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/

No.154 October 25, 2018

Kyoto meeting on the Vivisection by Unit 731: When Academics Cooperate with War

On April 14 a lecture meeting at Kyoto University was held being hosted by "Association to require verification of the degree-granting to a medical officer of Unit 731 stationed in Manchuria". The association was calling for verification of the thesis suspected of containing of vivisection experiment data on plague bacillus-inoculated human body.

In his lecture on the special experiments on plague bacilli on which a Kyoto University-educated medical officer at Unit 731submitted a doctoral thesis, TSUNEISHI Koichi, Emeritus Professor at Kanagawa University, pointed out that Kyoto University valued the vivisection thesis as inaccessible since plague-infected fleas were the major biological weapon and thus Kyoto University was responsible for the issue.

AJISAKA Makoto, Professor Emeritus of Kansai University and a member of the Association, emphasized that not only individual Unit 731agent's responsibility but also the nature of the research institutions is subject to severe scrutiny.

Concerning the public invitation system for research funding by the Ministry of Defense, IKEUCHI Satoru, Professor Emeritus of Nagoya University, urged to establish a code of ethics to reject military research at every university.

NISHIYAMA Katsuo, Professor Emeritus at Shiga University and an association member, had a press conference after the meeting. He said he had obtained the "List of Empty Home" of Kwangtung Army Epidemic Prevention and Water Purification Department, a.k.a. Unit 731, a document disclosed on this January 31 by National Archives of Japan. This document contained real names of a total of 3607 unit members including army surgeons and engineers, their job types, ranks and their empty homes. This revealed a full picture of the Unit composition and was the most wanted document. It came out for the first time that the government had stored the detailed official documents for more than 70 years after the war.

Nishiyama said they would post the document on their website for people's good use. Finally he called for joining their signature campaign. They plan to collect signatures by the end of June to press Kyoto University for the verification in July.

The 7th Kanto-Koshin-Etsu district symposium held

Symposium "Where is Japan heading and what should we do? – Thinking of constitutional amendment" was held by JSA Kanto-Koshin-Etsu district (Tokyo, Kanagawa, Chiba, Saitama, Ibaraki, Gunma, Tochigi, Yamanashi, Nagano, and Niigata branches) and Network of constitutional researchers and citizens (Kenpo Net 103) on June 30 at Chuo University, Tokyo. At the symposium three panelists delivered 30-minutes key-note speeches and comprehensive discussion was done.

Prof. Ishikawa (Seigakuin Univ.) made a speech entitled "Constitutional amendment – investigating the draft prepared by Liberal Democratic Party". Beginning with explanation of the meaning of the constitution, he stressed the significance of constitutionalism that is the fundamental principle of modern constitution. The aim of constitutionalism is to regulate state power by the constitution to protect rights and freedom of the people. The draft of LDP is thus very problematic since it is reactionary and centrally places importance not on the people but on the state, he says.

Ms. Nasu (assembly mem. Ota Ward) talked on the meaning of the constitution at the ward assembly and the inference of constitutional amendment. Law has to be established based on the constitution and ordinance based on laws. After the advent of laws suspected to infringe the constitution, seemingly unconstitutional ordinances have begun to be enacted in local government as well, she instantiated. She claimed that the general rule of local administration in conformity with the constitution, i.e. resident self-governance and local autonomy, should be increasingly esteemed.

Ms. Nihei (survivor of the Great Tokyo Air Raid) talked with title "Eight-year-old girl survived in swirling flames owing to the covering of a burned body, what she thought in a constitutional revision move". Instantiating the map of then Tokyo, rules of the Air Defense Law, debris of fireballs, she spoke about her realistic and profoundly touching experience. Photos of the war dead tells us grievous war. Indication of then state government and the Air Defense Law gave rise to augment the dead and distress residents, she stimulated. We don't forget that those facts shows the essence of the body politic, i.e. to protect not the people but the state.

