WiN GLOBAL - CONFERENCE

WiN Global 2017 Annual Conference
After efficient, thorough and detailed preparations by WiN China, WiN Global 2017 was held at the Chinese National Convention Centre (CNCC) in Beijing from 29 August to 30 August 2017, with the theme of “Women, Nuclear, Cooperation and Harmony”. The actual conference was preceded by WiN Global Executive and Board meetings and excursions to the Great Wall.
During the Executive and Board meetings, held on the SNPTC premises, WiN Global President Dr. Gabi Voigt announced the registration of WiN Global as a legal entity under Austrian association law. This is a significant milestone in the development of WiN Global from a loose network to a non-governmental organization, which will facilitate its future activities and collaboration with other nuclear-related entities. Gabi Voigt welcomed WiN Russia, represented by President Alena Yakovleva, to the WiN Global community.

The dates and venues of the next WiN Global conferences were announced as follows:

- 11-17 March 2018: WiN Global 2018 in Bariloche, Argentina, together with IYNC
- June 2019: WiN Global 2019 in Madrid, Spain
- October 2020: WiN Global 2020 in Canada (venue TBD)
- 2021: WiN Global 2021 in Sharm Al-Sheikh, Egypt

The conference was attended by some 350 Chinese and foreign representatives from 32 countries and regions. The opening ceremony on 29 August saw welcome and keynote speeches by honorary guests from the China Atomic Energy Authority, the Chinese Nuclear Society, the State Power Investment Corporation, the State Nuclear Power Technology Company, the IAEA, and WiN Global.

Almost 30 WiN chapter presidents or their representatives reported on nuclear developments and WiN-related activities in their respective countries. While there are a few newcomer countries in the WiN Global community (the UAE, Turkey, Egypt), it was at the same time disheartening to note the decline of the nuclear industry and beginning or ongoing phase-out in countries such as Germany, Japan, Sweden, Switzerland and most recently Korea. Concerted efforts by the WiN community will be needed to underline and communicate the significant role nuclear energy needs to play in the fight against climate change.

The WiN Global general assembly concluded the first day of the conference. In the evening the gala dinner was held in one of the festive halls of the CNCC. The programme included music by a ladies’ band, a Tai Chi session and a surprise show by (almost real) two Chinese dragons. During the dinner, this year’s WiN award was given to Ms Fang Rong, Chief Economist of SNPTC, and the honorary award to Ms Dominique Mouillot, the former Vice-President of WiN Global and the former President of WiN Europe (accepted on her behalf by Anne-Marie Birac). The conference participants continued the WiN tradition of closing the gala dinner by dancing to disco music.

The second day was devoted to five panel sessions, highlighting the charm of nuclear, nuclear safety (and security and safeguards), women in nuclear, nuclear cooperation and harmony in nuclear. Several presentations brought facts about nuclear energy, which could be used for communicating the benefits of nuclear energy as a clean source of energy.

More than 90 posters were exhibited on both days of the conference and poster awards were finally given to the best ten posters. After the passing of the WIN Global flag to WiN Argentina, WiN Global President closed the conference by thanking WiN China and their sponsors and supporters for the excellent organization of the conference. In the evening, conference participants were given the opportunity to visit the Big Show at the Beijing Liyuan Theater.

On 31 August, conference participants were offered an optional technical tour to the Centre of Excellence on Nuclear Security and a cultural tour to the Imperial Palace. Participants in the technical tour in Shandong province departed for Yantai in the evening. On 1 September they visited the CAP 1400 Project and the HTGR reactor in Rongcheng and the AP1000 Project in Haiyang, which left them deeply impressed with the developments and the
progress of the Chinese nuclear industry, in particular in the area of advanced passive nuclear power technology.

WiN Global 2017 provided a wonderful opportunity for mostly female nuclear professionals to meet and network, to discuss technical topics of common interest and to learn about latest nuclear developments in many countries of the world. At the same time, WiN Global 2017 also highlighted the need for its members to continue communicating the benefits of nuclear energy to the wider public in order to oppose increasing efforts by the anti-nuclear community to eliminate this source of clean energy from countries’ energy portfolios.

Owing to the efforts by WiN China and its supporters, WiN Global 2017 was a great success and it has left all participants with lasting memories of China, its culture and the many advancements in its nuclear technology.

Next year’s WiN Global conference, to be held in Bariloche, Argentina, from 11-17 March 2018, will be jointly organized with IYNC (the International Youth Nuclear Congress). Preparations are already at an advanced stage, so make sure to check out the WiN Global web site for more information.

I would like to take this opportunity to thank WiN IAEA for sponsoring my participation in WiN Global 2017.

