

THE BULLETIN OF JSA

THE JAPAN SCIENTISTS' ASSOCIATION

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No.120

December 25, 2010

SEEKING FOR THE WORLD WITHOUT MILITARY ALLIANCE

The Japan Scientists' Association and nine groups of scientists, layers, and journalists held a symposium to debate a question about the Japan-U.S. Security Treaty revised in July 1960, on 26 June at Liberty Hall of Meiji University, Tokyo. The Status Force Agreement based on the Treaty has been railroaded by the Liberal Democratic Party at the Lower House with no discussion, despite heated up voices of objection to the treaty revision and elimination of the treaty. The agreement defines to provide American forces military bases and to secure the freedom of American forces in Japan. It is an unequal agreement.

The symposium started with a lecture of the Prof. Nakamura (Hitotsubashi Univ.). He pointed out, as one experienced 1960 struggle against the Japan-U.S. Security Treaty, the postwar history of Japan tells a conflict and contradiction between the Japanese Constitution and the Treaty. Due to the opinion of next lecturer Prof. Masuda (Hosei Univ.), Japan should make use of economics and technical capabilities in order to build the world where industrious workers are appraised by right and the economic system depending on war supplies and multinationals are excluded. The third lecture by Prof. Mizushima (Waseda Univ.) asserts that, since dependence on oil derives military alliance to acquire it, the thought that the way to get peace through military alliance is abnormal will be widespread.

The symposium adopted an appeal "Let us develop links of opinions seeking for the world without military alliance".

In the afternoon five sessions were organized. Titles were as follows: a) the transformation of American troops and perspective of peace building, b) six-party talks and Asian peace, c) Japan-U.S. Security Treaty from the viewpoint of Asia, d) Japan-U.S. Security Treaty seen from judicial trials, and e) establishment of Asian peace and historical perception.

AIMING AT THE ESTABLISHMENT OF THE EFFECTIVE "BASIC LAW FOR ANTI-GLOBAL WARMING MEASURE" AND SUCCESS OF COP16

The 2007 Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report warned us that if we can not control the increase of temperature less than 2°C compared with the temperature level in the pre-industrial age until the end of 21st Century, the damage on ecosystem and human society would increase globally. To avoid the catastrophic situation the Report recommended that we will turn the increase of greenhouse gas emission to decrease until 2015 and cut down 50 – 85% of the emission of 2000 until 2050 and advanced nations will cut down 25-40% of the emission of 1990 until 2020.

In the country on May 14, 2010 "Basic Law for anti-global warming measure" was voted at the House of Representatives without sufficient deliberation and from the same month 21 the deliberation was started

in the House of Councilors. We evaluate that the Law has a numerical target aiming to reduce greenhouse gas emissions by 25% at 1990 ratio by 2020 (a middle target) and by 80% by 2050 (a long-term target). But the Law is insufficient in the point below to perform the effective measure to stop the global warming.

1) To control the average temperature rise of the earth below the 2°C is not clearly written.

Although Japan and the like advanced nation have responsibility of the warming problem, for setting the mid-term target the Law set a precondition that depends on the international situation as “the construction of an international framework which is fair and effective by all major powers”.

2) Although many objections were put out in the deliberation and AR4 pointed out the problems of safety, nuclear proliferation and nuclear waste, the Law stipulates the additional construction of nuclear plants and the development of nuclear power.

3) Though the increase of renewable energy supply can be actualized technically, the Law leaves it a low level of 10% of the primary energy supply in 2020.

We think that the middle-term target of at least 25% reduction is necessary and feasible. The society of mass production, large quantity consumption and large quantity abolition should be changed drastically. The reduction of unnecessary and not urgent production activity and public undertaking is necessary. The development and spread of energy-saving technology are also necessary. In addition the energy supply should be shifted from the fossil fuel and nuclear power to renewable energy. Energy saving measures and the construction of solar power generation and wind power generation would become the new domestic key industry and bring good influence such as job creation and ripple effect on economy.

