

The background of the cover is a scenic landscape featuring a large body of water, a large resort-style building on a hillside, and a golf course. The image is overlaid with several large, semi-transparent geometric shapes in shades of blue and grey, creating a modern, abstract design.

WNU Extended Leadership Development (ELD) Workshop Report

Summary

The Extended Leadership Developed Workshop, abbreviated ELD, took place in Bariloche, Argentina, March 14-15, 2018, being organized by World Nuclear University alongside with the joint IYNCWIN18 event and dedicated entirely to the WNU Summer Institute Alumni.

Due to the high registration fee (payable to IYNCWIN18, according to the agreement between IYNC, WIN and WNU) and high expenses involved by the location chosen (Bariloche is situated more than 1000 km away from Buenos Aires), the number of participant Alumni was low, only 18 being able to join the ELD. All the years (except 2007) were represented and as expected, the presence of Argentinean Alumni was significant (7). The other countries represented were: Australia (2), Azerbaijan (1), Canada (2), Kenya (1), Romania (1), South Africa (1), Sweden (1), UK (1), USA (1). Being already in Bariloche for the IYNCWIN18, two other fellows from other WNU programmes (the Nuclear Olympiad and the RT School, respectively) were invited to take part in the ELD and engage in discussions during the event.

The full list of participants, including the invited speakers is attached to this document.

The first day of the ELD debuted with a video message from Ms Agneta Rising, Director General of the World Nuclear Association, addressing a warm welcome, while emphasizing on the nuclear new builds in the last two years and the need of leadership to deliver a clean and safe energy. The opening remarks from World Nuclear University followed, underlining the WNU activities and the permanent reshaping of the programmes to offer competitive and high standard training solutions by Ms Patricia Wieland (Head of the World Nuclear

University) and expanding on the need for keeping the Summer Institute Alumni network alive by Ms Alina Constantin (the Coordinator of the ELD Workshop).

Next presentations in the agenda were provided by invited Argentinean leaders: Mr Julián Gadano – the Under-Secretary for Nuclear Energy Ministry of Energy & Mining and Mr Enrique Cinat – the General Manager of the National Nuclear Energy Commission. Mr Gadano offered a comprehensive overview of the Argentine nuclear sector, detailing on the national challenges and perspectives. Argentina expects to put into operation its first PWR by 2027-2028. Among the priorities mentioned were the CAREM project, prolonging the lifetime of the existent NPP, construction and operation of two new power reactors, as well as commissioning of the RA-10 research reactor.

Mr Cinat expanded on the environmental remediation activities going on in Argentina. He mentioned the CNEA Uranium Mining Environmental Remediation Project (PRAMU) for the mining complex located at Malargüe. Malargüe site remediation has been completed and it is the first uranium mining environmental remediation project in Argentina and the region. The official conclusion of the work has taken place with the opening of the theme park called “El Mirador”, a green space for recreation returned to the community of Malargüe.

The lecture of Mr Christophe Xerri – the Director of the Division of Nuclear Fuel Cycle and Waste Technology at IAEA contained insights on decommissioning and the tools and ways in which IAEA provides assistance to its Member States related to decommissioning. He also stressed on the support of



Group photo with the Argentinian invited speakers

the local and national stakeholders that, together with the technology and science, lead to a successful decommissioning project. Mr Xerri shared his experience on the Fukushima accident and the progress in decontamination and decommissioning at the Daiichi NPP.

On behalf of the World Nuclear Association, Mr Alec Mitchell – Senior Writer and Analyst talked about the Harmony programme, the leading WNA initiative for a clean and sustainable energy, in an increasing demand context. The Harmony programme represents the industry's vision for the future, envisaging 25% of global electricity supplied by nuclear in 2050 with 1000 GW from new nuclear capacity by 2050. Among the objectives targeted by the Harmony programme are the identification of the key barriers to growth and providing workable solutions, facilitation of consistency in messaging and providing the framework for action across the industry, as well as engaging with policy makers and influencing debate.

The first roundtable of the ELD Workshop entitled "*Bringing the Alumni together*" facilitated bonding among the participants, while collecting their expectations on the Alumni event.

First thematic session of the programme was dedicated to discussing ways of developing an efficient communication process and was facilitated by Mr Timothy ROWNES from ANSTO, Australia (WNU SI 2017) and by the invited speaker, Ms Lenka Kollar - Director of Business Strategy at NuScale Power & IYNC Communication Officer. Ms Kollar presented her messages from the communication work she has done with Mothers for Nuclear group. She plans to further implement this work at NuScale and also to a wider nuclear audience. She emphasized on the confirmation bias which means that by providing more information we may not change minds. A good example in this regard may be the following: if we read an article that has a generally objective view, we are still very likely to agree with the side that we already agree with. We have habits to take short cuts and everyone comes with different biases. Moreover, the social media has exaggerated the issue associated with cognitive bias. People only follow those that they agree with and only hear stuff from their own political group. As we become more connected, this has made our echo chambers even stronger. The general recommendations for a proper communication process were reminded to the audience: connect on emotion first, bond with the person on the other side based on common values, start with "why" and "how", be transparent, unique and consistent, preparation is key and practice makes perfect. The key message of the lecture was that telling people about your own experience is often the most powerful thing and engaging with your inner circle is something important that everyone can do. A working group activity followed the lecture and participants were asked at this point to tell their nuclear story.