Eva Gyane
WiN Global Executive

IMPORTANT DATES

2018 WiN Global Annual Conference
The 2018 Annual Conference will take place between March 11th and 17th in Bariloche, Argentina. This will be the first joint conference as WiN Argentina will co-host the event with the International Youth Nuclear Congress. It will also be our first conference in Latin America. The conference theme is “Challenge the present, Empower the future.” See full details in The World of WiN - WiN Argentina section page 4.

Call for summaries for IYNCWIN18 is open.

Participants from all over the world are invited to submit a 2-4 pages summary. All experience levels are welcome for the Technical Presentations.

All fields and themes related to the nuclear sector will be represented.

To apply for this call, please register via Conftool to the conference (https://www.conftool.pro/iync2018/), and submit your summary (2-4 pages) with the conference template (http://www.iync.org/wp-content/uploads/2017/05/Summary_Template_IYNC2018_26th_WiNGlobal.docx).

A committee will evaluate your abstract and decide which abstracts will be carried out in the oral session and which will be in the poster session. In addition, the highest quality abstracts
of the conference will be selected and authors will be asked to expand them for publication in the “Journal of Nuclear Engineering and Radiation Science”.

For any further questions, please contact <infowin@winargentina.org> and/or <info@argentinayng.com>.

For images you can check in our Facebook page https://www.facebook.com/womeninnucleararg/ or in IYNC Facebook page https://www.facebook.com/iynctechnology/

2017 WiN Canada Annual Conference
The 14th Annual WiN-Canada Conference will be held at the Brookstreet Hotel in Ottawa, Ontario from October 22nd - October 24th, 2017. For more details you can visit us online at:
www.wincanada.org
www.facebook.com/womeninnuclear.canada

World Nuclear University Summer Institute 2018
Applications are invited for the WNU Summer Institute 2018 to be held June 26 to August 3 in Busan and Gyeongju, South Korea. Application deadlines: IAEA funded applications ends November 22 2017, and company funded applications ends February 14 2018. Applications online at www.world-nuclear-university.org
Registration Is Now Open!

The 26th 2018 WiN Global Annual Conference will be jointly organized with the International Youth Nuclear Congress (IYNC) 2018, from 11 to 17 March 2018, in Bariloche, Argentina. Registrations are open! (http://www.iync.org)

The conference will provide a forum for young professionals and women in the nuclear field to discuss and collaborate on knowledge transfer, nuclear science and technology research and implementation, professional development, and communication. In particular, the event will bring together young professionals that are looking to further their careers and senior leaders that are willing to share their knowledge and expertise with younger generations.

In 2016 IYNC and WiN signed a Memorandum of Understanding to foster their collaboration and joint activities on knowledge transfer, education and communication on peaceful use of nuclear science and technologies. As both organizations selected Argentina to host their 2018 conferences, we decided to team-up and benefit from a unique opportunity to organize IYNC-WiN2018 together.

VENUE

Argentina has a long history of nuclear energy research, development and operation. Proof of its commitment to these activities is the foundation of the Atomic Energy Commission (Comisión Nacional de Energía Atómica, CNEA) in 1950. The country is capable of producing nuclear fuel elements which not only supply the national power reactors, but also those for research reactors in Argentina, Egypt, Algeria, Peru, and Australia. There are three operating nuclear power plants in Argentina generating around 10% of the national electrical energy consumption. The government has plans to build more nuclear power plants, as well.

IYNC-WiN2018 will be hosted in Bariloche, a beautiful city in the province of Río Negro, Argentina, located 1640 km away from Buenos Aires. Bariloche lies on the south shore of the Nahuel Huapi Lake, within the Nahuel Huapi National Park, at 770 meters above sea level. Being one of the most important tourist resorts in Argentina, this beautiful mountain village has become the entrance gate to Argentine Patagonia.

Bariloche is also home to the Bariloche Atomic Center, devoted to basic and applied physics research along with nuclear and mechanical engineering. Basic research is focused on deepening understanding and development of nuclear energy. Applied sciences have provided support for both state and privately owned companies. The main areas of research include: materials, neutrons, thermodynamics and theoretical physics. Within the complex operates the Balseiro Institute, a very prestigious university that offers physics, nuclear, mechanical and telecommunications engineering degrees. Also, RA-6, a 1 MW experimental reactor operates within the complex. RA-6 is used for educational proposes and to perform experiments and BNCT medical treatments for terminal cancer patients.

The congress will be held in three locations within the same complex:

- Panamericoano Hotel
- Bariloche Eventos y Convenciones (BEC)
- NH Edelweiss Hotel

TECHNICAL PROGRAM

The FINAL call for summaries for IYNC2018-26th WiN Global is OPEN!

