
- Brazil
- Bulgaria
- Canada
- China
- Croatia
- Czech Republic
- Ecuador
- Finland
- France
- Germany
- Hungary
- India
- Indonesia
- Israel
- Italy
- Jamaica
- Japan
- Kenya
- Lithuania
- Malaysia
- Mexico
- Netherlands
- Nigeria
- Norway
- Peru
- Poland
- Portugal
- Romania
- Russia
- Slovakia
- Slovenia
- South Africa
- South Korea
- Spain
- Sri Lanka
- Sweden
- Switzerland
- Tanzania
- Turkey
- UAE
- UK
- Ukraine
- USA
European Nuclear Young Generation Forum (ENYGF2017)

By Alys Gardner

During the week of 11-16 June 2017, over 550 nuclear professionals from 32 countries attended the European Nuclear Young Generation Forum. The event was held in a truly unique venue, steeped in industrial heritage – Manchester’s Victoria Warehouse.

The six-day event was organised by the UK Nuclear Institute’s Young Generation Network (YGN) on behalf of the European Nuclear Society Young Generation Network. It brought together leading names from the global nuclear industry and the sector’s brightest young talent for a packed programme of presentations, interactive workshops, site tours and networking events.

Keynote speakers included Dame Sue Ion, Chair of the Nuclear Innovation and Research Advisory Board; Professor Andrew Sherry, Chief Scientist at the National Nuclear Laboratory; Dr Rebecca Weston, Strategy and Technical director for Sellafield Ltd, and Peter Prozesky, Chief Executive of the World Association of Nuclear Operators.

Rebecca Weston, of Sellafield Ltd, commented: “I supported ENYGF2017 because I believe the nuclear industry has always been an international industry and will continue to be so. It’s important for young people within the industry to come together to discuss the challenges facing the industry and to offer their opinion and generate new ideas – and to learn how to build relationships and influence in order to effect change. The ENYGF showed a number of experienced conference organisers how to do it, with plenty of new ideas and keeping things live and fresh.”

They were joined by Tom Greatrex, Chief Executive of the Nuclear Industry Association; Tom Samson, Chief Executive of NuGen; Greg Evans, Operations Director at Horizon Nuclear Power, and David Eccles CBE, Head of Communications (Hinkley Point C) at EDF Energy.

“My experience at this year’s ENYGF was second to none. The organisation, venue, displays, speakers and activities were outstanding. But most of all, it was the atmosphere I will remember. Enthusiasm, commitment and energy gave the whole event an amazing buzz. It is nice to know our beloved industry has such a young vibrancy developing and taking us forward. Well done to all! Greg Evans, Operations Director, Horizon Nuclear Power, Wylfa Newydd”
Also appearing were: Malcolm Grimston, Honorary Senior Research Fellow, Imperial College London; Gwen Parry-Jones, Generation Development Director of EDF Energy, Roger Garill, Scientific and Technical Project Officer of European Commission, Neil Thomson, President of the Nuclear Institute, John Molyneux, Engineering and Technology Director for civil nuclear at Rolls-Royce, Rory O’Sullivan, Chief Operating Officer of Molten Energy; and Kirsty Gogan Alexander, Co-founder and Director of Energy for Humanity.

The event’s theme was ‘Innovation in nuclear - a rich heritage and our bright future’, which was reflected in a star studded technical programme. The organising team worked hard to bring innovative approaches to all other aspects of the conference - a unique industrial venue, interactive mobile app, live social media wall, exciting social events and creative spaces all led to a truly memorable event.

The Tuesday of the event saw the technical sessions taking place, delegates gave presentations on their areas of expertise over a range of topic areas including new build, decommissioning and energy policy. In addition to the presentations, some delegates had submitted posters for display and a best poster competition was hosted using the ENYGF app. Fellow delegates voted for their favourite poster and the very well deserving winner was announced as Rachel Curtis of Nuclear graduates.

Delegates were able to choose from a wide selection of site tours including the Nuclear Advanced Manufacturing Research Centre (NAMRC), Sellafield Ltd, the Culham Centre for Fusion Energy, Heysham nuclear power station and Urenco UK. Despite early starts for many, the tours proved to be hugely successful, prompting lots of questions and interest and broke up the conference days by allowing delegates to get out and see the industry with their own eyes.

