# Argentine Radiation Protection Young Professionals Network (RedSARJoven) Engaging the New Generation

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**Abstract.** Since its creation in 1965, the Argentine Radiation Protection Society (SAR) is working to fulfil the foundational objective of promoting knowledge on radiation protection through training, dissemination of information and knowledge management. This is why SAR carries out the regular dictation of courses recognized by the competent authorities and also special courses.

In recent times, it has become clear that the young generation has a different way of communication and learning. It is a real challenge to adapt the education and training in radiation protection to the modern world, a technological world, where information is extremely wide and where there are many ways to share knowledge and experiences. Thinking on the needs of the Radiation Protection Young Generation, SAR decided to launch the Argentine Radiation Protection Young Professionals Network (Red SAR Joven). This network was created with the purpose of promoting the participation and inclusion of young professionals working in radiation protection in all its applications, improving the resources of the human capital and its competences and promoting the culture for safety in the new generation.

Red SAR Joven was launched at the IYNC-WIN 2018 Congress (International Youth Nuclear Congress - WIN Global Annual Conference) in March 2018, in Bariloche (Argentina) at the Panel "Youth in Nuclear Energy - A Nuclear Movement", where the perspective of young professionals working in nuclear energy and radiation protection were presented by leading professionals from international organizations. One of the main objectives of Red SAR Joven is to create a space for the exchange of ideas and joint work among the young professionals working in radiation protection and also to encourage young professionals who start in this area, giving them information about the different opportunities. To fulfil this objective, and taking advantage of the extensive experience of elder members of SAR, Red SAR Joven is planning to launch a Mentoring Program for knowledge transfer, exchange of experiences and fundamentally to guide young professionals in their radiation protection career development.

During the 2018-2020 period, Red SAR Joven has organized different activities for young professionals, as a "Workshop on Radiation Measurement" and a "Workshop on Optimization Applied to Medical and Industrial Practices". Representatives of the network had participated in national, regional and international events, such as the XI Latin American Regional Congress in Havana – Cuba, with the aim of sharing the experience in the region and encouraging the creation of national networks in other countries.

Red SAR Joven is in line with IRPA's goals that promote the participation of young professionals, as well as being part of the global youth movement in all areas, from nuclear energy to medical applications, from industry to education, research and communication.

#### KEYWORDS: Communication, Young Professionals Network, New Generation.

## **1 INTRODUCTION**

Argentina has developed experience in the nuclear field since 1950 to obtain the benefits from the peaceful uses of nuclear technology. This long experience is the reason why Argentina has a strong position in the world today, with the development of new technology and new projects, from nuclear power plants, production of radioisotopes and all the applications of nuclear technology like nuclear medicine.

From the beginning, the country has worked on radiation safety along with nuclear developments; taking into account the safety of the workers, the public, the patients and the environment. There are highly qualified human resources and experience, and in this sense, the country has the challenge to transfer knowledge to the young professionals and motivate the new generations to work in this scientific field.

The Argentine Radiation Protection Society (SAR) since its creation, in 1965, has been working to fulfil the foundational objectives: to promote the execution of works and exchange of expertise in radiation protection and related issues, to promote awareness of radiation protection principles in regard to the existence and use of radioactive material and sources of radiation and to promote radiation protection as a professional expertise and to contribute to its progress.

One of the main objectives of SAR is to support the active participation of young professionals in radiation protection events. Since its creation in 2013, our Argentine colleagues participated of the Young Professionals Awards in Latin America and the Caribbean, in every IRPA Regional Congress (Brasil, 2013; Argentina, 2015; Cuba, 2018). SAR also supports the participation of young professionals in the Young Scientists and Professionals Awards in International IRPA Congresses (South Africa, 2016; Korea, 2021). In the last national congress, in 2019, SAR organized a special session of young professionals with the presentation of works in different areas.

The participation in IRPA Congresses and these important awards have motivated and contributed with the new generation professional development in radiation protection. The events are a great opportunity to establish networking between young colleagues at regional and international level.

# 2 CREATION OF THE YOUNG PROFESSIONALS NETWORK



In 2018, SAR decided to create a network for young professionals in Argentina (Red SAR Joven) [1], in line with IRPA initiative, as well as being part of the global youth movement in all areas, from nuclear energy to medical applications, from industry to education, research and communication.

At this moment the network has more than 50 members who participate in different activities and exchange information and receive news by e-mail.

This network was created with the purpose of:

- encouraging the participation and inclusion of young professionals working in radiation protection in all its applications,
- improving the resources of the human capital and its competences and
- promoting the culture for safety in the new generation.

The goal is to have a common space to: exchange ideas and work together, make questions and receive answers, show the work of the members and share news (like congresses, courses, scholarships, publications, and of course all kind of information of interest for the young generation).

Red SAR Joven was launched at the IYNC-WIN 2018 Congress (International Youth Nuclear Congress - WIN Global Annual Conference) in March 2018, in San Carlos de Bariloche (Argentina) at the Panel "Youth in Nuclear Energy - A Nuclear Movement", where the perspective of young professionals working in nuclear energy and radiation protection were presented by leading professionals from international organizations.

In the same year, in April 2018, the Network was presented in the last IRPA Regional Congress that was held in Havana, Cuba, with the aim of sharing the Argentine experience and encouraging societies of all Latin America to take this initiative and to launch their own Young Professional Network.

## 3 SOCIAL MEDIA

In recent times, it has become clear that the young generation has a different way of communication and learning. It is a real challenge to adapt the education and training in radiation protection to the modern world, a technological world, where information is extremely vast and there are many ways to share knowledge and experiences.

