# THE BULLETIN OF JSA

### THE JAPAN SCIENTISTS' ASSOCIATION

Chasu Blg. 9F, 1-9-15 Yushima, Bunkyo-ku, Tokyo 113-0034, JAPAN Fax: +81-3-3813-2363 http://www.jsa.gr.jp/

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### NATIONAL CONFERENCE "NUCELAR POWER PLANTS AND HUMAN RIGHTS (2)" IN FUKUSHIMA

The national conference titled above was held on April 5 through 6, 2014 at Fukushima University, with subtitle "Seeking the restoration of human beings and society free from nuclear power plant," following the first conference held at the same place two years ago. That was hosted by JSA and several organizations made up of lawyers, journalists, pollution suit groups, and etc.

On opening day, after the opening address by Prof. Awaji and greeting by Prof. Nakai (president, Fukushima Univ.), Prof. K. Yanagida (ex-vice-chair of the accident investigation committee) offered a keynote speech, posing some questions from the point that the accident occurred due to the absence of safety in culture. Emeritus Prof. Masaki reported concerning the movement to seek the decommissioning of nuclear reactor. Six reporters including plaintiffs to ask injunction against reoperation of the Genkai station, as victims and citizens, expressed anxieties about life in Fukushima, labor at nuclear power plant, damage in agriculture and fishery, and regional evacuation. Mr. Sakurai, Mayor, Minamisoma City, talked on the city's actual status. Prof. M. Prieur (environmental law, Limoges Univ.) delivered a special lecture on how international human right law deals with damage at nuclear power stations viewing the Fukushima accident from the aspect of European human right. Lastly Prof. Tamba reported the diversified circumstances of damages in Fukushima.

On the second day were organized several sessions, themes of which were exchange of experiences among plaintiffs of the victims, compensation of damage, breaking with nuclear power generation, news reports on nuclear power plant accidents, and international solidarity and network.

Circumstances have changed three years later from the accident, two years later from the preceding conference. The sessions had a lot of achievement and findings, especially plaintiffs met face to face and the cooperation between lawyers holding each suit and researchers became stronger.

#### NATIONAL SYMPOSIUM ON ATOMIC POWER HELD IN ISHIKAWA

The 35th National Symposium on Atomic Power "Three years and a half since the Fukushima accident" was held on August 30-31, 2014 at Kanazawa city with the theme "Actual status of the accident and issues of resumption of operation and active fault".

In the morning of the first day were presented four reports: "Actual status of the Fukushima NPS accident, reality of Fukushima people and its prospect of breakthrough" by Prof. Shimizu (JSA Fukushima branch), "Circumstances around radiation contamination" by Prof. Noguchi (Nippon Univ.), "World and Japanese NPP" by Dr. Motojima, "What is wrong in Fukushima accident and restarting operation – the way to decommissioning" by Dr. Tateno (JSA Tokyo branch). Their reports state: (a) It must be avoided to determine whether NPS is right or wrong considering health damage, as for future of little people, discriminant is more significant than cancer; (b) Internal radiation exposure for Fukushima residents are held down through various measures, external radiation exposure should be reduced by decontamination; (c) Electric Utility Law determining must be converted, which defines that Nuclear power generation is high-density and large volumetric electric source for industries and heavy and chemical industry; (d) Heat is the most important problem that NPS faces, namely, NPS has a serious defect that reactor core readily get melting when failing to cool high density heat happened to arise in the narrow core.

In the second day, a session "Quake-proof security of nuclear power station and the question of active fault" was held. Three reports were offered: "Quake-proof security of NPS and new control level" by Dr. Tateishi (JSA Niigata branch), "Active fault near Shiga NPS, Ishikawa Prefecture, revealed by scientists and residents' investigation" by Dr. Kodama (JSA Ishikawa branch), and "The problem of active fault and restarting of Wakasa Gulf NPS" by Dr. Yamamoto (JSA Fukui branch). Participants discussed the questions concerning the quake-proof security of Wakasa Gulf and Shiga NPS in Fukui, Niigata Karuwa NPS, and Kagoshima Sendai NPS, new control level and its application to screening, and regional economics after disposition of NPS.