By the way, the military activity is accompanied with enormous carbon dioxide emission and ecosystem deterioration. Japan having the peaceful constitution should not make the military section that has the worst environmental load factor as a sanctuary and be the first to bring up the nuclear weapon extinction and the drastic disarmament in the world. The House of Councilors should thoroughly discuss these problems and should revise the Law as an effective "anti-global warming measure fundamental law". The 15th Conference of the Parties UN Framework Convention on Climate Change and the 5th Conference of the Parties of the Kyoto Protocol (COP15/ CMP5) held in December 2009 did not draw up the plan (the setting of the middle and long-term target) after 2013 when the first promise period (2008-12 years) of the Kyoto Protocol will be over. It is essential to build an international framework strengthened than the Kyoto Protocol unless the problem of global warming is solved. There is a forward situation that the developing countries such as China or India that had refused the setting of the numerical target showed numerical target of the emission of the own country.

We demand Japanese Government to enact effective "Basic Law for anti-global warming measure" and to go ahead the domestic measures. In addition, we demand that Japanese Government show the strong leadership to set an ambitious target for the reduction of greenhouse gases in COP16/ CMP6 held in Mexico in December 2010 along severe warning of the IPCC. The Japanese Scientist' Association will advance the scientist movement on the warming problem and its measures widely in connection with researchers and movements to fulfill the responsibility of scientists.

30 May, 2010

The Japan Scientists' Association 41st general assembly

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

CRITICISM OF TECHNOLOGY OF GENETIC MODIFICATION BASED ON PRINCIPLE OF LIFE AND SEXUAL REPRODUCTION IN PLANT KINGDOM IN RELATION TO GENETICALLY MODIFIED (GM) RICE LAWSUIT

The research committee of food stuff problems organized a civic lecture entitled above on July 10 in Tokyo, where Dr. Namai (Univ. Tsukuba ret, plant breeding) raised a scientific question about the technology. JSA members who expected to know clear criticism of technology of genetic modification and non-members including consumers joined in and enjoyed a useful lecture.

The lecturer explained the principle of nature of life and sexual reproduction of plant showing pictures of the practical side of plentiful variable biological phenomena. Concerning to diversity in reproductive process, believers in GM technology stuck to their opinion “rice (*Oryza sativa*) is autogamous (highly self-fertilizing) plant and thus pollen flow doesn't happen so much.” The lecturer argued against it based on his “The chin-cheek theory”. Both autogamous and allogamous plants had no clear border between them and were connected continuously like chin and cheek. Rice is always not autogamous and also the fixed pollen flow distance should not be clarified. The pollen dispersal and the natural crossing might be observed in the distance more than the expectation.

Breeding is the process to expand a genetic variation and select chosen qualities, and that's why it is the natural genetic recombination. On the other hand, the technology of genetic modification forces a target gene to transfer into the plant gene complex. The target gene can never be inserted in the aimed specific place, because the insertion place cannot be controlled at all. Therefore, how inserted gene has serious influence on phenotypic expression are unclear.

Consumers express concern over the safety of GM crops. Safety test over a long term, however, has not been carried out. Further, principles of genetics are not yet fully elucidated scientifically. Under the present circumstances most people still have some misgivings about the risk of technology of genetic modification.

The lecturer also referred to a lawsuit over the risk of GM rice which gene of mustard plant defencin, antimicrobial peptide, was inserted with a specific promoter, and the GM rice plants always produce defencin. It was feared that defencin-producing transgenic rice creates highly infectious pathogens by mutation and selective proliferation to resistant microbe. After enthusiastic discussion, participants were convinced that activities of the JSA were indispensable to respond correctly people's anxiety about technology of genetic modification and GM crops.

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) WHY ARE ONLY THE KOREAN SCHOOLS OUT OF THE GRATUITOUS SCOPE?

The members belonging to Aichi and Gifu branches visited Aichi Korean Middle-High-school on May 22. High school gratuitous conversion has begun. But only the Korean Schools, where offer education using Korean language for Korean people, are excluded from gratuitous subject. The members aimed to verify the assertion of Ministry of Education, Culture, Sports, Science and Technology, the same quality of education as at other Japanese schools cannot be ascertained. At the round-table conference, they discussed school education, school life, in-residence, external performance organized by the school with teachers and pupils. Those pupils were fourth-generation Koreans. They identify themselves Korean, which moved JSA members. The teachers accused the Government's different treatment for pupils according to their nationality in the case of abroad excursion, which is very a human right issue Japanese Government should overcome.

