



- Basic Research Field Course -



## Mr. WANG Yadong

China Institute for Radiation Protection (CIRP)

CHINA

The University of Tokyo  
(September 9, 2019 – February 14, 2020)

It is my great honor to participate in the MEXT Nuclear Researchers Exchange Program FY2019 and this experience of studying and living in Japan will be a precious memory in my life and help me a lot in the future.

Luckily, I joined Iimoto Lab of The University of Tokyo and my major work here is about the continuous measurement of radon-222 in air. With the guidance of Prof. IIMOTO Takeshi, I learned the knowledge about radon-222 and its measurement first and conducted the experiments together with other lab members. During the process, I improved my abilities to plan the experiment and handle the encountered problems. Besides, I visited a number of nuclear institutions (including NIFS, QST, JAEA, Kindai University and KUCA), and attended the 2nd JRSM-JHPS conference (Sendai, Dec. 4-7) with giving two technical presentations (one oral and one poster presentation). All these improvements and academic experiences will be helpful in my future research.

My living condition in Japan is excellent and comfortable. I really enjoyed the delicious food, fancy nature beauty and shrine, and habitable living environment. I'm heartily grateful to the NSRA staffs and all the members of Iimoto Lab for their kind help.



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## Mr. ZAHARI Ahmad Khairulikram

Malaysian Nuclear Agency (Nuclear Malaysia)

MALAYSIA

Research Institute of Nuclear Engineering (RINE)  
University of Fukui  
(September 2, 2019 - November 22, 2019)

I was accepted to participate in the MEXT Nuclear Researchers Exchange Program on Radioactive Waste Management in the RINE in Tsuruga. The radioactive waste management study is within the radioactive facility decommissioning laboratory supervised by Prof. YANAGIHARA Satoshi and Dr. KAWASAKI Daisuke.

The inspiration for my study stemmed from the absence of expertise in my home country pertaining high level waste disposal. In Malaysia, there are no nuclear power plant currently in operation. Radioactive wastes normally consists of disused sources from medical and industrial sectors which are rarely of high level.

During my time in the institute, I studied the multi-barrier disposal designs considered for high level waste disposal and the reasons for such designs. Japan has successfully compiled a basic study for this purpose in its comprehensive H12 report published in the year 2000. In the report, every possible scenarios which could affect the safety functions of the engineered barriers were discussed. This report is very useful as a starting point for countries that would like to start a similar program.

The performance of the engineered barriers are normally assessed by the nuclide diffusive flux and residence time in each barrier. To capture the basic principle of the disposal concept, all these were numerically calculated without the use of any modelling software.

I consider myself quite lucky to be put into this research laboratory for multiple reasons;

The laboratory members are very friendly and engaging, their English language proficiency are fairly good which made social interaction lively and most importantly, the supervisors are always very helpful and attentive.