The technical program of the conference is constructed around the theme “Challenge the present, empower the future”. A wide range of topics will be covered through various interactive sessions: Technical Tracks; Workshops; and both Plenary and Panel sessions.
Technical Tracks

- NPPs Operation, Maintenance and Design Modification
- Advanced Nuclear Systems
- Neutronics, Reactor Physics and Core Criticality
- Thermal hydraulics
- Nuclear Fuel Science
- Materials for Nuclear Industry
- Nuclear Safety, Security and Radiation Protection
- Nuclear Fuel Cycle, Waste Management and Decommissioning
- Fusion Energy
- Human Resources, Communication and Knowledge Management
- Nuclear Policy, Economics and Social Aspects
- Nuclear Technology in Medicine, Biology and Non-power Sectors
- IYNC-YGN Best Practices

The direct link to the submissions website is on the following link (Technical tracks link, above): [http://www.iync.org/technical-tracks/](http://www.iync.org/technical-tracks/)

All summaries will undergo a reviewing process and accepted ones will be published in the conference proceedings. The authors of the highest quality summaries will be offered to prepare a full-length paper for publishing in a peer-reviewed journal.

When submitting the summary, authors can express their preference for oral presentation or poster session. A committee will then assess your summary and decide which summaries will be taken forward to the oral sessions and which ones will be to the poster session.

TECHNICAL TOURS

BARILOCHE

- National Atomic Energy Commission (CNEA)-Bariloche Atomic Center-CAB: governmental institution responsible for nuclear energy research and development. The Center is mainly devoted to research, development and training of human resources in the area of Physics and Nuclear Engineering, and hosts the RA-6 (1 MW) research reactor.
- INVAP: a provincial state-own company devoted to the design and construction of complex technological systems, with more than 30 years of history in the domestic market and more than twenty in the international scene.
- Dr. Richter’s nuclear old lab: adventure visit. Cross the Nahuel Huapi lake by kayak, boat or swimming to visit the place where the nuclear activity in Argentina was born.

BUENOS AIRES

- National Atomic Energy Commission (CNEA) - CAREM Small Modular Reactor: First SMR 100% designed by CNEA under construction in Atucha site.
- Nucleoeléctrica Argentina S.A. - Atucha I and II NPPs (both PHWR). Nucleoeléctrica Argentina S.A. is the company which generates electric energy in a nuclear way, and it is an essential part of the development of the Argentine Nuclear Plan.
- Electronuclear Brazil- Angra I, II and III NPPs (Angra dos Reis, Brazil): the visit will be available for those who are willing to travel to Brazil after the Congress.

ABOUT IYNC

IYNC is a global non-profit organization connecting students and young professionals engaged in all areas of peaceful uses of nuclear science and technology. We proudly
embrace representatives from 45 countries and six continents. One of our central goals is to transfer knowledge from the current generation of leading nuclear professionals to the next generation. Click here (Link to http://www.iync.org/goals-and-mission-of-iync/) to learn more about IYNC.

More information: www.iync.org

WiN AUSTRALIA

In April 2017 the Executive of WiN Australia paused for a moment to do some strategic planning. Thanks to a tip from another amazing Australian Women in STEM organisation, Franklin Women (check them out at https://franklinwomen.com.au/), we were able to secure the assistance of facilitators Elizabeth Foley and Stephen Emmett, who guided us through the process.

We started out focusing on our strengths:

- 200+ members,
- the substantial “sweat capital” that our Executive team and other members commit to the organisation,
- a sound administrative foundation we have developed in recent years,
- strong support from both WiN Global and the Australian Nuclear Science and Technology Organisation, and
- Significant improvements in our social media presence.

Focusing on our strengths … the WiN Australia Executive make a start on strategic planning
However, we also had to consider the challenges we face. There are an increasing number of organisations supporting women in STEM, and we need to ensure we offer members something unique and relevant to our core values. We also recognise that we need to develop a more sustainable financial model.