At the tour of inspection around Shiga NPS, 50 participants heard about the history of NPS establishment at Noto Peninsula, Ishikawa, explanation of wind power plant passing by the window, and observed lamination formed on the beach through the window. On the rocky beach by the side of Shiga NPS site, Dr. Tateishi explained the relation between lots of faults observed on the beach and active fault inside the site, and at a fine spot Ganmon, 3km north from the NPS, outcrop of marine sand layer that indicates seismic bumps, and wave cut notches and benches.

#### **ACTIVITIES OF RESEARCH COMMITTEES AND GROUPS**

The JSA headquarters organizes a number of research committees and groups undertaken on a nationwide scale, which are encouraging the members across the country

1) How does the Abe Administration intend to change education?

In advocating "regain Japan", "renewal of education" has been one of the most important issues the Abe administration focusses on together with the economic policy "Abenomics" and the revision of the Constitution. In order to clarify its aim Research community liaison conference for peace and democracy held the 5th series symposium "Education of Japan; exploring the current status and issues" at Meiji University on June 14 with 20 participants. Prof. Katsuno (education, Univ. of Tokyo) mentioned in his keynote speech that the main causes of the education crisis of today are the worst poverty rate below the average of OECD 30 countries since 1985, the deterioration of the living environment, the collapse of the equal opportunity to receive an education and the decrease of education budget (least ratio to GDP ratio in OECD). He also pointed out the political intervention, the competition in education, and the overwork of teachers. "Education renewal" of the Abe administration is oriented to the strengthening of political control to the educational administration and educational content and the marketing of education. Contrary to our wishes to overcome the education crisis, the Abe administration has justified its policy in the crisis, which in fact has been made by the Abe administration. Prof. Kojima (history, Tokyo Gakugei Univ.) reported that in teacher training colleges and faculties of education of the National Universities, the setting of the teacher employment rate, establishment of graduate school for teachers and an advisory body with a local board of education have been carried out re-defining the mission of university. The aim of teacher training is intensified in teaching methods rather than the content of the curriculum. The special education training corresponding to the mass retirement and deflection of teachers' hours of employment should be improved. He claimed that training teachers should be as they have a sound critical spirit, expertise, and autonomy, and that colleges and faculties should have independent authority to educate.

#### 2) PROJECT BY THE RESEARCH COMMITTEE OF ENVIRONMENTAL PROBLEM

The first study meeting on the linear central Shinkansen project was held on July 26, 2014 at Waseda University. The doubts from several fields about the business plan which JR Tokai has submitted are given. JSA announced the statement that asks to withdraw and to cancel this plan on July 15. Because this business plan has severe doubts about the cost performance, technical safety and Mr. Sakamaki, committee member, reported the situation of the environment consideration. explanatory meeting and the public hearing that he himself participated in. The participants and the information disclosure in the meeting were extremely restricted and the correspondence to the speaker at the public hearing was perfunctory and the discussion time was also insufficient. He pointed out many problems that the influence to the environment under construction (a great deal of surplus soil discharge, possibility of polluted soil discharge, a din and vibration, air pollution and accidents by construction vehicles, etc.) and also the influence after practical use (noise, vibration, micro-barometric wave, electro-magnetic wave, measures for earthquake and active fault and flood, etc.). In particular he pointed out that boring exploration for arsenic polluted soil that may be discharged by tunnel excavation is insufficient and that correspondence to water flow is difficult. Many problems have been pointed out also by the opinion of the Minister of the Environment to "The environmental impact assessment report" of JR Tokai.

#### 3) ACTIVITIES OF THE RESEARCH COMMITTEE OF FOODSTUFF PROBLEMS

The committee held a regular meeting on 19 July 2014 inviting Prof. Abe (chair, Study of Nutrition in Home) as a lecturer, where participants discussed with the lecture and DVD "To protect children from internal radiation exposure". Ms. Abe introduced her group and that it publishes "Communication of foodstuff" with key concept, health of mind, body, and society defined by WHO, asking for safe foodstuff and sound dietary habit rooted on Japanese food culture, pursuing significance of eating as Hippocrates'word "Let food be thy medicine and medicine be thy food" indicates. She pointed out that many problems arise in Japanese food environments, for instance, people is anxious about vague food indication seeing genetically modified products sold in the market in spite that influence on human body is unknown enough. We do not know yet when TPP and the issue of food safety are settled. And food contamination has been brought about since the severe nuclear power plant accident. The study group has proposed 12 ways to eat for health: (1) take mainly Japanese food, (2) take foodstuff with no use of chemicals, (3) take non-polished foodstuff, (4) take foodstuff in whole, (5) preferably avoid frozen or fabricated foods, (6) take well-balanced meal, (7) take foodstuff in season, (8) select foodstuff made in Japan, (9) select low-sodium foods, (10) avoid excessive consumption of sugar, (11) refrain from a lot of oil, (12) chew well and avoid overeating.