Delegate James O’Keefe, Graduate Project Engineer at Ansaldo NES said: “I attended ENYGF so that I could build my network and learn about the wider nuclear industry...what I got was so much more. The presentations from some of the most senior people within nuclear were an insight into the hard challenges and amazing opportunities facing us today. The panel sessions which followed allowed us to understand the opinions of these industry leaders and to debate serious questions with them around how we can innovate and build efficiency into New Build and Decommissioning. Add to that a trip to the Reactor Room at Heysham Power Station; it became one of the best weeks I’ve had since I entered the industry. I was genuinely inspired by the enthusiasm and energy that I found throughout each day of the event, from the organisers, speakers and attendees alike. There was a real sense of togetherness and movement towards a common goal as we discussed how to innovate and drive efficiency into future”.

The conference was closed with a farewell dinner held at Victoria Warehouse which featured some incredible displays of acrobatics! There was an incredible atmosphere both that night and throughout the week and delegates could were able to see the huge range of opportunities available to young people starting their careers in the nuclear industry. Bringing together such a large group of like-minded individuals from all over the world created a real buzz of energy and enthusiasm.

Organisers hope the conference, which focused on collaboration and youth engagement, will also leave a lasting legacy in Greater Manchester. As part of the event, over 70 children from Greater Manchester schools were invited to attend a full-day interactive learning session at the city’s Hotel Football. Here a team of volunteers ran a number of workshops to help pupils engage with science and technology topics and allow them to ask questions. A STEM poster competition was also run in the months leading up to the conference; the winners were presented with the prize by members of the NI and ENYGF along with Kate Green, MP for Stretford and Urmston (Greater Manchester). The STEM posters were displayed during ENYGF for delegates to see.
ENYG 2017 was organised over a two year period by a dedicated team of over 30 hard working volunteers:

The ENYG team would like to thank the sponsors of the event, without whom it would not have been possible: Assystem, Jacobs, NuGen, EDF Energy, AWE, DBD, Nuvia, Kier, Office for Nuclear Regulation, Urenco, Cavendish Nuclear, Horizon Nuclear Power, Tecnatom, SCK-CEN, Atkins, National Nuclear Laboratory, CRA, ARC, ENEN, NDA, IYNC, Nuclear AMRC, NTEC, Sellafield, and the BECBC.

Alys Gardner, Chair of ENYG 2017 said: “The success of ENYG is testimony to the hard work of the organising team who all volunteered countless hours of their own time to create the biggest and best ENYG to date. I’d like to thank them for all their efforts. It was an incredible event to be a part of; the atmosphere throughout the week was one of optimism and opportunity and I hope that we as an industry can look to capture that energy and enthusiasm. The young people who attended ENYG are the future leaders of the global industry and if these individual’s are anything to go by, then we have a really bright future ahead of us.”

IYNC at the European Nuclear Young Generation Forum

IYNC also had a booth during the exhibit portion of ENYG where IYNC Vice President Luca Capriotti and IYNC Research Chair, Innovation Officer Fidelma Di Lemma engaged with representatives of the nuclear industry and presented the upcoming congress (IYNC2018) in Barloche, Argentina.

The UK and European professionals and students had a positive response to the booth, and were interested in joining the IYNC network and the newsletter. At the closing ceremony for ENYG, Luca Capriotti also addressed the full audience with a short presentation on the network and its activities and presented a beautiful beta version of the promotional video for IYNC2018.
African YGN making long strides in promoting peaceful uses of nuclear science and technology in Africa

By Raphael Chesori

Signing of MoU, July 19, 2017, Sandton, South Africa

African Young Generation in Nuclear (AYGN) was formally launched on March 29th during the Inaugural Youth Nuclear Summit hosted by the Kenyan Young Generation in Nuclear in Nairobi in March, 2017. The network brings together national networks (YGNs) comprised of young professionals in nuclear field and other related disciplines in Africa. As a continental affiliate body to the International Youth Nuclear Congress, AYGN’s prime mission is to address the socio-economic issues of the continent through promoting the peaceful uses of nuclear science and technology in Africa. AYGN endeavors to educate the general public and facilitating knowledge transfer from the current generation of leading nuclear experts to the young generations. In its endeavors, AYGN works closely with African governments, private sector, universities and other institutions of learning and professionals’ bodies and agencies to build a sustainable nuclear future through empowerment of young professionals in the industry.