A key component of the day was to review and update our mission in this ever-changing environment. We are still refining a succinct statement, but identified key components were:

- Networking based on shared expertise
- Sharing technical expertise drawing from members’ diverse backgrounds
- Providing practical support for women in nuclear (and STEM) and their managers
- Spreading messages about the safe use of nuclear

This is just the beginning and there is still more work to do – shaping the many thoughts shared into a practical action plan! However, taking the time out to “think BIG” about our strategy (which is usually the item at the end of the meeting agenda which is skipped when you run out of time!) was of huge value to the WIN Australia Executive. It was gratifying to take the time to reflect on what have done and we are excited about what we could do in the future!
Networking Event

On 22 August 2017, WiN Australia hosted a successful networking and movie screening event. Over 30 WiN members, their family and friends came together at the cinemas to celebrate diversity. WIN Australia’s guests included State Member of Parliament, Ms Melanie Gibbons, Dr Adi Paterson introduced by WiN Australia’s President as, “in order of priority: a WiN Member, a Male Champion of Change and Chief Executive Officer of the Australian Nuclear Science and Technology Organisation” and members of the Australian Nuclear Science and Technology Organisation Board. This event was a valuable opportunity for attendees to network, before hearing from Ms Gibbons on some of the challenges of being a woman and a new mum in politics. The night wrapped up with a screening of the movie Hidden Figures - the story of a team of female African-American mathematicians who served a vital role in NASA during the early years of the U.S. space program. This movie was a valuable reminder of the importance of female networks for women in STEM – networks WiN Australia hopes to build through events like these! It was also a powerful reminder of the important contributions women in STEM (and other underrepresented minorities) make to our society.
14th Annual WiN-Canada Conference

Registration is now open for the 14th Annual WiN-Canada Conference, which will be held at the Brookstreet Hotel in Ottawa, Ontario from October 22nd - October 24th, 2017. The opening reception will take place on October 22nd, followed by a full-day conference and closing reception on October 23rd. The conference will end with industry tours on October 24th. The early bird rate has ended and industry tours are selling out quickly; register now for the best prices and industry tour availability!

CNS Conference

WiN-Canada participated in the Canadian Nuclear Society’s 37th Annual CNS Conference & 41st CNS/CNA Student Conference in Niagara Falls on June 4-7, 2017. Representatives spoke with current and potential members at the WiN-Canada booth, and promoted membership with students who were participating in the Student Conference. During the student poster session, WiN-Canada streamed its first Facebook Live video, which has received over 100 views.

EHRC Connected Women Accord
The Electricity Human Resources Canada Leadership Accord on Gender Diversity in the Electricity Industry is a public commitment by employers, educators, unions and governments to promote the values of diversity, equality and inclusion throughout their work. WiN-Canada is proud to be a signatory on this accord and has committed to advocating for opportunities for women in the electricity industry.

CINDE NDT Conference

WiN-Canada President Heather Kleb attended the Canadian Institute for Non-Destructive Evaluation (CINDE) Conference in June. At this conference, she signed an MOU with CINDE on behalf of WiN-Canada. The MOU formalizes the partnership between the two organizations and outlines the shared opportunities for collaboration in the coming year.

Speakers’ Clearinghouse Initiative

WiN-Canada’s Speakers Clearinghouse is gearing up for upcoming speaking opportunities this fall and expanded outreach within the community and to students. Updates on this initiative and recent activities are posted on a regular basis on our website and on social media.

The One Campaign

Canada only contributes around 2 cents a day per Canadian on global education. As part of The One Campaign, a petition has been created calling on politicians to double Canada’s investment in global education. WiN-Canada has shared information about this petition to its members and encourages WiN-Global members to check out the campaign for more...
information about the importance of global education for girls and its significant impacts on society.

You can visit us online at:
www.wincanada.org
www.facebook.com/womeninnuclear.canada
twitter.com/win_canada

**WIN FRANCE**

**WiN Normandy Celebrates 10 Years**

WiN Normandy region (north-west of France), created on September 12th, 2007, counts 87 members today.

For this 10th anniversary, David Houivet, Director of ESIX Normandy, an engineering school of Cherbourg-en-Cotentin, and Marie Kirchner, President of WiN Normandy, welcomed the participants.

Marie Kirchner: " We have a lot of gratitude for all those who made these ten years so wealth and fame: our members, former members, partners, institutional, elected and media."

Chantal Quimerc'h, Manager of nuclear propulsion's infrastructures, and Marie Lanaud, EDF's safety engineer, showed of their interest for the association through their career. Marie Lanaud received the FEM'Energia award in 2010.

Professor Jacques Foos reminded that Marie Curie was the only one until this day to obtain a Nobel Prize in Physics and in Chemistry.

During the panel session, David Houivet, André Rozec, ESIX educational adviser, Emilie Perrin, President of the Club Normandy Pioneers, Professor Jacques Foos and Anne-Marie Duchemin, from CREPAN (Normandy's environmental regional committee) reminded the cross-cutting approach of WiN Normandie's actions and its implication with ESIX students, businesswomen in Normandy, other associations and local networks: several pluralistic debates were organized, in particular by contributing to the national debate on the energy transition.

Dominique Mouillot, President of WiN France, presented activities of WiN Europe and WiN Global as well as those of all WiN regions in France.