The day ended with a session dedicated to the presentations made by Alumni. With this occasion, Mr Miguel SCHLAMP – Researcher at Bariloche Atomic Center, Argentina (WNU SI 2005) provided a technical overview and status of the CAREM Reactor Project. CAREM is a Small Modular Reactor – first of its kind – under construction in Lima, Buenos Aires Province, since mid 2014. It is expected that around 70% of the supplies, components and services will be provided by local companies. The prototype will generate about 32 MWe with simple and innovative design features, satisfying national and international safety standards, as well as state-of-the-art hardware and software technologies. Mr Erik Fagerberg - Manager Process Design at Ringhals NPP, Sweden (WNU SI 2009) discussed the approaches used at his workplace to build effective teams. Ms Princess Mthombeni - Stakeholder Liaison at NECSA, South Africa (WNU SI 2016) briefed on the nuclear facilities in South Africa and the communication strategy used by NECSA to reach out the public. Mr Rafael Chesori – Secretary General of the African Young Generation in Nuclear (WNU SI 2011) presented the role of the African YGN, its guiding principles and key strategies, as well as its activities.

To conclude the day in a more relaxed manner and increase networking among the participants, all Alumni were invited by WNU to a Happy Hour in restaurant nearby, providing a nice ambient and an exceptional lake view.

The second day of the ELD started with a session on leadership, moderated by Ms Belen Bianco – Advisor at the Undersecretary of Nuclear Energy, Argentina (WNU SI 2017) and with the participation of the invited leader, Ms Mary Alice Hayward – Deputy Director General and Head of the Department of Management at IAEA. Ms Hayward gave an excellent leadership speech based on her experience. With this occasion, she also referenced an article ‘How to be a CEO from a Decade’s Worth of Them’ by Adam Bryant in the New York Times. The article summarizes some recurring themes Bryant has seen in interviewing over 500 CEOs for the Corner Office column. The important traits are ‘applied curiosity’, ‘love for a challenge’ and ‘focusing on doing their current job well, which earns them promotions’. Ms Hayward told about her time at Areva USA around 2009 which had a great impact on her views on leadership. At that time, a new General Manager, named shortly ‘Joe’ was hired. His management style was initially abrasive and directive. For two



Working group activity during the thematic session on communication



Group photo with Ms Hayward, after the thematic session on leadership

years he would berate management staff over the phone during weekly conference calls. This approach really made Ms Hayward get her guard up, like she was ready to fight whenever she encountered him. At the time Areva USA was under performing on a robust market, and there was a warning of lay-offs from Areva headquarters. So Joe changed his approach. He did extensive personal coaching and took management staff on retreats for training. He introduced the model of the accountability ladder which challenges staff to own problems. Sometime after this Ms Hayward received a handwritten note of appreciation from Joe. She put it on her desk because she was so astonished to have received it from her boss. Areva USA's performance improved and Joe is now head of Bruce Power in Canada. This shows the importance of recognition and empathy: your staff needs to feel valued in order to buy into your vision. If Joe asked Ms Hayward to join his team again, she would consider it. Very valuable take-aways derived from the session. One is the importance of peer to peer mentoring. It is extremely valuable to get honest feedback from one of your peers. Ms Hayward supports equal opportunity but does not support quotas for equal outcomes. Competence must be the first priority. She has a staff of 650 at the IAEA, and has had to change her style of work in her new workplace. For example, by having lunch with her staff rather than at her desk which she prefers. She emphasized the importance of staying humble no matter how high you rise in your career. If you want your changes to stick you must be consistent. Ms Hayward has introduced the accountability ladder at the IAEA. Whether or not the ladder sticks around after she leaves is not important but it is important to her leadership style.

The next activity in the ELD programme was the thematic session on decommissioning, environmental remediation and radioactive waste management. The first part of this session consisted in joining the IYNCWIN18 plenary session on this topic which has as invited speakers: Mr Con Lyras – the IAEA Decommissioning Network Chair and Engineer at ANSTO, Australia, Ms Elvira Maset – Manager at CNEA, Argentina and Mr Christophe Xerri. Mr Lyras detailed the innovative technologies, like SYNROC, developed by ANSTO for minimize disposal volume. Ms Maset's lecture provided the Argentine lessons learnt and challenges associated to the radioactive waste management, including treatment, conditioning, storing and final disposal. Innovation is also supported in Argentina, especially through IAEA TC programme. Among the challenges mentioned were the need to find a solution for the legacy waste, as well as siting and construction of the geological repository. The disposal of waste using deep boreholes is also studied in Argentina as an alternative solution. Mr Xerri complemented the plenary with perspective for this century related to decommissioning and radioactive waste management. He emphasized the accentuate need for decommissioning worldwide at these time since we are reaching the last life cycle step for many nuclear facilities. This need attracts opportunities for pioneering, innovations, finding solutions for new programmes. Mr Xerri expanded also on the tools, especially e-learning, and various networks developed by IAEA to provide support for its Member States. The message of the plenary was that decommissioning is a very complex task and there is a great need of experts to be part of the solution and work on smart innovations in order to minimize to need for the waste repositories.

After the lunch, a 30 minutes session dedicated to questions and answers related to the plenary followed and the participants benefited from the valuable experience of Mr Xerri. He had more time to expand on his Fukushima experience and detailed the ways in which IAEA supports developing an integrated approach of the radioactive waste management.

The roundtable entitled “*Building effective teams in the 21st Century*” was facilitated by Ms Janice Dunn Lee – IAEA Deputy Director General Emeritus and mentor at WNU, being a lively discussion on how working remotely may benefit or not the employees, as well as the employers of this century, with the participation of invited speakers: Mr Luca Capriotti - the IYNC Vice-President, Ms Gabriele Voigt – the WiN Global President, Mr Riccardo Chiarelli – Programme Manager at WANO and Ms Marcela Ermacora – Advisor in the Radiological Safety, Security and Safeguards Department at the Argentine Nuclear Regulatory Authority. Participant Alumni as well as the invited speakers shared their opinion and experience on the advantages and drawbacks of remote working with the conclusion that a mix of flexibility,

adaptability, competence and mutual understanding between employer and employee are key to successful work relationships.