Most recently, the network entered into Memorandum of Understanding (MoU) with Russian State Corporation for Nuclear Energy (ROSATOM) through its international network entity – ‘RAIN’ based in South Africa. In the MoU that was signed on 19th July, 2017 at Sandton in Johannesburg, South Africa, some of the key benefits include, but not limited to: promotion of knowledge transfer and skills development; promotion of educational opportunities for African youth at educational institutions in Africa and Russia; social and educational projects in Africa, realized jointly for the purpose of promoting and increasing public acceptance of nuclear energy in Africa; including the development of educational materials on nuclear energy in English and other languages spoken in interested regions. The MoU underscores cooperation in enhancing public awareness and education on nuclear energy in Africa. Besides the ROSATOM, AYGN has also approached other key industry players in Africa such as African Commission on Nuclear Energy (AFCOME) and the African Union (AU) among other players around the world to entrench the interest in working and engaging the youth in shaping the future of nuclear industry.
In an effort to coordinate its work across the continent, AYGN has initiated the formation of National YGNs in some of the interested member states in Africa with no such youth networks. Some of the countries with plans underway to include nuclear energy in their energy mix include; Algeria, Egypt, Ghana, Kenya, Libya, Morocco, Namibia, Sudan, Nigeria, Tunisia and Uganda.

It is imperative to note that AYGN has lined up activities throughout 2017 to 2019 to engage and involve key stakeholders, young people and the general public on matters nuclear. Some of the upcoming major regional events this year include the following, Nuclear Workshop to be held in November 2017, Nairobi Kenya, The Future Energy East Africa Conference (EAPIC) November 2017, Nairobi Kenya. AYGN is also mobilizing its members and young professionals at large in Africa to participate in the IYNC 2018 to be held in Bariloche, Argentina in March 2018.

Kenyan Young Generation in Nuclear Official pose for a picture with the AYNS2017 key note speakers

African Youth Nuclear Summit

Kenyan Young Generation in Nuclear (KYGN) hosted the inaugural African Youth Nuclear Summit, dubbed AYNS2017 that took place on the 27th to 30th March, 2017, at Kenyatta International Conventional Centre (KICC), Nairobi. The participants were drawn from academia, research and development institutes, radiation services providers, health institutions, nuclear facilities and regulatory bodies. They shared experiences, exchanged ideas and built networks on issues related to safe application of nuclear science and technology.

The theme of the summit was “Nuclear for a Sustainable future”. The discussions which were conducted through plenary, panel sessions and workshops were centered around three thematic areas: Nuclear powering Africa, Radiation Protection and safety culture, and application of nuclear science and technology for a sustainable future.

More information on the event can be found on our website at http://www.ync.org/african-youth-nuclear-summit-report/
Upcoming Events

Joint IYNC2018-26th WiN Global Annual Conference
By Cristian Vega

Save the date!

The next IYNC congress will be held in Bariloche, Argentina, from March 11th to March 17th 2018.

There are two key features that distinguish the IYNC 2018 as one of a kind. First, it will be held in South America for the very first time in IYNC history. And second, it will be jointly organized with Women in Nuclear (www.win-global.org) also for the first time, thus creating a major event, which bring together leaders working in the nuclear field around the world!

Why should I go?

IYNC-WIN2018 will be a unique opportunity for young professionals and women in nuclear to participate in specialized workshops, attend conferences from renowned experts in the nuclear sector and exchange ideas with a wide diversity of specialists from diverse backgrounds and nationalities.

The IYNC is the perfect environment for networking, promoting collaborative projects and at the same time learning, with the different participants working in the nuclear sector.

Furthermore, IYNC-WIN2018 will also provide the opportunity to visit Argentina and Brazil nuclear facilities such as a nuclear power plant, research reactors, nuclear medicine facilities, nuclear companies’ headquarters and even a visit to Huemul Island, a place surrounded by nature in the middle of Nahuel Huapi Lake.

It was the place, where the whole nuclear history of Argentina started in the 1950’s as a top-secret experimental project leaded by a controversial scientist.