Exchanges with all the participants closed this friendly evening.

**12 Partners collaborate with WiN Normandie:**

- Association « Carrière 2000 »
- ESIX Normandie
- Lycée Alexis de Tocqueville
- Lycées Emulation Dieppoise et Pablo Neruda
- CFA EN 50 (Lycée Edmond Doucet)
- Réseau Normand
- MEF COTENTIN
10th anniversary of WiN Normandie

Article in Ouest-France Newspaper - Marie Kirchner, President of WiN Normandie

FEM’Energia 2017 - Award Ceremony: October 10th, 2017

Since 2009, FEM’Energia awards in partnership with EDF and WiN Europe, aim to recognize the exceptional contribution made by female students and professional women to nuclear activities in France and Europe.

The Award ceremony will take place in Paris, October 10th, 2017.
To participate: femenergia@edf.fr (before October 3rd).
Student Meeting

On Saturday, June 24, 2017, WiN-Japan (WiN-J) held its 5th student meeting with NEDE, an organization consisting of Faculty of Science and Engineering students at Kindai University.

NEDE developed the game to simulate the combination of electricity sources 2 years ago, they have improved it since then. This time, NEDE added the viewpoints of “the balance between demand and supply” and “the kind of electricity source, for example, as Base Load supply, as Mid-range Load supply and as Peak Load supply”, then the consideration level of simulation became more difficult.

The models used in each group were based on different Japanese electric power companies, so their constraint conditions were different based on the facilities of supply. At first game, they had to cover 50-60% of supply by source as Base Load supply, and they cleared easily. But, at second game, they couldn’t use nuclear simulating the situation in Japan after the Fukushima Daiichi Nuclear Power Station Accident, then they had trouble in achieving their goals in the cost of generation and CO2 emission.

WiN-J lectured about the viewpoint of the “S+3E (Safety, Energy Security, Economic Efficiency and Environment)”, which was indispensable in consideration on energy mix, and supported the group discussion to be more deeply.

Technical Tour

WiN-Japan members took the FY 2017 technical tour of the Fukushima Daiichi Nuclear Power station of the Tokyo Electric Power Company on July 21 in collaboration with the Japan Electrical Manufacturers’ Association (JEMA). This is the second time to visit Fukushima, six years after the accident in 2011.

We observed the exterior of Unit 1-4 reactors, the Advanced Liquid Processing System (ALPS), the Impermeable Wall (frozen soil wall) and the building with subdrain-purification equipment. We encountered the internal inspection of a reactor containment vessel in the Unit 3 using a robot to reveal the situation of fuel debris. Discussion will be carried out on
how to proceed with its operation. Working environment was significantly improved compared to three years ago when the first technical tour was set out. For example, use of Tyvek suits and masks is now only required within the surrounding areas of buildings with high dose. In addition, a large resting area including individual spaces for staff of relevant companies was prepared, warm meals from a nearby food service centre became available, and also a new office building has been built.

On July 20, the optional program has been arranged to provide additional opportunities for participants to build a better understanding of the priority projects for revitalization in Fukushima. We visited the "Centre for Environmental Creation", an organization that conducts research and provides information with the aim of recovering and re-creating the environment that has been contaminated with radioactive materials, and the Naraha Remote Technology Development Centre, an institution that conducts research on decommissioning and training the human resources, as well as fostering the related industries.

The participants visited three other projects in evacuation zones. First, a grape vineyard, one of the projects to create and promote new industries. Second, the Thai-based cafe franchise operator that first opened its Japanese branch shop in the disaster-hit Kawauchi Village that provides much-needed enjoyment to residents, a project of revitalization of the local community. Third, the multifaceted tomato farming business, a project of support for resumption of farming.

The latest valid information about the challenges for Fukushima’s reconstruction that were observed during this tour will be shared not only among the WiN-J members but also within their workplace, and furthermore, it will be utilized whenever communication will take place with the public.

**Summer School 2017 for Female Students**

On August 6, 2017 in Saitama, WiN-Japan (WiN-J) participated in a poster session called “Summer School 2017 for Female Students” (3rd Grade of junior high school to 3rd Grade of high school), which was a program to support female students who choose science majors, hosted by the National Institutes for Quantum and Radiological Science and Technology (QST).

This WiN-J poster session featured “Application of Artificial Intelligence (AI) technology in the field of nuclear as well as other energy sources” by introducing familiar applications such as online shops, YouTube videos. For example: Deep Learning involves analyzing data through a combination of several AI techniques.
Female students who are considering majoring in science participated in the summer school and became full of hope as they were informed about the future of AI technologies, which are promising for energy and nuclear industry purposes, including design and engineering, analysis and evaluation, and the forecast of energy demand/supply and communication that will be extremely valuable to solve energy problems that Japan is facing now.