The last roundtable of the ELD workshop entitled “*How WNU shapes professional paths for its Fellows*” was live broadcasted on the World Nuclear University Facebook page and contained testimonies and sharing experience of Alumni regarding the impact that attending the Summer Institute had on their careers.

The day concluded with the feedback on the ELD, suggestions for improvement of future editions, proposals for next location of the Alumni meeting and certificate ceremony. A feedback survey was also designed online for better capture the Alumni opinions.

The full programme of the ELD Workshop is attached to this document.

The general feedback on the organization of the WNU Extended Leadership Development Workshop was very positive. The quality and content of the presentations were highly appreciated by participants and they particularly welcomed the time allocated for more conversation

and exchanging ideas. The content and approach of the presentations were very different, but this was perceived as adding an extra value to the workshop. The thematic sessions were relevant, although the one covering decommissioning, environmental remediation and radioactive waste management was more technical by nature and was perceived as being of more interest for fellows already in this field. However, for some of the participants the presence of the more technical session actually helped them to obtain approval from their management for travel and participation in the ELD. There was suggested that the technical topic should vary from one event to the other and the leadership and communication session should be kept as they are of more general interest.

The strong points of the ELD Workshop that were acknowledged in the feedback were: leadership and team building, small group conversations, opportunities to talk with other Alumni and exchange experience and points of view, opportunity to listen to high level experts in an exclusive session and to interact with them, discussions about communication challenges in the industry, successful stories and advises from the invited leaders, good networking.

The weak points of the ELD Workshop mentioned were mainly related to the scheduling conflicts with other conferences (IYNCWIN18) and the partnership with IYNCWIN18 (involving a high registration fee, infrastructure below WNU standards).

The majority of the participants found the ELD Workshop as being useful for their professional development and improvement of leadership skills.



Invited speakers and facilitator, Ms Dunn Lee during the roundtable *Building effective teams in the 21st Century*

Related to the next Alumni meeting, a suggestion was to have it in conjunction (excluding overlapping) with some important events, like the WNA Symposium and Oxford or London were considered very suitable and accessible locations. If the Alumni meeting would be connected with the WNA Symposium, a proposal was that the Alumni should benefit from a reduced registration fee to the Symposium. One observation was to have the Alumni event announced well in advance (even with one and a half year). In terms of the programme, there was suggested to emphasize even more on leadership aspects (corporate leadership, professional leadership), develop more interactive session and allocate less time to presentations or extend the time for the Alumni meeting up to one week in order for the speakers to have more time for the presentations.

Another question included in the feedback survey was how to make the WNU Summer Institute LinkedIn Alumni group (<https://www.linkedin.com/groups/8450056>) more attractive for Alumni and encourage exchanging of news. The suggestions included to post topics for discussions (structured as dialogues or ad-hoc themes) and call out for opinions, post about opportunities in the industry such as available (leadership) positions, conferences, etc. and not only for WNU but all organizations in the industry, promote the Alumni i.e. if one gets a position somewhere in the industry, profile him/her.

The concept of the former Forum Issue Groups (FIGs) of the Summer Institute have evolved lately into the

Networks for Nuclear Innovations (NNIs) aiming to enable fellows to participate in detailed discussion of important global nuclear issues and bring new light to these. The feedback survey asked the Alumni opinion on how the connectivity between NNIs on the same topic from different years can be improved. The suggestions offered were to have former fellows present their work at the beginning (or else record the final presentations and show it to new fellows, Skype video), have the Summer Institute participants creating a message of findings or learning to pass along to the next group that has that topic, the WNU organizers to present the outputs of previous years so the new fellows have a starting point or inspiration and make the outputs of the NNI effective by encouraging implementation and approaching organizations with these ideas, while playing an influential role. Also one option may be to post a summary of the new projects/new discussion status on the LinkedIn page/WNU facebook page for discussion. It would be of help to receive periodical e-mails reminding of discussions going on or when any issue has been opened for discussion, preferable with a link to the network.

All the materials of the ELD Workshop (including presentations, list of participants, programme, the bios of the invited leaders and Alumni that presented during the ELD Workshop) were uploaded to the WNU Dropbox folder that can be accessed at: <https://www.dropbox.com/sh/b04b17q42l33umk/AAAR1ov8beJXebtgomjvxNW3a?dl=0>.