2) REGULAR MEETING "REALITY OF ISAHAWA BAY BALANCING RESERVOIR" IN KUMAMOTO

Mr. Takahashi (branch member) lectured in the regular meeting of the Kumamoto branch on May 22, 2010. He explained the echo-system of tide land and pointed out that the environment of the Ariake Sea changed largely in recent 30 years. In particular, after closing of the sea dike of the Isahaya bay constructed for

reclamation, large scale red tide frequently has occurred. The influence of the reclamation of the Isahaya bay is very serious as we estimated. The great amount of water bloom breaks out every summer in the reservoir for water regulation divided by the sea dike. The water bloom creates the toxin, microcystin that has the virulence of several ten times of potassium cyanide. He presented that the high-density microcystin over WHO standard detected in the water and mud of the reservoir. Such high-density microcystin might cause health damage like Minamata disease. He concluded that the only way to solve the problem is to open the gate of the sea dike. Ministry of Agriculture, forestry and Fisheries, however, says that the reservoir is necessary for the agriculture. Does Ministry allow using the virulent water for the growth of crops? On the other hand Nagasaki prefectural office says that fishery damage might occur if the gate will be opened. But the draining from the reservoir to sea is performed frequently and the polluted water flows to sea actually. It is more and more necessary to open the gate for the bi-directional flows. The government and the prefectural office spend three billion yen for the water quality improvement in ever year. It is waste of tax really. His lecture was very understandable for the participants. It is necessary that the Kumamoto branch has to inform such a research outcome widely.

3) MEETING "PUBLIC ENTERPRISE AND POLITICAL PARTICIPATION OF INHABITANTS" HELD IN FUKUOKA

On July 10 the environmental research group held the above entitled meeting focusing on the Kawabe River Dam Project. Dr. Doi (Kyushu Univ.), born in a village near Kawabe River upstream Sagara Village, was invited to give a lecture on popular participation. He first pointed out announcements to discontinue construction of Kawabe River Dam and Yamba Dam had different backgrounds. In Yamba Dam case inhabitants in the construction area already have not taken objection. In Kawabe River Dam case, while, inhabitants and fishery cooperative association have opposed the dam construction and the pros and cons have been argued in the court. Resident debate rally ex-governor Shioya held played an important role to decide the announcement. The doctor says this rally as participatory democracy encouraged opposition inhabitants. He also stressed that ex-governor Shioya, at first expressing no decision in the prefectural assembly, where dam construction proponents occupied 66%, had had more meaningful discussion about the problem with inhabitants through several debate rallies. The role of the dam for the flood control is limited. And, it is clarified that the dam might cause the flood. The case of Kawabe River Dam becomes a model to think about the water policy that doesn't rely on a dam alone.

4) BRANCH LECTURE "ROLE OF BIOMEDICAL ENGINEERING" IN MIYAGI

Miyagi branch held a branch lecture on July 24, where Mr. Ozawa (grad student, Tohoku Univ.) gave a lecture on the role of biomedical engineering from his study on research and development of biomodel using polymeric materials.

In recent years the engineering technology contributes greatly to build up a background of the progress of medical techniques. It is recognized that the development of biomodel to realize dynamical properties and the feel of real human tissues such as bone, blood vessel and oral mucosa using polymeric materials is effective for the improvement of medical doctor's operation skills, the operative simulation, the development of new treatment skills and the evaluation of medical devices. The lecturer introduced the arterial blood vessel model and the jawbone model investigated in the laboratory he belongs to. He also introduced his own research of the oral mucosa model. He developed oral model by using poly-vinyl alcohol -H (PVA-H) for mucosa and the compound formed by acryl resin and saw dust for oral cavity aiming to realize real feel. As the future prospect of biomedical engineering now introduced, the realization of tailor mad medical treatment for individual patient, the establishment of safe and precise medical treatment, shortening a time for training as a medical engineer, responding to the problems of approval of medical devise and so on will be expected.