This program also aims to encourage female students to learn how attractive science majors are, and to better understand their options in academic and professional career paths through dialogue and interaction with scientists and engineers.

Afterward, we heard lots of good feedback from the participants, including: “I’ve gotten more interested in science,” “My anxiety about my career path was just swept away,” and “It helped me to create a concrete vision for my future.”

UNIQUE DOUBLE-EFFECT METHOD

In December, on behalf of the Head of State, National Youth Contest of Innovative Projects NURINTECH was held in Astana. The Contest was mainly focused on attracting young people from Kazakhstan to research and innovations.

Aigul Sadaukasova, a young engineer from the East Kazakhstan State Technical University became one of the winners of this intellectual Contest owing to her development of a unique method on uranium extraction from anthropogenic and hydromineral raw. This method is more economically viable and environmentally friendly compared to existing methods. Aigul was asked to talk more about her development, its prospects and plans for the future.

Aigul, could you tell us about your technology, that enables rising economic benefit and do not harm the environment when uranium processing?

– Sorption technology of uranium and other metals extraction from solutions is well-known for many years. Today synthetic ion exchange resins are used for sorption of uranium from pregnant leach solution (PLS). The sorbents as shungite and zeolite we have developed to extract of uranium from technogenic hydromineral uranium-containing raw materials and their technological regime show that this raw might be deeply purified against uranium. At the same time, it allowed to obtain sorbents saturated with uranium to a few percent (wt.). Ecological component is that with the help of our sorbents we can reextract uranium that remained in waste solution. Accordingly, this will have a bit of an economic effect, as initially we planned to use our sorbents only for diluted solutions such as waste solutions of uranium chemical and metallurgical industries and natural water.

How did you come to discovery of this method? This is with no doubt a hard work of many years, lots of infinite calculations and experiments, isn’t it?

- Yes, you are right. Professor of Ural Federal University named after first President of RF B. Eltsyn, Viktor Ivanovich Zelenin, one of our research supervisors, has developed hydroxide-based catalyzators and uranium sorption on hydroxides of polyvalent metals for many years. However, preparation of cryo-prilled hydroxides from metallic salts is time-
consuming and labor-intensive process. Therefore, it was offered to use nature materials as shungite and zeolite as matrix to precipitate metal hydroxides. Some techniques had been tested to prepare sorbents from natural materials and metal hydroxides. According to pre-calculations, it was concluded that we should follow developed method. Sorbents’ development and testing took three years of PhD traineeship but sorbents still need to be modified.

**Your invention undoubtedly is of high practical importance. Are you going to test it in our mines?**

– Decision to grant two invention patents by the Federal Institute for Industrial Property RF (FIPS) confirmed practical value of our research. To date, the results of our research, in particular sorbents and their possible application were demonstrated only at NURINTECH and published in some articles. I think it is too early to implement them in uranium production because it should be proven on a larger scale than laboratory and beyond-laboratory tests. Therefore, we have not presented our achievements among uranium enterprises yet.

**What about promising directions of your invention near and far abroad?**

– Today Russia, Azerbaijan, Tajikistan, Japan, etc are involved in uranium sorption from dilute solutions. The way to prepare sorbents is different. I think that application of natural materials and industrial waste, as in our case, is quite a promising way. I believe, we will be able to modify them to such a quality that will compete with the sorbents abroad.

**Could you tell us about yourself a little bit? What are you keen on as much as uranium extraction from the water and industrial uranium waste?**

– I have started studying metallurgy and mineral processing after obtaining a bachelor’s degree in Chemistry. Perhaps, orientation of our Region has played a pivotal role here. In addition to my research work, I’m interested in chromatography and chemometric.

**One last thing, Aigul, how do you see your scientific future? Are you going to investigate any other research areas or continue working at this invention in detail?**

– Uranium sorption really attracts me, I would like to research it and further. However, I’m interested in statistics of analytical chemistry too, but this is a healthy hobby.

Thank you, Aigul, I wish you every success and new scientific discoveries!