#### 4) ACTIVITIES OF THE COMMITTEE FOR SCIENCE AND TECHNOLOGICAL POLICY

The government of the Democratic Party of Japan had made the 4th period master plan of science and technology. In 2013 the government of Liberal Democratic Party of Japan and Komeito settled on "Innovation integrated strategy of science and technology". The issue the committee thought is to grasp the trend of science and technology policy under the present government and to make the proposal of JSA for desirable science and technology policy. The committee has planned a session in 20th Comprehensive Scientific Study Convention, and presented the research results in symposia held by JSA branches and submitted articles to JJS. We should pay attention to the drawing up of the 5th period master plan by the Council for Science, Technology and Innovation which has increased the function as a conning tower. The committee will submit opinions to a public comment and perform aggressive proposal activity.

It is desired that the member of the committee has the ability of continuous research and information sending to perform the current issues.

#### 5) THE ACTIVITY OF JSA-ACT

To suppress the average surface temperature rise of the world within  $2^{\circ}C$  by the end of this century compared with the temperature before the industrialization period, how the medium- and long-term climate goals should be set? The Committee has been working on research and information collection to study this problem. The committee has discussed IPCC 5th report, abnormal weather, and reduction plans of governments for greenhouse gas emissions at a few meetings.

The committee held a study meeting in a training camp on September 1 -3, 2014 in preparation for session "Recent extreme weather and climate change" which is to be held in 20<sup>th</sup> Comprehensive

Scientific Study Convention. Its theme and presenters at the study meeting were as follows: "Nuclear power plant is not the answer to global warming" (Dr. Asuka), "Japan's current situation and challenges of wind power generation" (Dr. Kono), "Japan's medium- and long-term greenhouse gas emissions scenario" (Dr. Utagawa), and "Verification of climate change denial" (Dr. Iwamoto). Lengthy discussion has been made under the above themes. There were also reports on confusion in the discussion of CO<sub>2</sub> equivalent concentrations of the IPCC report. Dr. Kawasaki, who participated as a guest, presented a relationship between fishery creature and climate change and research results standing on a wide field of view.

In the session of 20<sup>th</sup> Comprehensive Scientific Study Convention additional reports presented were: "Our Environmental Summit towards climate change deterrence" (Mr. Sagawa), and "High school textbooks in weather and environmental education" (Mr. Sakon). About 30 participants discussed above reports. The climate change problem is an important issue related to the survival of human race, it is necessary to increase interest in JSA and the public.

#### 6) STUDY MEETING "LIFE-NOURISHING SOIL AND DELICIOUS RICE" IN SADO

The research committee of foodstuff problems held a study meeting "From geopark to GIAHS – Life-nourishing soil and delicious rice" on September 20, in Sado Island, where Dr. Homma (president, College of traditional culture and environmental welfare) delivered a lecture. Due to what he mentioned on life and soil, geopark is useful to understand the relation between ecosystem and human life learning the structure of mountain and river, whereas it does not cover the fact that plants and microorganisms reproduced therein constitute an ecosystem. On the other hand, GIAHS (Globally Important Agricultural Heritage Systems) is the land usage and scenery that FAO (Food and Agriculture Organization of the United Nations) authorized because that it protects biodiversity to leave for posterity. In Sado Island there are still gold and silver mine relics. Sado people started to take movements to conserve these three as world heritages, but which are not unified. It is very important to unify those movements as an activity of the entire Sado. The year 2015 is the UN International Year of Soil. Appropriate control of soil is a key in order to accomplish socio-economic task as economic growth and poverty reduction. The UN program aims to ameliorate sustainability of soil resources and spread globally its necessity to acknowledge. The movements in Sado could gain a good development through linking the UN program. As for "delicious rice" the president mentioned about eating quality, constituents, the way of product, relation between the type of soil and eating quality, nakaboshi (drying paddy field in midcourse). As main factors of eating quality, he indicated breeds, locality, climate, cultivation method, agrichemical, harvest way, dehydration, storage, rice cooking, steaming. Dr. Homma notes that in Sado with scarce flatland development of terrace paddy field has been advanced since the Edo Period, rice produced there are more delicious and appreciated, though costlier, than the one at flatlands.