Participants expressed their acknowledgement for hearing the experience of war and substantial speeches.

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) ACTIVITIES OF THE COMMITTEE OF PROBLEMS OF ENGINEERS AND SCIENTISTS IN PRIVATE FIRMS

We have held a committee meeting in the morning of March 17th, 2018, and a symposium in the afternoon. In the committee meeting, following by a chairman Osada's opening speech, the draft of "Reports and policies" for committee of national convention was discussed, and the drafts of FY2017 settlement and FY 2018 budget were confirmed. After that they debated the revision of rules of JSA, a proposal of a sectional meeting of the 22nd Comprehensive Scientific Study Convention in Okinawa, and decided committee members of the next term.

There were two presentations in the symposium where 18 participants attended. The first presentation was on "Falsification of data by Kobe Steel" by Mikio Deguchi (worked for Kobe Steel in the past) of JSA Osaka branch. He explained that "there has been negative legacy since the establishment" of Kobe Steel; bribery, collusion, internal strife, connection with gangs, falsification of data of soot and smoke. He then explained about the latest case of data falsification in detail. The final report of March 6th from the company is a mere summary and contents were no more than a list of catchwords. The report says "there has been a deep problem" but it has not been well elucidated. The directors of the division who falsified are totally corrupted. Problems are substantial personnel cuts and reduction of "capability of manufacturing." The report is missing the point of developing human resources, too. He pointed out the "final report" rather than a summary should be submitted.

The second presentation was by Minoru Fujita, professor Japan Research Institute of Labour Movement, Obirin Univ., under title of "Comment to '2018 Report of special committee of management and labor policies' of KEIDANREN (Japan Business Federation)" introducing analyses of movements around 'work-style reform' and 'spring labor offensive under government initiative,' etc. Managements are aiming at finding an exit by 'de-regulation' such as mutilating work-hour regulation, while they are forced to accept pay raise with the background of record-high business results and increase of internal reserve. He explained that it is important not to allow such movement and we should work on correction of disparities and large wage hike.

(Toshihiro Kushimoto, committee member)

2) RECENT ACTIVITIES OF JSA-ACT

JSA-ACT has been researching the climate change science, the adverse effects, measures and policies of the climate change. It provides the information on the drastic reduction of greenhouse gas emissions, realization a decarbonizing society and the long-term organizational goals of each country to avoid the adverse effects of global change on JSA's website.

In the "Paris Agreement" of the Framework Convention on Climate Change, the overall target is a temperature rise of less than 2°C (as compared to before the Industrial Revolution), an effort target of 1.5 °C, and it decided that reducing artificial greenhouse gas emissions to zero in the second half of the century.

However, it is impossible to control 2°C only by targets of individual countries. To do that significant reduction targets and measures of the countries including Japan are necessary. Discussions on strengthening measures of the world will be held in 2018, and IPCC will issue a special report on the suppression of temperature rise of 1.5°C. The agreement of detailed rules on the "Paris Agreement" will

be done at the Conference of Parties of the Framework Convention on Climate Change. In 2018, Japan is also to decide on revision of the energy basic plan and amendment of the basic environmental plan.

In 2016, JSA-ACT set up the session of climate change in the 21st CSSC (JSA Comprehensive Scientific Study Convention) at Ryukoku University. The reports on climate change and abnormal weather, domestic measures and policies necessary for suppression of temperature rise by less than 2°C were submitted. Discussion on the wind power generation was conducted in particular. In 2018 JSA-ACT edited the special feature of the climate change in JJS February issue and introduced the findings and discussions on science and adverse effects of climate change, international institutions, domestic measures and policies.

JSA-ACT will propose the climate change session at the CSSC to be held in December 2018 at Ryukyu University and report and discuss of the domestic measures and policies in the session.