Argentina has a long history of nuclear development. As of today, the country has installed three nuclear power plants, two of which are in operation and there is a fourth one that has recently been announced to be built. Argentina also counts with heavy water production facilities as well as uranium enrichment and fuel element production plants. With regards to research reactors, Argentina has proved to be not only an excellent domestic reactor designer and constructor, but also has constructed the OPAL reactor in Australia, the RP10 reactor in Peru, the NUR reactor in Algeria and the ETRR in Egypt.
**Why is it held in Bariloche?**

San Carlos de Bariloche is a small town that lays on the south shore of the Nahuel Huapi Lake, in the foothills of the longest continental mountain range in the world called “Cordillera de Los Andes”. It is a well-known place for its splendid natural beauty and for the development of the nuclear sector in Argentina, since it holds the Bariloche Atomic Center and the Balseiro Institute, the only nuclear engineering university in South-America.

The city of Bariloche is also world famous for its chocolates, craft beers, Swiss style architecture and all kinds of winter sports practiced in the middle of the magnificent mountains. In summer, the city offers a wide variety of aquatic activities such as canopy zip-lining, kayaking, kite surfing, sailing, as well as mountain sports such as climbing, hiking and horseback riding, among others.

**How can I participate?**

You can be part of the IYNC-WIN2018 by attending the high-level speaker’s plenaries, workshops, technical visits and expositions. Registration will be open soon. Furthermore, you can also share your work in the nuclear field by submitting a paper and presenting it in the congress. This includes not only technical research such as fusion energy, thermal hydraulics, nuclear medicine and neutronics, but also socio-economic papers focused on nuclear policy, economics and social aspects of the nuclear sector.

The second call for summary submission is already open, do not miss it!

For more information please visit [www.iync.org](http://www.iync.org)

**What is next?**

There are many ways to fully profit from the opportunities provided by the IYNC-WIN 2018.

If you are coming from far away we suggest you take a few days off and profit the chance to move around! Argentina and Brazil offer all kinds of magnificent places to visit including capital cities, beautiful natural views ranging from glaciers to stunning beaches. In particular, Bariloche offers a wide variety of gastronomic offer, adventure sports and cultural activities, please check [www.barilocheturismo.gob.ar/en](http://www.barilocheturismo.gob.ar/en)

Once back in your home country, you can engage in the national chapters of WIN and IYNC and continue working for the development of the nuclear sector and sharing your ideas and experience with professionals around the world. For more information on the Argentinean Youth Nuclear Generation, please visit [www.ayng.com](http://www.ayng.com)
The creation of the World Nuclear University (WNU) bears testament to the international cooperation in the nuclear sector. In 2003, the International Atomic Energy Agency, the World Nuclear Association, the World Association of Nuclear Operators and the Nuclear Energy Agency/OECD, along with academic and research institutions from 23 countries, established the WNU to promote international cooperation on the peaceful applications of nuclear science and technology in support of global sustainable development, as well as to train future nuclear leaders. This cooperation has further developed over time, to now include more international and regional associations and educational institutions. To date, over 4000 participants from more than 80 countries having attended one of the WNU programmes. The Summer Institute Alumni alone counts with 1071 Fellows in 83 countries!

The Summer Institute is the WNU’s flagship programme aimed at developing leaders in the nuclear area. This 6-week programme has been successfully operating for the last 13. This programme was created with a view of developing a stronger, more global and knowledgeable leadership for nuclear energy. The WNU Summer Institute has a three-fold training philosophy focusing on nuclear knowledge, leadership skills development, and networking. At the Summer Institute, Fellows have the opportunity to openly discuss issues and experiment with new ideas, building connections with other Fellows, and developing informed opinions on international topics. Fellows are actively encouraged to ask questions and engage with the mentors, lecturers and invited leaders inside and outside of the lecture room, building their network amongst peers and leaders.

The Summer Institute has a strong impact on the professional development of Fellows, and it also benefits the organization that sends them. WNU conducted a survey with Human Resources departments from Companies that regularly send Fellows to the Summer Institute. 87% of respondents agreed that they could easily identify a positive impact in the organisation itself due to participation in the Summer Institute. Examples of positive impacts on the organisation include “contribution toward achieving strategic goals”, “attitude of staff at work” and “more eager to train others in the organization”. This underlines the importance of developing their leadership skills competencies, especially critical thinking and communications. In the survey employers also noted increased confidence to response to higher levels of responsibility.
Both personal and strategic networks are necessary to help individuals fulfill their leadership potential, especially when transitioning to a new role. And as they transition to new leadership roles, their networks evolve with them, matching the new needs, requirements and opportunities. That is why WNU encourages Alumni Meetings, in a way to bring together Fellows of different years, sharing their new experiences in technical workshops.