#### DISTRICTS' AND BRANCHES' ACTIVITIES

The JSA consists of 47 branches which are grouped into 9 districts, and they are independently and/or cooperatively carrying out their activities in addition to the headquarters' ones

#### 1) SYMPOSIUM "NOW IN HOKURIKU" HELD

JSA Hokuriku Region held a symposium "Now in Hokuriku" on April 12 through 13. On the 12<sup>th</sup> day eight reports were offered: (a) Environmental pollution by dioxin and etc.; (b) Dioxin polluted Tomiiwa canal and the measure of Toyama prefectural office against that, which has to be kept in surveillance of citizens; (c) Establishment of civic radioactivity measurement room; (d) Radioactive cesium derived from atmospheric nuclear bomb test remaining in the underground of Toyama Pref., citizens' report on their struggle to measurement of radioactive matters in the earth and foods and their will to reduce the amount of radiation; (e) Agriculture-based sustainable regional development, a report of paddy farmer acting to improve environment of vegetation in the areas advancing to be urbanized; (f) Hokuriku Shinkansen route and its effects on Naka-Ikemi Marsh; (g) Itai-itai disease case with Mitsui Mining And Smelting Company, Limited, and its conclusion; (h) International meaning of Cadmium kidney disease compensation, Toyama's rule in this field.

On the next day, several reports were presented. In particular Prof. Nakashima (Nagoya Univ.) expressed his opinion on the reformation of state-run university and higher educational problem in the popularized society, namely, he pointed out that the governmental policy on higher education does not response to students' real situation and desire of learning, though the government aimed to grow global manpower as a significant target.

#### 2) REGULAR MEETING OF HACHINOHE CHAPTER, AOMORI BRANCH

On Apr. 19, 2014, the 1st regular meeting in 2014 "Let's plant a seed in children's heart" was held at the Hachinohe community center. (The City of Hachinohe is located in eastern part of Aomori prefecture, which is the northernmost part of Honshu.)

In the meeting, Dr. Makoto Ara (JSA Aomori branch) reported an agricultural exercise in Hachinohe St. Ursula Junior High School and High School as "the period for integrated studies", which is one of curriculums stipulated by MEXT(Ministry of Education, Culture, Sports, Science and Technology in Japan). The contents of the report as follows: (a) Students noticed the living thing which is there because the students cultivate the field with a hoe; (b) When they cooked and ate the harvest, they can share joy of harvest; (c) "The period for integrated studies" make students to experience acquisition and its practical use of knowledge.

## 3) NUCLEAR POWER PLANT IS NOT THE ANSWER TO STOP THE GLOBAL WARMING AND IT DOES NOT PROMISE AN AFFLUENT LIFE

By four organizations JSA, JSA Miyagi branch, Tohoku University labor union, the resident movement for nuclear power problem Miyagi liaison center an open lecture "For nuclear power plant abolition and tomorrow society" was held at Tohoku University on April 26 with 56 participants. Prof, Asuka (Center for Northeast Asian Studies, Tohoku University) who has worked at Central Research Institute of

Electric Power Industry lectured on the theme "Nuclear power plant is not the answer to the global warming measure".

He mentioned that there are political and intentional deceptions in the promotion of nuclear power as a global warming countermeasure and clarified the inherent risk and cost of nuclear power plants qualitatively and quantitatively as possible. He also reported trends of renewable energy in the world and the nuclear power plant abolition. We can be confident it is possible to achieve both of global warming prevention and nuclear power abolition.

Dr. Ihara (Prof. Emeritus, Tohoku University), who has studied history of science and technology, lectured entitled "Nuclear power plant does not promise affluent society". He inquired the social responsibility of scientists in the situation that leaves negative legacy in the future by the Fukushima nuclear accident. Introducing the historical documents of Science Council of Japan, he asked" Is there a boundary between military use and peaceful use of nuclear energy?" and" Will the peaceful use of atomic energy contribute to human kind?"