Annex 1 | ELD Workshop
Programme

Extended Leadership Development (ELD) Workshop for Summer Institute Alumni

14-16 March, 2018 | Bariloche, Argentina | Venue: Panamericano Hotel (PAN) & BEC

DAY 1: Wednesday, March 14th

| | | |
|-------------|--|------------------|
| 9:30-10:00 | <i>Welcome with Networking Coffee & Tea</i> | PAN, Los Puentes |
| 10:00-10:20 | Patricia WIELAND, Head of WNU Alina CONSTANTIN, Coordinator of the ELD Workshop <i>Opening Remarks</i> | |
| 10:20-11:00 | <i>Invited presentations</i> | PAN, Los Puentes |
| 10:20-10:40 | Julián GADANO, Under-Secretary for Nuclear Energy Ministry of Energy & Mining, Argentina: <i>The Argentine nuclear sector: perspectives, challenges and leadership</i> | |
| 10:40-11:00 | Enrique CINAT, General Manager National Nuclear Energy Commission (CNEA), Argentina: <i>The experience of CNEA in environmental remediation of uranium mining</i> | |
| 11:00-11:20 | <i>Break for Group Photo</i> | |
| 11:20-12:30 | <i>Invited presentations (cont.)</i> | PAN, Los Puentes |
| 11:20-11:40 | Christophe XERRI, IAEA Director of the Division of Nuclear Fuel Cycle and Waste Technology: <i>Leadership and Decommissioning</i> <i>IAEA e-tools and networks</i> | |
| 11:40-12:00 | Alec MITCHELL, WNA Senior Writer & Analyst (WNU SI 2017): <i>Harmony – nuclear energy delivering its potential</i> | |
| 12:00-12:30 | Q&A for invited presentations | |
| 12:30-13:00 | <i>Roundtable: Bringing the Alumni together</i> | PAN, Los Puentes |
| | This session will open the possibility for Alumni to introduce themselves, identify their expectations on the Extended Leadership Development Workshop and get acquainted with the ELD programme. Coordinator: Princess MTHOMBENI (WNU SI 2016) | |
| 13:00-14:00 | <i>Joint IYNCWIN18 – ELD Lunch</i> | BEC |
| 14:00-16:00 | <i>Thematic session 1: Developing an efficient communication process</i> Session Manager: Timothy ROWNES, ANSTO (WNU SI 2017) | PAN, Los Puentes |
| | The communications workshop will be based on communication with the public. Participants will critically analyze nuclear industry public communications by comparing examples. They will then develop their own communication strategy and evaluate it with feedback from their peers. Learning outcomes will include a broader understanding of effective nuclear communications and experience of presenting to an international audience. The discussions will benefit from the valuable expertise of invited leaders, Ms Janice DUNN LEE (IAEA Deputy Director General Emeritus) and Ms Lenka Kollar (Director of Business Strategy at NuScale Power & IYNC Communication Officer). | |
| 16:00-16:30 | <i>Joint IYNCWIN18 – ELD Coffee Break</i> | PAN |
| 16:30-17:45 | <i>Presentations by Alumni</i> | PAN, Los Puentes |
| 16:30-16:45 | Miguel SCHLAMP, Bariloche Atomic Center, Argentina (WNU SI 2005) <i>Technical overview and status of the CAREM Reactor Project</i> | |
| 16:45-17:00 | Erik FAGERBERG, Vattenfall, Sweden (WNU SI 2009) <i>Effective teams</i> | |
| 17:00-17:15 | Princess MTHOMBENI, Stakeholder Liaison, NECSA, South Africa (WNU SI 2016) <i>Public understanding of Nuclear: The South African story</i> | |
| 17:15-17:30 | Rafael CHESORI, Secretary General African Young Generation in Nuclear, Kenya (WNU SI 2011) <i>Inspired Youthful leadership in the 21st century</i> | |
| 17:45-21:00 | <i>Happy Hour & Networking with ELD participants</i> | |

DAY 2: Thursday, March 15th

| | | |
|-------------|--|-------------------|
| 8:30-10:00 | Thematic session 2: Organizational Effectiveness & Leading your Team Session Manager: Belen BIANCO, Undersecretary of Nuclear Energy, Argentina (WNU SI 2017) | PAN, Los Puentes |
| | This thematic session on leadership is Alumni centred. The session will start with a motivational speech by invited leaders, Ms. Mary Alice Hayward (IAEA Deputy Director General and Head of the Department of Management). She will share her own experience on leadership, while commenting on the opportunities and drawbacks she has encountered throughout her career. Participants will be asked to share their own personal experience related to leadership, focused on the barriers to their own leadership development. Finally, Alumni will have the possibility to ask for leadership advice on a case-to-case scenario, and to ask questions to Ms. Hayward regarding this topic. | |
| 10:00-10:30 | Joint IYNCWIN8 – ELD Coffee Break | PAN |
| 10:30-12:30 | Thematic session 3:Decommissioning, Environment Remediation, RWM | PAN, Las Americas |
| 10:30-12:00 | Joining the IYNCWIN18 Plenary Session 3: Radioactive Waste & Decommissioning – Yesterday’s Legacy, Tomorrow’s Opportunity | |
| | This session will focus on how nuclear science and technology can contribute to reduction of nuclear waste, discuss plans for decommissioning of nuclear sites, the challenges and opportunities that come with nuclear fuel and how this waste can be reused. The invited speakers of this session are Mr Con LYRAS (Group Executive Capital Programs and Chief Engineer, ANSTO), Ms Elvira Rosa MASET (CNEA), Mr Christophe XERRI (IAEA Director of the Division of Nuclear Fuel Cycle and Waste Technology). | |
| 12:00-13:00 | Joint IYNCWIN18 – ELD Lunch | BEC |
| 13:00-13:30 | Thematic session 3: Decommissioning, Environment Remediation, RWM (cont.) Session Manager: Alina CONSTANTIN, WNU (WNU SI 2014) | BEC, ZONA room |
| | Nuclear decommissioning, environmental remediation, radioactive waste storage and disposal share a common objective: to keep people and the environment away from the harmful effects of radiation exposure. In a sustainable process essential to ensuring that nuclear energy continues to power the world in a safe and responsible manner, site decommissioning and remediation activities need a waste management strategy to support and enable their delivery. Thus an integrated waste management approach has to be achieved to ensure that activities are carried out in a way that protects people, plant and the environment. This involves reducing hazards on-site by transfer of all spent fuel to off-site facilities for treatment and storage, transfer of other nuclear materials to off-site facilities for management, dismantling reactors or preparing reactor buildings for safe storage, decommissioning redundant facilities, retrieving, treating, packaging and disposal/storage of waste and managing contaminated land. Risk communication, ethical issues, stakeholder involvement, knowledge management, integration of the social dimension in decision-making are challenging aspects encountered in decommissioning, environmental remediation, waste storage and disposal activities. This second part is targeted to be interactive and participants will have the possibility to identify the take-aways and discuss the challenges and possible solutions in decommissioning, environment remediation and radioactive waste management with invited leader, Mr Christophe XERRI. | |
| 13:30-15:30 | Roundtable: Building effective teams in the 21st Century | BEC, ZONA room |
| | A lively discussion on how new technologies like Internet of Things and remote interactions can impact on working relations and training in the future, coordinated by Ms Patricia WIELAND, Head of World Nuclear University with the participation of: <ul style="list-style-type: none"> • Luca CAPRIOTTI, IYNC Vice-President: YGN role in Attracting, Developing and Retaining Talents in Nuclear • Gabriele VOIGT, WiN Global President: The importance of networks for career development • Riccardo CHIARELLI, Programme Manager WANO: Leading teams in a changing world • Marcela ERMACORA, ARN: Role of new technologies in building effective regulatory teams Each participant will introduce their talking points in 15 minutes and then a Q&A session will start. | |
| 15:30-15:45 | Joint IYNCWIN18 – ELD Coffee break | PAN |
| 15:45-16:40 | Roundtable: How WNU shapes professional paths for its Fellows | BEC, ZONA room |
| 15:45-16:10 | This session will focus on personal stories related to how WNU impacted the professional career of the participant Alumni with the purpose to create an inspirational short movie for the next SI Fellows. Coordinator: Erik Fagerberg (WNU SI 2009) | |
| 16:10-16:40 | Feedback on ELD Workshop – All Alumni | BEC, ZONA room |
| 16:40-17:00 | ELD Wrap up and certificate ceremony | BEC, ZONA room |
| 17:00-18:00 | Joining the IYNCWIN18 closing ceremony | PAN, Las Americas |
| 20:00-22:30 | Joining IYNCWIN18 Farewell Dinner and Social Event | BEC |

