

Summary of the Advisory Board's Evaluation for FY2017

Advisory Board Members:

Prof. Brenda Howard (UK Centre for Ecology & Hydrology)

Prof. Sergey Fesenko (Russian Academy of Sciences, Russian Institute of Radiology and Agroecology)

Prof. Wolfgang Raskob (Karlsruhe Institute of Technology)

Dr. Satoshi Yoshida (National Institutes for Quantum and Radiological Science and Technology)

Evaluation period: April 1, 2017 - March 31, 2018

Annual Symposium: March 6, 2018

Advisory Board meeting: March 7, 2018 Venue: IER Main Building 6F Conference Room

Prof. Brenda Howard

The research activities of the IER are of high quality and of direct interest and usefulness to the authorities and people living and working in the areas impacted by the FDNPP accident. The refereed paper and other output is good and has grown with time as would be expected.

The recently commenced project with Ukraine will be of mutual benefit and has some interesting aspects as outlined in the keynote speech during the open day. Many different types of international and national cooperation are listed which include interesting cooperation with different countries, age groups and researchers.

The open day was successful and most of the talks were interesting and appropriate. The audience included both scientists (local and national) and the public and is a rather unique meeting in targeting both audiences within the day by using different approaches of general talks, scientific talks, panel sessions and posters. Much work is needed for this meeting, but I think it has considerable value. Dissemination to the public in other fora is also carried out, in some cases addressing specific issues of local communities. Again this is to be commended.

The structure and content of the master's course looks reasonable and interesting. There is a need to ensure a high quality of teaching and interaction so mechanisms to address this issue need to be put in place. A procedure to receive feedback is recommended.

Overall, the activities and output of IER continue to impress and to maintain a high standard. Plans for the future have been well developed and are realistic.

Prof. Sergey Fesenko

The fourth progress report meeting presented a lot of novel information covering all the environments, analytical techniques and research tools. The IER research activities are well justified and novelty most of them is very clear. They complement each other, providing response to the national demands of long-term assessments of the consequences of the Fukushima accident.

High importance for science and high practical value has forest and freshwater studies. Modeling of these processes is important for the decision support of the environment management in those areas. Assessments of radiation impacts on plants and animals, including appropriate dosimetric support are of high interest for scientists.

An extension of the collaboration of the IER with many other national and international relevant institutions looks very impressive. The number of collaborating centers increased in 2017 up to 26 institutions. Such approach allows the attraction of the numerous researches around the world and an increase of the research efficiency in the areas affected by the accident. The collaboration of the IER with relevant IAEA projects is effective way for dissemination of the Fukushima findings. In this respect, the approach based on Joint Usage/Joint Research Centre looks as very important.

The IER, having broad area for research and highly qualified staff, provides a good bridge between research and education; the establishing a graduate program is a good step forward in that direction. Forty-three publications in the peer-reviewed journal published by the IER in 2017 is an excellent output in dissemination of the results for relatively small and relatively young team.

The current staff of the institute is balanced in terms of working experience, skills and age of the researchers. However, some changes in the staff are foreseen in the nearest future and advance planning of the optimal staff rotation would be highly desirable.

Prof. Wolfgang Raskob

The Institute of Environmental Radioactivity (IER) is an important scientific partner for the local population of Fukushima prefecture and has performed outstanding research to understand environmental processes following the Fukushima disaster. Work on terrestrial and aquatic environment focused on the description and identification of key processes. A new research topic was addressed dealing with research on remediation which is the logical way forward once environmental processes are well understood.

IER has the big advantage to have a strong modelling and experimental group on aquatics and therefore working together might boost the understanding of the main pathways for dose to humans and for the environmental processes relevant to regulate this. In this respect I would encourage that modelling of processes – not only for aquatics – is supported further by the IER management. In general, I want to recommend a strong link between experimental and modelling activities at IER as interaction is surely beneficial for both.

The IER is well connected with national and international institutions and participation in international projects/programs should be further encouraged. I fully support establishing a certified “Joint Use/Joint Research Center” with the collaborators indicated. The collaboration with local actors in the administration and the general public are of high importance and should continue. As soon as remediation will be a research topic, collaboration might be extended to organisations dealing with decontamination at the local level.

To establish a graduate program under an existing graduate school is a very good decision assuring the necessary allocation of resources.

In general, talent management seems to be a critical and important issue to keep the excellence of the staff members at the current very high level. This can be also seen by the list of publications, presentations and lectures which is very impressive.

In general, IER has made excellent progress in 2018.

Dr. Satoshi Yoshida (Japanese Only)

福島第一原発事故の影響を受けた地域の特性を活かした非常に幅広い分野の研究が、適切な研究計画のもとに実施され、質・量ともに優れた研究成果が創出されている。研究所の設立当初からの特徴であった国内外の研究者（研究機関）との連携も着実に実を結んでおり、世界的にも、環境放射能に関する代表的な研究機関の一つになりつつある。

新たにスタートした SATREPS プロジェクトは、これまでの連携を基盤にしつつ、原子力事故の影響を受けた二つの地域が明示的に手を結ぶことで、研究の新たな展開が期待できるとともに、福島県民に対して将来に向けたより良い選択肢や解決策を提示することが期待できる。また、計画されているネットワーク共同研究拠点構想は、IER の求心力を高めることに加え、データや施設・設備の共用を通して、当該分野における日本の研究能力を高めて、長期的な研究の基盤を築く上で大いに期待できる。

国内外の機関との共同研究を進める中で、若手の人材交流の体制が整っており、それによる研究成果も上がっている。SATREPS プロジェクトなどは、さらに優れた人材育成の「場」になることが期待される。福島県内の他の研究施設との連携をより強めることで、当該分野で職を得ることを含めた人材育成がより強化されると考えられる。

福島第一原発事故から7年が経過した現在、多くの機関において環境放射能研究のアクティビティを維持することが困難となっている。このような状況の中、IER に大学院が開設されることは、教育と人材育成に大きく貢献することが期待され、特出すべきことである。事故の影響を受けた現場に近接しているというアドバンテージを活かした特色のある運営を期待したい。

Progress Report Meeting や住民を対象としたセミナーの開催など、県民をはじめとする社会に研究成果を分かりやすく発信していくための活動も実施されており評価できる。

今後も引き続きの発展を期待する。