*Togzhan Seifullina,*
*Nuclear Society of Kazakhstan*
WiN Korea held its 2nd Board member’s workshop (30th June~1st July) to devise a future plan and strengthen the union power. The workshop was attended by 10 board members. On the first day of the workshop, we watched the “Hidden Figures” movie, which treats African American women’s concerns and distress at their poor working conditions during the racial discrimination period. The ongoing discussions were followed by a discussion on the theme of “WiN Korea Operation and Development”, with this discussion, we plan to establish a long term development plan as a reference. In addition, Lee Eun-yeong, former MBC announcer and former Director of MoA Speech & Communication, talked about how to enhance his or her competitiveness through the “Strengthening Competitiveness of Women Scientists-Communication Speech Act”. On the following day, time was spent experiencing
meditation and gymnastics including health lectures and how to relieve work stress. Director General Lee Seung-sook said, "through the workshop, the board members and the committee members of WiN Korea gathered together to provide a forum for mutual understanding and harmony such as discussion and information exchange, and it was a good opportunity to collect various opinions for activating the association."

WiN Korea Publishes Leaflets on Activities
WiN Korea has produced a Korean publicity leaflet that can be distributed abroad so that it can be understood more easily. The newly created leaflet is a publicity material reflecting the current status of the existing situation, and it contains a summary of the purpose of establishing WiN Korea, major activities, and subscription. The prepared leaflet will be used as an important reference material for the work related to our association and it is designed to enable anyone to view the electronic file through the association’s website. (www.winkorea.or.kr)

Meeting with Women’s Science and Technology Organizations
As part of the support program for the Korean Women’s Science and Technology Association, WiN Korea is organizing three seminars (2017.07.05.; Korea Women’s Science and Technology Association / 2017.07.07.; Science Fellowship / 2017.07.27.; Korean Women Technology Engineers Association) held a meeting with “Women Science and Technology Organizations.” The seminar was held under the theme ‘Learn and Learn from Women in Science and Technology Groups’. It was time to organize a mutual cooperation system and discuss information exchange and cooperation. Participants discussed the difficulties and troubles experienced as women scientists and engineers and exchanged opinions about the role and identity of women scientists and engineers in the future. In addition, we will exchange opinions on women-related agendas, such as activating women's groups, gender equality, and advancing women's social advancement, and will continue to hold meetings to promote women's representation and mutual development. Lee Seung-sook, the Director General who attended the meeting, said, "This meeting was a meaningful event to raise friendship among women's organizations and I think it should be an occasion to maintain constant meeting and to exchange information with each other. “

**WiN Korea Holds “Understanding Nuclear Power through Experiment and Practice” Job Training**

WiN Korea held a training course on atomic energy attended by 30 high school teachers in Korea from August 8th to 10th for 2 to 3 days at the Korean Atomic Energy Research Institute. The seminar was held in conjunction with the Korean Institute of Nuclear Emergency Research (KAERI), and was themed "Understanding Nuclear Power through Experiment and Practice". The seminar was held to help students understand nuclear and radiation. WiN Korea has been looking for ways to ensure that students have correct and effective knowledge transfer. In addition, the researcher of the Korean Atomic Energy Research Institute (KAERI), and the Korean Nuclear Safety Academy participated in the seminar, and gave lectures on the understanding of energy, life and nuclear power generation, life story and radiation experiments, and research reactor HANARO. The program was centred on experience and participation. In addition, a certificate was given to the teachers who completed 16 hours of education in two days and three days. In the future, WiN Korea will develop and utilize a variety of nuclear power enhancement programs based on years of experience and feedback from participating teachers.
WiN Spain organized at the end of May, a visit to the José Cabrera Nuclear Power Plant, the first plant in the process of complete dismantling in Spain. The group traveled to Almonacid de Zorita (Guadalajara), location of this site, and they had the opportunity to visit the facilities of the plant and know also the Dismantling and Closing Plan that is being carried out. Mr. Manuel Ondaro, director of the plant's Decommissioning Plan was in charge to provide all the explanations during this visit.

Effectively, the José Cabrera Nuclear Power Plant was the first nuclear power plant that came into operation in Spain in 1968. After 38 years of operation, this unique Westinghouse PWR with only one reactor coolant loop, ended its activity on April 2006.

The activities prior to the dismantling carried out between 2006 and 2009 consisted mainly in the management of spent fuel and in the conditioning of operational waste. Since then, the complete dismantling and closure process was initiated. The tasks to be performed include: removal of conventional elements, dismantling of radiological components, decontamination and demolition of buildings, and environmental restoration of the site, having in mind and giving priority to the safety of the personnel performing the work, and to the protection of the general public and the environment.

Among all these activities, we should mention the dismantling of the components of the reactor coolant loop, located inside the containment building, since it has been a differential activity against previous dismantling projects. One of the most complex activities carried out has been the underwater segmentation of the internals and the reactor vessel, through the use of remotely operated cutting tools. Due to their uniqueness, these actions have aroused the interest of the technical community. Numerous institutions and companies, both national and international, have visited the facility to learn firsthand the scope of these works.