Friday, March 16th: Joint IYNCWIN18 Technical Tour Day

IYNCWIN18 provides the opportunity to join technical tours of Argentina and Brazil's top nuclear facilities:

- BARILOCHE ATOMIC CENTER CNEA, Bariloche, Argentina
- NUCLEOELÉCTRICA Atucha I-II NPP site – Buenos Aires, Argentina.
- INVAP S.E. Bariloche, Argentina.

Participants will have to express their option at the moment of registration on the IYNC website.

"The WNU SI was a transformative experience, and the Alumni Assembly allows one to sustain that transformation over the years" Shehab (Sunny) G. Mustafa, Ontario Power Generation, 2009 WNU SI Alumnus at the 2014 Assembly in Oak Ridge, USA

"The Alumni Assembly has successfully inherited and developed the spirit of the WNU Summer Institute by providing continuous opportunities to solidify the international alumni network. I am very proud to be a member of the alumni and the fellows always inspire and encourage me to constantly improving myself in my career." Peichen Sun, Project Manager, CNEIC Nuclear Power (Bidding) Dept., 2010 WNU SI Alumna and Coordinator of the 2016 Assembly in Beijing, China

Useful contacts – Organizing Committee

Coordinator of Extended Leadership Development (ELD) Workshop & Manager of the Thematic Session on Decommissioning, Environment Remediation, RWM

Alina CONSTANTIN, alina.constantin@world-nuclear-university.org

Local Coordinator&Manager of the Thematic Session on Leadership:

Belen BIANCO, bbianco@minem.gob.ar

Manager of the Thematic Session on Communication

Tim ROWNES: timothy@ansto.gov.au

Annex 2 | ELD Workshop List of
Participants

Organizing Team

| | | | |
|------------------|---|----------------|--|
| Patricia WIELAND | Head of World Nuclear University | United Kingdom | patricia.wieland@world-nuclear.org |
| Alina CONSTANTIN | Coordinator of the Extended Leadership Development Workshop, World Nuclear University | Romania | alina.constantin@world-nuclear-university.org; alkonstantin@yahoo.com |
| Belen BIANCO | Advisor in the Undersecretary of Nuclear Energy, Ministry of Energy and Mining | Argentina | bbianco@minem.gob.ar |
| Timothy ROWNES | OPAL Shift Manager, ANSTO | Australia | tim.rownes@gmail.com |

Invited Speakers

| | | |
|--------------------|---|-----------|
| Julián GADANO | Under-Secretary for Nuclear Energy, Ministry of Energy & Mining | Argentina |
| Enrique CINAT | General Manager, National Nuclear Energy Commission (CNEA) | Argentina |
| Christophe XERRI | Director of the Division of Nuclear Fuel Cycle and Waste Technology, IAEA | Austria |
| Janice DUNN LEE | Deputy Director General Emeritus, IAEA | USA |
| Lenka KOLLAR | Director of Business Strategy, NuScale Power; Communication Officer, IYNC | USA |
| Mary Alice HAYWARD | Deputy Director General and Head of the Department of Management, IAEA | Austria |
| Luca CAPRIOTTI | Vice President, IYNC | USA |
| Gabriele VOIGT | President, Women in Nuclear Global | Germany |
| Riccardo CHIARELLI | Programme Manager, WANO | UK |