The page in Facebook @RedSARJoven was created at the same time as the Network creation in January 2018. On the page, updated news can be found like activities, publications, congresses, workshops, fellowships and other information of interest for the young generation in radiation protection. Currently, the page has 530 followers.

More recently, the use of Instagram has risen a lot particularly among young people. Last November, the account @RedSARJoven was created and launched in the "Virtual workshop on radiation protection in radiology". In only one month, the account reached over 100 followers.

As a result of the first virtual workshop organized by the Network, a You Tube Channel "Red SAR Joven" was opened to share some videos of the Network Activities and make the information available, in particular for those who couldn't participate in the activities in real time.

## 4 WORKSHOPS

Among the activities that have been organized and carried out by Red SAR Joven during 2019-2020, it can be mentioned three workshops. It is important to highlight that all the proposals were suggested by the members. The registration was free of charge with the aim of increasing the participation of young professionals.

## 4.1 Workshop on Radiation Measurement – March 2019

The Workshop on Radiation Measurement was carried out from 20 to 25 March, 2019, with 32 participants. The goals were to provide training and updating in the use of detectors and measurement techniques with dose rate and surface contamination detectors. The participants were young professionals coming from different areas and it was required to have previous basic knowledge on radiation protection. The participants work in a variety of applications and institutions, for example: universities, investigation laboratories, regulatory authority, research reactors, hospitals, waste management facilities and fire brigades.

During four days, theoretical and practical sessions were held, including the use of different types of detectors and sources of low activity. The last day, a practical exercise was carried out visiting a relevant facility where the participants had the opportunity to interact with the staff. At the end of the workshop, the participants continued working in groups for data analysis and conclusions of the measurements collected.

## 4.2 Workshop on Optimization Applied to Medical and Industrial Practices – August 2019

The Workshop on Optimization Applied to Medical and Industrial Practices was carried out from 28 to 30 August, 2019, with 22 participants. The goals were to provide training and updating to young professionals who work in radiation protection in industrial and medical areas for the implementation of optimization.

During three days, the optimization basis, ALARA approach and procedures were presented based on the Safety Report No.21 Optimization of Radiation Protection in the Control of Occupational Exposure – International Atomic Energy Agency. Each day, practical cases were presented that reflected situations in different areas: nuclear medicine, radiodiagnostic, interventionism, industrial radiography, research reactors and PWR.

The last day, a method to help decision making was presented. At the end of the workshop, the participants created a WhatsApp group to ask questions and interchange information and news. The group is currently active and contributes to the aims of the Network.

## 4.3 Virtual Workshop on Radiation Protection in Radiology – November 2020

The Workshop on Radiation Protection in Radiology was carried out on November 7, 2020, with more than 150 participants from Argentina, different countries of Latin America and also Portugal. The proposal was made to celebrate the International Day of Radiology (November 8). This workshop had the additional challenge that the lectures were all given by young professionals that work with radiation in different areas.

At the end of the workshop, a panel was organized to discuss: How to enhance radiation protection and How to strengthen and motivate the young generation. Some conclusions: keep working and give opportunities to young students and professionals; strengthen the use of social networks as the main way of communication today; and plan strategies to encourage the next young generation or generation Z.

The workshop recording was recorded and uploaded in the new You Tube Channel of the Network [3].

## 5 PUBLICATION IN NUCLEAR JOURNAL

In 2018, after the launched, Red SAR Joven published an article in the nuclear journal "EN hoy" [3] of national distribution with the aim of promoting the Network and also the activities regarding radiation protection.

#### **6 WOMEN IN RADIATION PROTECTION**

The Network has an active participation and a strong commitment by young women who work in radiation protection in different fields: such as research, dosimetry, waste management, research reactors, nuclear medicine, etc.

Red SAR Joven widely disseminated information about the IAEA Marie Sklodowska-Curie Fellowship Program and encouraged young women to participate as an opportunity to improve their education and training.

Red SAR Joven hopes to encourage women to work in radiation protection and inspire the younger generations.

#### 7 PARTICIPATION IN IRPA YGN

From the beginning, Red SAR Joven is a member of the IRPA Young Generation Network (YGN) [4]. Since 2020, the chair of Red SAR Joven has the honor and pleasure of being a member of the Leadership Committee.

In 2020, as being part of the IRPA YGN, Red SAR Joven collaborated in the collections of testimonies on the impacts of the Covid-19 on the continuity of RP. Argentina participated in the collection of them and in the translation into Spanish of the synthesis. Currently, the synthesis is available in English, Spanish, Japanese and German [4].

#### 8 BOOK: HISTORY OF SAR

In 2019, SAR edited the book of the "History of Argentine Radiation Protection Society, 1965-2018" [6]. The book was made with the contribution of testimonies and documents given by many members and with the hard work as compiler by the Member  $N^{\circ}$  1 of SAR.

Red SAR Joven is very grateful to be included in the Chapter 14. It's like a symbolic bridge and hope to continue with the activities and write the next edition.

## 9 CONCLUSION

The creation of Red SAR Joven provides a common space for young students and professionals in radiation protection. The activities carried out contribute to the development of the professional career considering technical skills as well as soft skills (communication, teamwork, leadership).

Red SAR Joven hopes to be a reference and guide for the young generation, who have the legacy and challenge to continue with the goals of Argentine Radiation Protection Society (SAR), to improve and to strengthen the radiation protection in all its applications.

## **10 ACKNOWLEDGEMENTS**

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