3) ACTIVITIES OF THE RESEARCH COMMITTEE OF THE JAPANESE CONSTITUTION The committee has been inaugurated in May 2013 for the purpose of theoretically criticizing Abe administration's policy that aims to revise the constitution, with the base on political science and constitutional law, and clarify the significance of the Constitution.

During this time, the committee, being urged by advancing joint struggle of citizens and opposition parties against the Abe administration, has been acting with an awareness concerning the way of cooperation of political science and the constitution law (legal science), and the role of scientists in the cooperation of political parties, citizens, and scientists.

We are proceeding with the preparations so as to succeed in organizing the session "What is the problem in the Abe administration? – From the standpoint of the Constitution" in the 22nd Comprehensive Scientific Study Convention which is to be held in December, Okinawa Prefecture. The session is to discuss the following points: (1) The problem in the Abe administration; (2) The actual state and issue of the joint struggle of citizens and opposition parties. As for (1) we shall make clear the singularity of the Abe administration considering the policy to revise the Constitution as the policy on the base of the draft of constitution prepared by Liberal Democratic Party. In discussion on (2), construing the joint struggle of citizens and opposition parties against the Abe administration's politics, or constitutional revision policy, as that to seek policy basing on the constitution, or constitutional government, we shall the actual state and prospect of that struggle.

Young people against security-related legislation asked acute questions to adult people, "What is politics?" and "What is democracy?" which is fresh in our memory. We, scientists or scholars, have to think what answer to give.

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) WE GIVE SUPPORT TO THE PROVISIONAL DISPOSITION BY HIROSHIMA HIGH COURT TO SHUT DOWN THE 3RD NUCLEAR POWER PLANT OF IKATA

(Statement of Fukui branch: Dec 20, 2017)

In the 37th Symposium on Nuclear Plants issues of Japan (2017/12/9-10, Nagoya), Shuzo Takemoto (geodesy, Professor Emeritus, Kyoto Univ.) has clarified that "earthquake may happen anywhere in Japan." In the symposium, I have also stated that natural disasters bring about nuclear plant accidents.

On Dec 13th of 2017, Hiroshima High Court (presiding judge: Tomoyuki Nonoue) has, overturning the district court decision of dismissal, sentenced to order injunction of operation of the 3rd plant of Ikata nuclear plants of Shikoku Electric. It was epoch-making that the reasoning was eruptions of volcanos, and it was the first injunction sentence by a high court.

The Hiroshima High Court sentence made a decision "we cannot judge that the possibility of volcano activity is small enough during the 40 years including operation period of Ikata plant based on the current knowledge from volcanology" regarding the influence of eruption of Mt. Aso of 130 km distance from the nuclear plant. Further, the sentence states "we assume tangible danger to lives of residents," criticizing Nuclear Regulation Authority who does not face up to the danger of volcanos. It has concluded "the location (of Ikata nuclear plant) is inadequate."

On the other hand, the plaintiff's lawyers of the Ooi nuclear plant trial criticizes it as "the sentence is obiter dicta, having no value as a precedent." They reason that the Hiroshima High Court has made a faulty judgment that "the new regulatory standards on the effects of earthquake, tsunami, etc. are rational."

There are criticisms such like above to the latest sentence of the Hiroshima High Court. However, we support the sentence as the judicial authority severely warns of the danger of operating nuclear plants in volcanic country, Japan.

As if to support it, a news was delivered of eruption of Mt. Hon Shirane, the major peak of Mt. Kusatsu Shirane, on Jan 23, 2018 while I was writing this article. (Fujio Yamamoto)

2) 2018 HOKURIKU DISTRICT SYMPOSIUM HELD

On April 7-8 at Fukui University the JSA Hokuriku District (Fukui, Ishikawa, and Toyama branches) held the 2018 district symposium with the theme "Perspectives of peace and democracy in Japan and the crisis of the Constitution", where Prof. Obinata (Waseda Univ.) addressed a memorial lecture "Campaign of the sesquicentennial of the Meiji Restoration and the crisis of Japanese constitution". The professor says, the centennial and the sesquicentennial of the Meiji Restoration have a common concept, enhancement of nationalism and national prestige, the regime of Meiji constitution was established through oppression of privately prepared drafts for the constitution born in The Freedom and People's Rights Movement, which are alive in the postwar Japanese constitution as origins.