Based on the historical situation that was hard to see the research position by the wall of the social system such as military secrets, patents and MSA agreement, he pointed out the following problems. The experts have promoted the big science that uses enormous budget such as nuclear power plant without listening to public opinions. We should not be involved in with people in all fields the action that makes humankind unhappy. The research system of performance principle in which research is evaluated on the point of view of profits of companies should be overcome.

#### 4) FORUM "CONSIDER TOHOKU MEDICAL MEGABANK"

The forum entitled "Tohoku Medical Megabank" was held on Aug. 2-3, 2014 at Sendai City Information and Industrial Plaza in Sendai-city, Miyagi prefecture, which is the biggest city in Tohoku area. The subtitle "A problem of ethics is considered while learning the significance of the man genetic study." was put on the forum.

On first day, there were 4 reports as followed: (a) "Criticisms on Tohoku Medical Megabank Organization (ToMMo)" by Dr. Mitobe (general manager, Wakabayashi Clinic, Sendai City): From the viewpoint of medication provided at the afflicted area, he pointed out some problems in the investigation of the victims; (b) "Cohort study in Nagahama" by Prof. Matsuda (Center for Genomic Medicine, Kyoto Univ): He reported that Nagahama City, Kyoto prefecture established an ordinance for the cohort study.

(c) "Ethical problem of a man genetic study" by Dr. Nudeshima (the Tokyo Foundation): He insisted that medical treatment should be separated from medical study, criticizing ToMMo as an ambiguous plan in the name of "for the quake-hit area"; (d) "As ToMMo" by Prof. Kuriyama (Group of Three-Generation Cohort Study, ToMMo, Tohoku Univ.); He explained the view and ethical consideration of the ToMMo study and asked understanding to project ToMMo.

On second day, a basic lecture meeting for citizens was held. There were two lectures, (a) "The current state and view of the man genetic study" (Prof. Matsuda) and (b) "Several ethical problems of a life science" (Dr. Nudeshima).

#### 5) EXAMINATION REPORT OF SENDAI NUCLEAR POWER PLANT'S RE-OPERATION

Nuclear Regulation Authority of Japan (NRA) on Jul. 16, 2014 accepted an examination report on the resumption of Sendai nuclear power plant, Kyushu Electric Power Co. which concludes that No. 1 and 2 reactors at the plant meet new control level. NRA sought scientific and technological public comments for the report till August 15. The Fukuoka branch committee of nuclear problem analyzed some important terms of measures to the severe accident at nuclear power plant which have been hardly discussed.

The result of analysis was uploaded on Webpage of the committee and submitted to No-Nuke movement mail news group. As for measures to phreatic explosion and hydric explosion, the committee published the result till the due date.

The documents contains a few new knowledge, and has a feature of review with references and related URL and an intent to contribute to No Nuke movement in scientific and technological aspects, while they were not aimed to be popular readings.

**Note** Sendai nuclear power plant is located at Satsumasendai City, Kagoshima Prefecture, south Kyusyu, about 40km to the northwest of "Aira-caldera", which is 20km in diameter. In the south of the caldera, there is an active volcano Mt Sakurajima, which erupted 835 times in 2014. The city is different from Sendai City, Miyagi Prefecture.

#### 6) STUDY MEETING "UKRAINE PROBLEM" HELD

The Tottori branch held a study meeting "Ukraine problem from the viewpoint of a woman, born in Belarus and grown up in Russia" on June 7, 2014, inviting Ms. Irina (head, Japan Sea rim economic exchange center). Born in Belarus, grown up in Far East Russia according to her father's employment, she went to her post at Tottori City Office four years ago. She has many friends not only in Russia but in Belarus and Ukraine. The meeting was organized expecting her view and information, especially considering the fixture was immediately after the presidential election in Ukraine. Before the lecture's talk Prof. Taktori (branch member) offered a preliminary knowledge: We see Eurasianism lies as a background of Putin's thought and far-right forces become marked in Europe that sympathize with Putin's way of thought. Ms. Irina stated a reason of the corruption issue in Ukraine, namely, because people want to earn as much money as possible while holding the post, which may be foreign to Japanese. Although Mr. Poroshenko won the presidential election, she predicts that Dr. Timoshenko comes to the fore because loser Timoshenko in fact wields the real power.