VIEWPOINT OF TEWS 2025 MVP (MOST VALUABLE PARTICIPANTS: MS. NADIA'S OPINIONS, AS OF THE REPRENTATIVE PARTICIPANTS OF TEWS 2025 PROGRAM

Nadia Babaei Bidmeshki

Nuclear Science and Technology Research Institute

1) Please kindly let me know overall impression of the School.

An experience that I will cherish thoroughly was attending the *INSTA Spring School of Advanced Radiation Protection Focusing on NORM* in Tokyo, Japan last month. The scientific community abroad is a lot more welcoming. There is space for everybody, a co-operative, interactive, freeing environment full of encouragement and growth. Japanese Voluntary Experts Team (JVET) helped me get in touch with great minds, of diverse backgrounds, who took out valuable time for good, productive scientific discussions. And Tokyo, was truly stunning! With all the restrictions in language, it truly was a special time that I was fortunate to experience. How can I not thank Japan Government, Tokyo University, NPO-Science and Technology Information Forum, and IAEA for funding my journey and providing me with this opportunity!

2) What brought you in the first-ever INSTA EPE & on-site Spring School?

As someone actively involved in promoting nuclear science and technology among Iranian students, teachers, and university audiences, I recognized the importance of receiving professional training to ensure the content I deliver is both accurate and engaging. To spark greater interest in nuclear fields and help cultivate the next generation of scientists, I need to understand not only *what* to teach, but *how* to teach it—at the right level and according to international standards.

The INSTA program stood out as a unique opportunity to deepen my expertise and refine my educational approach. The topic of Naturally Occurring Radioactive Material (NORM) is particularly significant in Iran, where industries like oil and mining frequently encounter related challenges. While regulatory frameworks exist, my aim is to go beyond compliance and contribute to building a culture of awareness and safety. I'm especially interested in finding effective ways to engage engineering students with practical, interdisciplinary learning about NORM. By integrating insights from this program into both academic settings and industry outreach, I hope to advance best practices and promote scientific collaboration across the region.

3) How interesting, useful & effective was this School & the INSTA EPE for your career & practices in your institute?

Everything offered through this spring school —both the 5-day online course and the 6-day onsite school—was incredibly informative and enriching. The instructors were highly professional and managed to convey a great deal of knowledge effectively within the limited time. The same

can be said for Phase I of the INSTA EPE.

Although I hold a PhD in Nuclear Engineering with a focus on radiation applications, I still found the content of the school to be remarkably valuable. Participating in this program has contributed significantly to both my scientific development and personal growth.

I benefited from the training in two key areas: first, in advancing my own research and applied scientific work, and second, in my outreach efforts—particularly in transferring knowledge to teachers and students as part of my mission to promote nuclear science and technology. This dual impact makes the experience deeply meaningful for my current role and future career.

4) Which components of the School were most interesting, useful & effective for you?

This is a difficult question to answer, as the entire experience was truly enriching. First and foremost, I must highlight the unique value of in-person participation. Being physically present in a classroom offers a much deeper learning experience compared to online or offline training. Similarly, site visits provided an even greater impact than classroom sessions—they were both highly educational and inspiring. The School was clearly designed and executed in a way that fully engaged participants through a variety of learning tools. Lectures, lab visits, group discussions, and interactive activities all worked together to reinforce learning and make the experience more memorable.

Personally, Dr. Ogawa's class and the introduction to the PHITS simulation code were particularly exciting and relevant to my interests. I was also deeply impressed by the visit to the JCAC laboratory, which demonstrated the remarkable scientific capabilities of Japanese researchers in detecting extremely low levels of radioactivity. Another highlight was the visit to the fire station, which I found both thrilling and insightful. I believe that many participants, myself included, would not have had the opportunity to visit such secure and operationally sensitive sites—like police or fire stations—in their own countries. This reflects the strong coordination and connections of the University of Tokyo, especially through Professor Iimoto, with local institutions, which greatly enriched the overall experience.

5) How do you maximize the knowledges and experiences you obtained by attending this School for your career?

I am committed to applying the knowledge and experiences gained from this School in both my academic and outreach work. On one hand, I will integrate what I've learned—especially on topics like NORM, radiation safety, and simulation tools such as PHITS—into my research and teaching activities, helping to raise the scientific standards of the content I deliver.

On the other hand, my role as a science communicator and promoter of nuclear technology allows me to directly share this knowledge with a broader audience, including teachers, students, and young professionals across Iran. I plan to organize workshops, lectures, and outreach activities that translate complex topics into accessible and engaging material, aligned with international standards. In addition, the international experience and exposure to best practices in Japan have inspired me to strengthen regional collaboration and encourage interdisciplinary approaches to radiation education and safety. By combining scientific insight with effective communication, I aim to both advance my own career and contribute to building a more informed and capable community in the nuclear field. I believe my passion for education, dedication to research, and enthusiasm for knowledge-sharing make me a strong and committed participant in this initiative.

6) Which lectures and/or discussions brought good improvements for your presentation?

Since my academic background is not directly related to education or learning sciences, completing Module 1 of the INSTA program was especially valuable for me in designing educational content and training sessions. During the group discussions, we often referred back to the models and principles introduced in this module to shape our approach. I was also inspired by the structure and delivery of the INSTA program itself. Its thoughtful design served as a strong example of how to organize effective learning experiences. In terms of content, my background in nuclear science provided a solid foundation for designing the technical material. However, the "WOW Factors" that helped enhance the presentation came from the inspiring visits to the JCAC laboratories. The creativity and precision demonstrated there greatly influenced our thinking. I'd also like to express my appreciation for my group members, Dr. Obeid and Dr. Bin Abdullah, who contributed fascinating ideas and made the discussions even more engaging and insightful.