Ms. Kanazawa (rep. study on Hosokawa Karoku's native place) explained rice riots raised by women in Toyama Prefecture 100 years ago basing on the book "Rice riots and journalism – 100 years since rice riots raised in the Taisho period" (2016), mainly referring to newspaper stories at the time.

Mr. Yamamoto (residential movement on nuclear power generation problem in Fukui) reported, under the title "Nuclear power generation in Wakasa and evacuation planning", as to the difficulty to base on "evacuation planning" and means in which residents at the periphery of generation plant escape. In a severe accident we cannot deny the possibility the evacuation expands beyond the periphery of generation plant to the wider range including Osaka urban area. Considering the evacuation planning (disaster prevention plan) as the last redoubt of multifaceted protective mechanisms, has deficiencies, it is unacceptable to resume running the Wakasa nuclear power plant, he accented.

Prof. Takagi (Gifu Univ.) reported some points of connection of inhabitants at Wakasa with business related to nuclear power generation basing on his book "Actual conditions of workers at nuclear power plant, their labors and livings": conditions for employment and labor, resource of blue-collar workers, and exclusion from compensation for industrial accidents. He also mentioned on the actual conditions of labor management and regional administration, and explained the feature of the village.

Prof. Naoe (Prof. Emeritus, Kanazawa Univ.) reported current state of geotechnical investigation of base rock on which the Shiga nuclear power plant is located and Japanese financial administration for nuclear power generation as a trial balloon.

Prof. Yokohata (Toyama Univ.) "What is happening to moles in Fukushima? From 5 years investigation" reports the radioactive cesium accumulation in soil-earthworm-mole system and characteristics of mole.

In the afternoon of the 8th day plaintiff attorneys of lawsuit against nuclear plant and support groups gathered to exchange their opinions and asked for the cooperation of JSA.

3) LECTURE "TO SEE THROUGH THE INTERNAL STRUCTURE OF THE PYRAMID" HELD The writer attended a lecture held by the Aichi branch on April 14. The lecturer was Mr. Kuno who is a doctoral student at Nagoya University Graduate School of Science. He is a member of the Flaboratory established by the late Professor Emeritus Nyu of Nagoya University, who had been active in JSA. Mr. Kuno is also one of the main researchers of the pyramid perspective project. He developed a technology to invest inside the huge object using elementary particle muon which occurs when cosmic rays penetrate the atmosphere.

Mr. Kuno had used light dry plates that are easy to carry and install in the narrow space inside the pyramid and photographed by the plates and he found two new internal structures that had not been known in Khufu Pyramid.

The writer had the following doubts. In the case of x-ray imaging, the radiation source is irradiated to the human body from a specific direction only at the photographing. However, when muon is used as a radiation source, it is not installed in a specific direction that passes through a huge object. Why can we photograph the inside of the object?

Mr. Kuno replied as follows. At the start of the photographing, stack two thin dry plates. At the data analysis, only the tracks that passed through the same place from the same direction on these two plates are counted. In this way, it is possible to identify muons that pass through the inside of a huge object.