Participant WNU Summer Institute Alumni

| | | | | |
|--------------------|--------|--|-----------|---|
| Miguel SCHLAMP | SI2005 | Researcher, Bariloche Atomic Center | Argentina | schlamp@cab.cnea.gov.ar |
| Florencia CANTARGI | SI2006 | Responsible for the intellectual capital area of the Argentine Laboratory of Neutron Beams, CNEA | Argentina | flor.cantargi@gmail.com |
| Marcela ERMACORA | SI2008 | Radiological Safety and Security and Safeguards Department Advisor, Nuclear Regulatory Authority | Argentina | mermacora@arn.gob.ar |
| Erik FAGERBERG | SI2009 | Manager, Vattenfall, Ringhals AB | Sweden | Erik.Fagerberg@vattenfall.com |
| Juan Pablo BONETTO | SI2010 | Nuclear Regulatory Authority (ARN) | Argentina | jbonetto@arn.gob.ar |
| Joanne LACKENBY | SI2010 | OPAL Licensing Officer/Environmental Coordinator, ANSTO | Australia | jla@ansto.gov.au |
| Claire SIMISTER | SI2010 | ECA Section Head, Canadian Nuclear Laboratories, Chalk River Laboratories | Canada | claire.simister@cnl.ca |
| Raphael CHESORI | SI2011 | Secretary General African Young Generation in Nuclear | Kenya | rachemoi@gmail.com |
| Thomas QUIRK | SI2011 | Senior Member of Technical Staff, Sandia National Laboratories | USA | tjquirk@sandia.gov |
| Genevieve HAMILTON | SI2012 | Director (Acting), NRU Technical Support, Canadian Nuclear Laboratories | Canada | Genevieve.Hamilton@cnl.ca |
| Melina BELINCO | SI2013 | Head of the technical-administrative section, Argentine Atomic Energy Commission (CNEA) | Argentina | mebelinc@nea.gov.ar |
| Alina CONSTANTIN | SI2014 | ELD Coordinator, World Nuclear University | Romania | alina.constantin@world-nuclear.org; alkonstantin@yahoo.com |

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|--------------------|--------|--|--------------|---------------------------------|
| Aysel HASANOVA | SI2014 | Senior Adviser, State Agency on Nuclear and Radiological Activity Regulation, Ministry of Emergency Situations | Azerbaijan | aysel.hasanova@fhn.gov.az |
| Natalia FERRO | SI2015 | Non-proliferation Policies and Institutional Affairs Department Senior Analyst, Nuclear Regulatory Authority (ARN) | Argentina | nferro@arn.gob.ar |
| Princess MTHOMBENI | SI2016 | Stakeholder Liaison, NECSA | South Africa | princess.mthombeni@necsa.co.za |
| Alec MITCHELL | SI2017 | Senior Writer & Analyst, World Nuclear Association | UK | alec.mitchell@world-nuclear.org |
| Belen BIANCO | SI2017 | Advisor, Undersecretary of Nuclear Energy | Argentina | bbianco@minem.gob.ar |
| Timothy ROWNES | SI2017 | OPAL Shift Manager, ANSTO | Australia | timothy@ansto.gov.au |

Invited Alumni from other WNU programmes

| | | | | |
|----------------------|-----------------------|--|-----------|--------------------------|
| Alice CUNHA DA SILVA | Nuclear Olympiad 2015 | Nuclear engineer/ acting co-administrator, Westinghouse Electric | Brazil | cunha1a@westinghouse.com |
| Alexis MAITRE | RT School 2017 | INVAP | Argentina | aramaitre@invap.com.ar |

Annex 3

Bios for the Invited
Speakers



Mr Julián Gadano is the Deputy Secretary of Nuclear Energy of the Ministry of Energy and Mining in Argentina since December 2015. He has a diploma in sociology from the University of Buenos Aires. He has also a Master and Doctorate in Political Science at the Universidad Torcuato Di Tella.

Prior to his appointment as Deputy Secretary of Nuclear Energy, he was a member of the Board of Directors of the Nuclear Regulatory Authority in Argentina. He has worked in the Argentine nuclear activity for 10 years.

He has also a broad experience in the area of education. He is currently Professor of undergraduate and postgraduate studies at the University of San Andrés.

He is the Chair of the IFNEC (International Framework for Nuclear Energy Cooperation), a multilateral initiative, made up of 34 countries, among which are the ones with the greatest nuclear technological development, aimed at providing a forum for international cooperation in order to enhance the benefits of peaceful uses of nuclear energy, and work on solutions to the challenges it faces. He was elected in June 2017 for a term of two years.

Mr Gadano is author of numerous articles on nuclear cooperation, non-proliferation and issues related to technological development.



Mr Enrique Cinat is the General Manager of the Argentine National Atomic Energy Commission. He holds a degree in Chemical Engineering from Buenos Aires University.

Prior to his appointment as General Manager, he spent his previous 10 years as Manager of the Nuclear Safety and Environment area at the Commission.

He holds an extensive experience in radiological protection, nuclear safety, safeguards, and physical protection of nuclear facilities and materials, having worked in the field for more than 30 years.

He is national point of contact to the Joint Convention Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management.

He also develops activities as inspector for ABACC Agency.



Mr Christophe Xerri holds an Engineer's degree from Ecole Centrale de Lyon, France, and a Master of Science degree from Salford University, UK. He also completed an MBA programme at Institut Supérieur des Affaires in France. He has over 25 years of experience in the field of nuclear energy fuel cycle and nuclear waste management.

Since 2015, Mr Christophe Xerri is the Director of the Division of Nuclear Fuel Cycle and Waste Technology in the IAEA Department of Nuclear Energy today.