There are frequent Fellows reunions in International conferences, for example, but the general assemblies are the next step in the Summer Institute evolution. They have been held at the IAEA headquarters in Austria (2012), Oak Ridge, USA (2014) and Beijing, China (2016).
This year, the WNU Summer Institute Alumni Assembly has been renamed to WNU Extended Leadership Development Workshop. And it will be held in Bariloche, Argentina, alongside the joint IYNC 2018-26th WiN Global annual conference, 11 - 17 March 2018.

The SI ex-Fellow who register to the joint IYNC 2018-26th WiN Global annual conference can not only participate in the IYNC 2018 activities, including the technical visits, but also can attend the WNU Extended Leadership Development Workshop from 14 - 15 March 2018, at no extra charge.

The WNU Extended Leadership Development Workshop is open to all previous Fellows, Lecturers and Mentors from 2005 to 2017 and includes invited leader presentations, case studies and workshops on effective communications, leadership, and decommissioning and remediation. It is a great opportunity to exchange experience and share the results of the Summer Institute Networks for Nuclear Innovation (formerly the Forum Issues Groups).

To register, please send an email to wnu@world-nuclear-university.org with the proof of registration at the joint IYNC 2018-26th WiN Global annual conference, mentioning the year of the Summer Institute that you have attended.

It will be a historical meeting in Bariloche!
On leadership with Amir Shahkarami

Amir Shahkarami is the founder, President, and CEO of CASE Global Partners, Inc. since October 1, 2014. Under his leadership, CASE provides complex financial and technical mathematical modeling, computer analysis, and consultation in energy and engineering. He has provided domestic and international (e.g., China, KSA, Japan, ROK) consultation such as organization effectiveness, nuclear management model, operational excellence, root cause determination, assessment, and executive mentoring. Amir is a mentor for and teaches at the World Nuclear University and serves on their advisory committee. Amir has been teaching at MIT INLEP. He is currently a member of the Southern, Duke, and DC Cook Nuclear Safety Review Board (NSRBs) and has previously served on Exelon and PSEG NSRBs. In addition, Amir is currently the Chairman of the TEPCo Nuclear Safety Advisory Board. He is the chairman of the Nuclear Industry Summit Working Group on Cyber Security which he recently was awarded the Chairman Award at the 2016 NSS. He also provides consultation and mentoring of international executives as well as has assisted INPO, WANO, and IAEA evaluation and programs.

Amir Shahkarami is a mentor and an inspiring leader. His experience and achievements are testimony to this statement and his words and teachings are valuable for all young professionals in the nuclear field, as they contain wisdom gained in a continuous learning process. I met Amir in World Nuclear University Summer Institute 2017. This programme is highly centered on leadership development and I took the opportunity to have an interview on leadership with him for the IYNC Bulletin, as IYNC also has a strongly focus on leadership.

What is your leadership story?

It is a long one but to summarize it, I will tell you how I started thinking about leadership.

I was a very technical person for many years. At some point, I decided to study management so I enrolled in an MBA programme. During this program, we were put in a team of four. In my team, there was a person from a telephone company, one from offshore business, one from an electrical non-nuclear company and me. We were assigned to work together for the entire duration of the programme. We gained a lot of knowledge about finance, corporate strategy, leadership and many other subjects but what changed my mind was indeed working with the three people in my team. They were not technical persons in their organizations and that made me very interested in learning from them. I became more willing to learn about people.

Six months later, I became a supervisor for a technical group. Since I was very aware of the technical issues, I was always helping my team to do a better job regarding technical aspects. I started thinking of becoming a manager, a director. And I wrote down some of the things I have to do to get there. I made myself a five-year plan and I made a commitment to myself that I would spend more time with people and help them in developing themselves.

This is what I did to move from being very technical to developing the organization and people. I started learning more and more about leadership and what you need to lead an organization effectively.
What do you think are the attributes of a good leader?

I am very fond of the leader to leader model. I don't believe a leader should have only followers, but a leader should have other leaders around him or her. As a whole, they will all be leading, rather than one person driving everything. In this way you will get much more momentum and energy from a group of people. A good leader is someone who is visionary, who can take the organization as a whole to a superior level that even the organization would not believe it can achieve. A leader is somebody who motivates, who has a high level of trust and integrity. Without trust and integrity you cannot be a leader, no matter how skillful you are in other areas. At the same time, you have to be aware that your main job is to develop others to move up in the organization. This is what I did always in my career: to develop others, pay attention to them, not taking care of people but caring about them so that they know you have the best interest for them. I also try to have a positive reinforcement and reward the individuals who deserve to be rewarded. This in combination with motivation are also attributes of a good leader.