(Takeshi Nakatsuka)

4) LECTURE MEETING ON NUCLEAR PROBLEM HELD IN FUKUOKA

The Fukuoka branch held a lecture meeting "Significance and challenge of Nuclear Weapon Ban Treaty" by Prof. Okamoto (Prof. Emeritus, Kyushu Inst. Tech.) on the occasion of the branch convention. The professor historically and logically explained the theme of the lecture, stressing the significance of defining concepts and assignments, and pointed out that the Nuclear Weapon Ban Treaty clearly states illicitness of nuclear weapon. The treaty, from the standpoint of humanity, disaffirms logic of nuclear deterrence as a central military strategy for national security, he says considering circumstances in which the treaty has been agreed. He also mentioned issues the treaty has such as situation surrounding Korean Peninsula. As to nuclear deterrence, he stressed that it has a self-contradiction logically, and nuclear umbrella has no factual evidence of efficiency as known from historical backgrounds. Such logical ambiguity brings an unstable factor to international relations. For instance, missile defense system is ineffective as well as contradicts nuclear deterrence. The professor furthermore made mention on the matters involved in U.S.'s NPR2018 (Nuclear Posture Review), Japanese Government's high appraisal for that (though Japan is the victim of nuclear bombing), and NPT.

Prof. Okamoto consecutively raised some problems concerning the concept of security and its history. Security is composed of national security, international security, and human security. As to national security, he pointed out that the internal administration exploiting foreign pressure and the threat of potential enemy, patriotism, and the national security depending on military power, those three inevitably involve arms race. And so, the peaceful constitution of Japan plays an important role as non-military security, he says.

He finally insisted that the standpoint of human security is traced back to Kant and Bentham and overlaps with 2030 agenda for sustainable development of the United Nations.

5) JSA KOCHI BRANCH GENERAL ASSEMBLY AND A LECTURE MEETING ON NUCLEAR WEAPON BAN TREATY – AN ADDENDUM: PROSPECT OF THE LAWSUIT AGAINST IKATA NUCLEAR POWER PLANT

A lecture meeting with the above theme was held on May 12th, Saturday, from 1:00 to 4:00 pm at the members' room on the 2nd floor of Yoshida store of Kochi Co-op, Yoshida-Cho, Kochi City. This meeting was co-organized by four parties including the Kochi Branch of JSA with five JSA members and 17 citizens participating.

Lecture on the main theme in general was delivered by HOSAKA Tetsuro, a JSA member, and IWATA Hiroshi, the secretary general, gave a lecture in the latter half of the meeting. Hosaka talked about (1); characteristic of the Treaty on the Prohibition of Nuclear Weapons (TPNW) enacted in July, 2017, and the background of its enactment, and (2); fictitiousness of nuclear deterrence theory and prospect of future abolition of nuclear arms.

In his lecture Iwata first critically reviewed the Non-Proliferation Treaty(NPT), said to be compete with TPNW, in order to demonstrate the excellence of TPNW; secondly, he chronologically reviewed the fact the Japanese government acted to prevent enactment of TPNW; and thirdly he explained why the government adheres to nuclear power plant and the Nuclear Fuel Cycle, by showing words and deeds of politicians and bureaucrats, is summarized in the idea that nuclear power plants should not be abandoned

in order to retain the 'nuclear option' of going nuclear anytime by obtaining technology to extract plutonium by reprocessing; and finally he concluded that the role of Japanese government is to stop the exclusively pro-American thinking and to take the initiative in signing and ratifying TPNW and persuade nuclear powers to endorse the treaty.

In the end of the meeting TOKUHIRO Yoshitaka, who leads "Association to stop IKATA (nuclear power plant)" talked about the significance of the provisional disposition of December 13, 2017, by the Hiroshima High Court that ordered to halt operating the No.3 reactor at Ikata nuclear power plant until September 30, 2018, and recent development of this issue. The meeting was closed after discussion by seven participants from the floor.

The general meeting of the Kochi Branch began at 4 p.m. and lasted way past the planned closing time, the activity report for 2017 and accounting report were actively discussed and a plan for the fiscal 2018 action policy was approved. (Reported by Iwata Hiroshi)

6) "ENJOYING THE FOOD OF THE PROVINCE OF LAKE" IN SHIGA

The Shiga branch held a meeting "Enjoining the food of the Province of Lake – talk on and tasting of *funazushi*" acceding to a branch members' request, where invited was Prof. Kojima (Prof. Emeritus, Shiga Junior College, lead of a study group of dietary culture in Shiga) studying conservation and nutritional component of fish in Lake Biwa, knowledgeable about *narezushi* of lake fish like *funazushi* (fermented carp, tastes like blue cheese). She has been studying the better way to salt fish in which even young female students easily eat *funazushi*, though it ordinarily smells stinky. The participants enjoyed to eat *funazushi* made in her own way.