Before his appointment to the IAEA, Mr Xerri served as Counsellor for Nuclear Affairs at the French Embassy in Tokyo, Japan. In this position, he gained in-depth knowledge of the challenges and progress made in the defueling and decommissioning of the Fukushima Dai-ichi nuclear power plant and related research and international cooperation. He was also Counselor to the French Embassy in Ulaan Baatar, Mongolia.

During his career, Mr Xerri has also served in the office of the President of AREVA, where he was in charge of international affairs. Mr Xerri moved to Japan in 2007 and became Vice President of Mitsubishi Nuclear Fuel in 2009, where he was also involved in handling the consequences of the earthquake and tsunami of March 2011.



Ms Janice Dunn Lee was former Deputy Director General and Head of the Department of Management at the International Atomic Energy Agency. She has more than 40 years of experience in nuclear energy policy and regulatory fields. Prior to her assignment at the IAEA, she was Deputy Director General of the OECD Nuclear Energy Agency in Paris, France. Earlier, she was Director of the U.S. Nuclear Regulatory Commission (NRC) Office of International Programs, where she managed US international cooperative programs in nuclear technology and materials, the import and export licensing of these materials, and radioactive waste safety. She also provided assistance to several former republics of the Soviet Union to protect, control, and account for their nuclear materials. She was responsible for formulation and implementation of bilateral nuclear energy programs with foreign governments and was engaged in extensive foreign travels. She holds a B.A. in Sociology from the University of California at Berkeley, and an M.A. in International Relations from the Fletcher School of Law and Diplomacy at Tufts University.



Ms 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. She is also the IYNC Communication Officer.



Mr Luca Capriotti 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 was the Vice-President of IYNC. Luca is passionate about energy & policy, European institutions and building a strong network.



Ms Gabriele Voigt joined WiN in 2003 when she received the WNA award to Women in Nuclear. Having been active in gender equality activities during her whole professional career, and after joining the IAEA as Director she became heavily involved in improving the gender balance of IAEA in different functions as the Chair of the Joint Advisory Committee Subcommittee on Gender Concerns, as the Focal Point for Gender Concerns in the Department of Nuclear Sciences and Applications and later the Department of Safeguards of the IAEA, and as Vice-President of UN VIC Women and Vice-President of WiN IAEA. She also held the Vice-President position of WiN Europe and served as an Executive and as a Board Member to WiN Global. Ms Voigt is a biologist and holds a doctorate in genetics, microbiology, and biochemistry. She habilitated from the University of Munich in Ecological Chemistry and is lecturing Radioecology at the Atominstitut of the Technical University in Vienna. She is working as a radioecologist since more than 30 years in the field of radiation protection, nuclear sciences and environmental management and remediation; first in the Institute of Radiation Hygiene of the German Federal Health Office and later in the Institute of Radiation Protection in the GSF-Research Center for Environment and Health (now Helmholtz-Zentrum München), both located in Neuherberg near Munich, Germany.



Mr Riccardo Chiarelli is Programme Manager at WANO and Co-Founder at Mela Works. He spent more than 14 years working in the energy sector and in particular in the nuclear industry covering different senior positions at nuclear power plants and in international organisations. He is Programme Manager at the World Association of Nuclear Operators, based in London. At WANO, he created and leads the WANO scholarship programme to the WNU SI. Outside WANO, he co-founded a mobile application to collect, share and analyse data from the job sites in industrial environments. He also founded a company to provide consultancy services in energy policy and energy management.

Annex 4 Bios for the Alumni
Speaking at ELD



Mr Miguel Schlamp (SI2005) has graduated in 1988 at Balseiro Institute of Cuyo National University, Argentina as nuclear engineer, and the topic of his thesis was nuclear safety. He works since 1988 in the Argentinean Atomic Energy Commission (CNEA) covering different positions. Since 2010 he is one of the coordinators of CAREM 25 project in CNEA, being in the present head of Nuclear Engineering Department of the Project. Since 2016 he coordinates Thermohydraulics, Neutronics, Radiological Protection and Plant Dynamics technical areas. These areas cover from conceptual and basic design to detailed engineering, construction, start-up and operation of CAREM nuclear power plant.

In 2011 he created the Information Preservation and Management Department of CAREM Project in which he implemented a 3D Product Life Cycle Management System to accomplish the 3D design of the plant and their systems. Detailed engineering of the buildings, containment and all the mechanical, electrical, I&C, HVAC and process systems are being designed in different points of the country by CNEA and suppliers. The PLM platform centralizes all these technical areas designs and allows the users to interact with each other to minimize interferences.



Ms Marcela Ermacora (SI2008) has a degree in Chemical Sciences and postgraduate studies in Radiological Protection and Nuclear Safety and teaching training for postgraduate courses. She participated in the World Nuclear University Summer Institute. Since 2000, she has been working in the Nuclear Regulatory Authority (ARN), having worked as an inspector of safeguards, in matters of accounting and control of nuclear materials and in the licensing and control of radioactive facilities, performing tasks of evaluation, investigation, inspection and supervision and participating in the development of standards. She was an alternate member of the Radiation Safety Standards Committee (RASSC) of the International Atomic Energy Agency (IAEA) for the period 2008-2010.

She is currently a member of the Steering Committee of the Ibero-American Forum of Radiological and Nuclear Regulatory Bodies (FORO), President of the Advisory Board on Radioisotope and Ionizing Radiation Applications (CAAR).