I also like the situational leadership style. People you lead come with different experiences and backgrounds, and as a leader you have to be able to communicate with them on their terms. For example, when you meet someone very inexperienced, you have to tell them what you want, but based on their level of understanding. Once they become more mature, you can sell them your idea, and when they mature even more, you participate and get engaged with them. In the most advanced stage, you delegate. This is the situational leadership.

I have always wondered if it is only about training for becoming a leader or is it more about an inner aspect you have to possess and then develop through training?

I think there has to be certain attributes that a leader must possess. Looking back I served two years in military, coached soccer at all ages including high school and colleges. All these gave me opportunities to build a winning team. There are also definitely very good training programmes. I read a very good book named Turn the Ship Around that reinforced what I always believed. It is about a submarine which was ranked the worst in the US fleet and its very autocratic leader. One day this leader told his crew to do something, which they did but it was very dangerous. When he asked the crew why they did it, he received the answer that he told them to do the task. The leader recognized it was dangerous and that if he commits mistakes, everybody follows in those mistakes. Following this situation, the leader changed his style and started empowering and letting everybody lead in his submarine.

In a very short time, the submarine became the best in the US fleet. Everybody understood accountability and had a very high level of ownership. This is what I believe even before I did the MBA programme: to get everybody engaged in what we are trying to accomplish, to understand the mission and vision so that everybody can drive in the same direction.

What defines you the most?

I can put myself in any type of organization regardless of being nuclear or not, regardless the culture and the region it belongs to and understand and develop its business. What I learned is applicable to everything, not just nuclear. This is what I have done through my whole career. If you are a leader in one aspect, you are a leader in every aspect of your life.
What is your advice for the young nuclear professionals?

Less experienced professionals really need to diversify in the business they work in. If you work in the nuclear industry, you must learn about all aspects of the business you are in. For example, if you work at a nuclear power station it is important to learn about transmission and distribution, to understand the marketing of the electricity. Broaden yourself beyond what you do day to day, focus on your development no matter what your current level is, and identify a couple of potential people that you can mentor to help them get to the point that you know they can do your job better than you so you can move on.

The biggest reward I have today is when I encounter top executives which once worked for me and I see what great leaders they have become. My legacy is developing leaders for our industry.

Why do you think events like IYNC and WNU Summer Institute bring value to the industry?

These events give the participants a broader understanding of the industry, put face to face the participants with top leaders of the industry from all around the world, cover a wide variety of very important nuclear topics and help in building relationships and strong networks among the participants. Some of the relationships and partnerships established with these occasions stay for a very long time or even a lifetime. These kinds of events are essential as there is no nuclear power plant in isolation and we need more synergy among everyone.

There should be a continuous learning process. If you are not a learning organization, if you are not a learning person, you will lose because there will be someone learning more than you. These programmes and events provide such a great learning opportunity, to always excel and broaden your perspective about nuclear.

Learning and building relationships will ensure you to successfully continue your journey.

Is there another message you want to transmit to our readers?

Do what you enjoy doing. Many times we get stuck on one specific issue, but if you start thinking in a very broad manner, you will learn that there is so much opportunity available. If you don’t like what you are doing, you have only two choices: either you change it, or you leave it. You should always try to do what makes you happy. If you are happy with what you are doing, your learning and your input and your support of that is exponentially better.

If you are not happy with your work, you do not grow and you are constantly under stress.

You have to understand that you own your development, your decisions and you are responsible for your path. In order to grow, you should be able to share more with others and help others grow as well. The more you give, the more you learn and develop yourself. “Plan the work, and work the plan.”

One last thing; always know what problem you and your organization are trying to solve. I see many times a leader and their employee rush to solve the problem without fully understanding it. Lots of resources get wasted. You should be able to define the problem in a simple manner that everyone can understand. There is a saying that “A well defined problem is almost half solved.”

Thank you very much for this inspiring words and we hope to see you in IYNC and WNU events: the Summer Institute and Extended Leadership Development Workshop!
INTERNATIONAL YOUTH NUCLEAR CONGRESS 2018
BARILocache, ARGENTINA
11 – 17 MARCH, 2018

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