The rest of the large components of the primary circuit (steam generator, main reactor coolant pump and pressurizer) have also been dismantled in situ. In parallel, the potentially
radioactive equipment and systems have been removed from the different premises of the containment and auxiliary buildings.

The process is still on going, including the decontamination of the walls and floors of the different radiological buildings, and the declassification of surfaces that certifies the absence of residual contamination. The management of all these materials, including segregation and recycling is an important activity aimed at optimizing the volume of waste to be treated, including proper separation among the various radioactive waste levels.

The Dismantling and Final Restoration Plan will ensure that the soils to be released are free of residual radioactivity and the land at this site will return to its original characteristics.

*Attendants inside (above) and outside (below) the Jose Cabrera Nuclear Power Plant*  

**WiN Spain Supports Local Chamber of Commerce Women Visiting Ascó Nuclear Power Plant**

With the support of WiN, and the power plant owner, Asociación Nuclear Ascó Vandellòs (ANAV), a group of professional women from different sectors, ascribed to the Reus Chamber of Commerce, visited the Information Center at Ascó nuclear power plant located, at Reus, in Tarragona region.

The Head of the Communications and External Relations of the Site, Ms. Montse Godall received all the attendants, and Mr. Jose Biarnes responsible for Communications provided explanations of the various aspects of the nuclear power generation. These explanations were complemented by a tour of the Information Center which contains a series of well-designed gadgets to easily visualize all the explained concepts (radiation, shielding, waste, etc…).

Dr. Maria Pérez-Griffo, member of WiN Spain Board, who works at these Ascó and Vandellòs Sites provided support during this visit.
Jack Gritt, President, Women in Nuclear UK writes:
I was honoured to be asked by The Department of International Trade to speak at the GREAT Nuclear Energy Summit in Bucharest last week. A trade delegation of British companies attended to find out more about opportunities in 7 markets across the Central and Eastern European region and Finland and to meet potential business partners. It was a perfect opportunity to raise awareness for gender balance which is much needed in the nuclear industry (as well as across other sectors).

Highlights included addresses from Paul Brummell, CMG, Her Majesty’s Ambassador to Romania and CEN Energy Ambassadorial Lead and Campbell Keir, Director for Energy, Department for International Trade. In addition the following keynote speeches provided an overview of the energy landscape and potential opportunities to collaborate:
The agenda then moved to the panel discussion for Women in Nuclear, addressing career development and the benefits of diversity in the nuclear industry. I was delighted to have the opportunity to talk in detail about the mission and progress of Women in Nuclear UK and challenges we face in resourcing our nuclear future. If we are to reach high performance and sufficient numbers of talented people entering our industry, we must focus on attracting women to the sector. It’s that simple. I was also delighted that I was able to share the panel session with Cristina Bucur, President, WiN Romania and WiN Europe.

It was a hugely successful event and my personal thanks go to Paul Brummell, CMG, Her Majesty’s Ambassador to Romania and Campbell Keir, Director for Energy, Department for International Trade for their kind invitation to participate.

PRESIDENT’S CORNER

Dear WiNners

The 2017 Annual Conference in Beijing is over! Everybody present enjoyed a wonderful meeting, a warm thank you again to our hosts and supporters in China, namely WiN China, CNS, SPIC and SNTPC. Sincere congratulations also to our two WiN awardees: Mme Rong Fang (WiN China) and Mme Dominique Mouillot (WiN France/WiN Europe). Both contributed essentially towards the goals of WiN Global and demonstrated outstanding leadership and commitment. The 25th WiN Global Annual Conference will be looked back on with lovely memories of Chinese tradition, culture but also innovative nuclear sciences. Please read the impressions on Page 1 by Eva Gyane, our IAEA Chapter member and Treasurer. Please visit also the WiN Global website and the WiN Global Facebook site for more information as well as the WiN China Conference website.
2018 will be marked with the first joint conference co-organized with IYNC and hosted by WiN Argentina in Bariloche from 11 to 17 March, and the first annual conference organized in South America. I hope I see many of you again!

Last not least: Since 22 August 2017, we are now a legally registered non-profit NGO. Please consider voluntary contributions to WiN Global, every amount is welcome and used for a good cause!

Bank Account: WiN Global

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Dr Gabriele Voigt
President

INDUSTRY NEWS

Please open the following link to read a report on the WiN Global 2017 Annual Conference by Sherrifah Noor Khamseah Al-Idid Syed Ahmad Idid of WiN Malaysia

NEXT ISSUE

If you have any news from your local Chapter for the December issue of WiNFO please send your article in Word format with jpeg photos to winadmin@world-nuclear.org by November 27th.

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