Since 2006, **Mr Erik Fagerberg (SI2009)** is employed at Ringhals NPP, first as concept owner for Ringhals Unit 1 safety enhancement project and then being appointed Program Leader for Ringhals Unit 1 safety enhancement project. Since 2014, he is the Manager for Process design, responsible for design criteria within the process area for Ringhals Unit 1-4.



Mr Raphael Chebosion Chesori (SI2011) is a researcher, an academician, a trainer, community development enthusiast and a visionary youthful leader. He holds a B.Sc in Industrial Chemistry and M.Sc. (Eng.) Nuclear Science from the University of Nairobi. He currently works as Part-Time Lecturer at Jomo Kenyatta University of Agriculture and Technology (JKUAT), in Nairobi, Kenya with research interests in applications of nuclear technology in medicine, radiochemistry, nuclear knowledge Management, energy technologies, nuclear security and safeguards. Raphael is an alumnus of the World Nuclear University Summer Institute (2011), Oxford UK, and the ICTP-IAEA School of Nuclear Knowledge Management (2010), Trieste Italy. He has participated widely in both local and international scientific forums and workshops that includes but not limited to the following; FORSAGE 2017 (Russia), Third International Conference on Nuclear Knowledge Management, Vienna Austria (2016), the European Nuclear Young Generation Forum(ENYGF-2015, Paris), IAEA-AFRA Projects held in Addis Ababa, Ethiopia(2011), and other several organized by National Commission for Science, Technology and Innovation (NACOSTI), Kenya Nuclear Electricity Board (KNEB), Kenya Radiation Protection Board (RPB) and East Africa Association for Radiation Protection (EAARP)

Raphael is the Secretary General for African Young Generation in Nuclear (AYGN) and a Co-founder of Kenyan Young Generation in Nuclear – a national network of young professionals in nuclear and allied fields where he currently serves as Vice President.



Ms Princess Mthombeni (SI2016) has a background which includes more than nine years of experience in communication & stakeholder relations division. Her work includes developing strategies that are aimed at reinforcing the communication and awareness-raising initiatives to address the lack of information and knowledge that persists around nuclear energy issues in South Africa. Currently she is working as a Stakeholder Liaison at the South African Nuclear Energy Corporation (Necsa) where her work collaborates with international, internal and external stakeholders. She is also a board member of Women in Nuclear South Africa (WINSA). She has a Bachelor's Degree in Marketing Management.



Mr Alec Mitchell (SI2017) is currently Senior Writer & Analyst at World Nuclear Association where he holds overall responsibility for the research, writing, upkeep, and improvement of the organization's online Information Library – an unrivalled resource of over 180 papers written for investors, governments, industry stakeholders, and the general public wishing to learn about civil nuclear energy.

He has extensive public speaking experience, and as part of his role he is involved in the Association's outreach programmes, speaking at industry events to communicate the benefits of the reliable, low-carbon electricity that nuclear power provides.

Annex 5 Bios for the ELD
Organizers



Ms Patricia Wieland is a Physicist, with a PhD in Industrial Engineering from Pontifical Catholic University in Rio de Janeiro. Since January 2014, she is the Head of the World Nuclear University (WNU).

Previously she was Deputy Director and Head of Infrastructure and Management Coordination of the Nuclear Engineering Institute (IEN), a research institute of the National Commission of Nuclear Energy (CNEN) in Brazil. She has held the positions at CNEN of Head of Regulations Division from 2008 to 2012, General Coordinator of Human Resources in 2003 and 2004 and Coordinator of Nuclear Installations Licensing from 2001 to 2003.

She worked at the Department of Nuclear Safety of the International Atomic Energy Agency (IAEA) in Vienna for almost six years, developing international recommendations on nuclear communications and training.



Ms Alina Constantin (WNU SI2014) has a wide international interest and experience in nuclear policies, nuclear waste management, stakeholder engagement, strategic planning, project management and scientific event organization. She works as scientific researcher at the Institute for Nuclear Research, Romania with a PhD in chemical engineering from University Politehnica of Bucharest. She has worked on various European nuclear projects in the framework of Euratom, with the French CEA and also with the USA Nuclear Threat Initiative organization. I participated in various international events and conferences, either as a speaker or as member of the Organizing Committee. In 2014, she attended the World Nuclear University Summer Institute which she found extremely valuable, both professionally and personally. After her attendance, she has been involved in several WNU activities, being the manager of the poster session during SI2015, organizer for the SI2017, coordinator of the WNU SI Alumni event 2018 – Extended Leadership Development Workshop and organizer for SI2018.



Ms Belen Bianco (WNU SI2017) works in direct coordination with the Undersecretary in Argentina, in charge of the ensuring that its executive and strategical decisions are correctly implemented by nuclear public companies at a management and administrative level. From a strategic point of view, she works with the Argentinean nuclear operator and national companies in finding ways of lowering the costs of the nuclear generation.

At an international level, she is part of the Undersecretary's Direction of Nuclear Security Policies and Non-proliferation. In particular, she is responsible for the Nuclear Suppliers Group matters, some of IAEA's security ones, and of enhancing nuclear security at a national level through detection and transport measures. Belen is the Argentinean organizer of the Extended Leadership Development Workshop.



Mr Timothy Rownes (WNU SI2017) is a Reactor Shift Manager, responsible for the safe, efficient, and reliable operation of the Australia's OPAL 20MW multi-purpose research reactor in accordance with its Operating Limits and Conditions. This includes oversight of all maintenance, operations, and reactor utilization activities and also primary responsibility for emergency response in accordance with approved plans and arrangements. In the Extended Leadership Development Workshop, he is the manager of the thematic session on communication.

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