Funazushi is made in the following manner: Crucian carp known as nigorobuna is packed in salt, preserved with rice, then finally fermented rice are thrown out. It has good keeping quality and delicious taste due to lactic acid produced during the fermentation. The professor explained the history of narezushi, the way to produce and eat funazushi, changes of rice and body constituents of fish, utility of funazushi, odor of funazushi, various kinds of narezushi such as narezushi devoted in shrines, and the safe way to produce narezushi.

Prof. Kojima gave an additional chemical explanation: Odor ingredients of the sushi increase 23 times by fermentation in comparison with raw fish, and change into fermentation odor mainly constituted of esters and carbonyls by pickling with salt, and then become balmy because acids and alcohols increase drastically by next pickling with rice. She also says, in order to make odorless and aromatic *funazushi* it will be better to use rice more and salt less than usual, mix with malted rice when pickle with rice, and use refined sake or distilled spirit when wash hands.

7) LECTURE MEETING "PRODUCTION OF FOOD IN THE OCEAN" HELD

On May 12 the Kanagawa branch held a lecture meeting "Production of food in the ocean", where Dr. Watanabe gave a lecture on the production of marine organisms and fish catches with the relation to the oceans. His talk is outlined in what follows.

In agriculture and livestock farming managed in continental areas, humans get total control over harvesting from seeds and fertilized eggs to adult, while fishing and aquaculture industry in seas depend

on natural material circulation and biological production. The global sea-level fisheries production in 2014 (82.27 million tons) is all the product by hunting or gathering wild animals and plants.

The global aquaculture production has increased to 47.5 million tons in 2014, comprised 26.1 million tons of seaweeds, and 15.8 million tons of bivalves such as oysters and mules. In aquaculture, seaweeds grow absorbing natural nutrient salts, and bivalves taking in natural phytoplankton. Both grow depending on natural material circulation and biological production in the oceans.

The production of fish and prawns cultivation by feeding like animal husbandry amounts to 5.2 million tons, which is less than 5% of the global sea fishery production (130.2 million tons).

In spite of today's highly developed industrial technology the food production in oceans remains to rely on natural material circulation and biological production. Why does the fishery production remain hunting or gathering natural products even in this day of the 21st century? Because marine animals and plants basically have ecological characteristics absolutely different from those of terrestrial organisms. Human beings are unable to handle at will the oceans or the creatures living therein.

8) MINI ACADEMIC LECTURE "ASBESTOS PROBLEM, THINKING FROM THE SCIENTIFIC VIEWPOINT" IN AICHI

On June 9 at Nagoya Institute of Technology, the Aichi branch held the 2nd Mini Academic Lecture, inviting Prof. Sakakibara (environmental conservation, Aich Univ. Edu.) as the lecturer, who explained asbestos problem from the natural scientific viewpoint while such a problem is apt to be investigated from the social scientific viewpoint.

Employing big size paper stocks and balls, she explained the minuteness of asbestos fiber comparing with cedar pollen and PM 2.5, and that precisely causes health problem. The professor gave a demonstration of discrimination method of asbestos she devised herself. Although the usage of asbestos in Japan was forbidden by laws since 2006, health problem caused by asbestos has not been resolved yet. In addition, one of most important things is that "Not be vexed with scientific disputes" is a common consensus among suitors for asbestos exposure. For instance, she introduced a case that her paper on asbestos problem partly was quoted to exploit in the sense absolutely different from her intension as a contrary evidence. That is just a problem for JSA members who are practicing science to aid human happiness.