The lecturer talked on his various experiences of an official trip to France, such as the difference of daily life, images of young people, and also the difference of the employment opportunities and laboratory

circumstances. Participants were impressed by the lecturer's young and vivid sensitiveness and broad view.

JSA^{NOW}
Briefings from organizers

CONFERENCE OF POLLUTION AND GLOBAL ENVIRONMENT ISSUES

On November 23 the conference and JSA and group of residents living around nuclear plants organized a joint action to seek abort of the policy dependent on nuclear plant and develop natural energy technology. Two reports were presented: a) Dr. Otsuki (ex-president, Hannan Univ.) "Japanese energy plicy", and b) Mr. Suzuki (Wind School, Denmark) "Denmark, advanced natural energy country".

LIAISON CONFERENCE FOR STUDYING PEACE AND DEMOCRACY

On November 28 in Tokyo the conference held a symposium "The problems of employment and life for young people". Two reports were presented: a) Mr. Kawazoe (youth union in areas around Tokyo) "Practical status of youth employment", b) Dr. Amagasa (Yoyogi Hospital) "Death and suicide from overwork".

KINKI DISTRICT

- 1) Kansai peace study meeting held 20th regular meeting on October 24 in Kyoto, where two lectures "Japanese colonial policy and conservative mobilization in wartime" and "the problem of Hibakusha in Korea" were delivered.
- 2) The Kansai-area's colloquium for scientific workers in private enterprises held a regular meeting on November 7 at the Osaka branch office. They discussed the application of Ozone, and micro-nano bubble under the Mr. Nakamura's suggestion.
- 3) The Kansai-area's colloquium for scientific workers in private enterprises held a regular meeting on December 5 at the Osaka branch office. Dr. Nishiyama presented a new viewpoint concerning ademonia in relation to workers' compensation.

KYUSHU DISTRICT

The district held 20th Kyushu-Okinawa symposium on October 23-24 in Kumamoto. In the first day, the foot-and-mouth disease problem was discussed: a) Prof. Makimura "Challenge to rebuilding through the lesson of 2010 Miyazaki case", b) Prof. Nakano "Kill disposal", c) Prof. Tobioka "Production preventing recurrence of infection", d) Prof. Iriya "Disasters and regional regeneration", e) Prof. Okamoto "International risk control system". In the second day two themes, "regional problems and scientists" and "water and environment of Kyushu and Okinawa2, were discussed: a) Mr. Ueda "Pollution from steel plant in Oita", b) Prof. Toyoshima "*Missile defense* and local peace movement", c) Prof. Kawauchi "Unnecessary dam at Chikugo River", d) Prof. Kameyama "Government vs. Okinawa people seen in Henoko Bay, Ooura Bay, and Awase tideland", e) Prof. Takahashi "Health risk occurred at Isahaya is passed with silence", f) Mr. Itai "Remedy for sufferers of Minamata disease".

HOKKAIDO BRANCH

The branch held a symposium "2010 Hokkaido Science Symposium" for citizens on October 30 at Hokkaido University. The executive committee organized a presentation session for research results prior to the symposium. Four titles were presented: a) Dr. Himemiya "Academic-industrial cooperation committee in athenaeum", b) Prof. Anezaki "Beyond academic capitalism and university evaluation culture – criticism of university reformation", c) Prof. Higashiyama "Examining Democratic Party's measure of compensation for farmers", d) Dr. Goto "Health hazard and natural environment violence caused by

wide-scale wind electricity", e) Dr. Takahata "Planning of wind electricity at natural sea coast". The symposium addressed the issue of foot-and-mouth disease broke out in Miyazaki Prefecture: a) Dr. Takahashi "Thinking of foot-and-mouth disease, especially Miyazaki case, as a veterinarian working main dairy-farming district", b) Prof. Nagahata "Engaged in the prevention of epidemic".

TOKYO BRANCH

- 1) The 85th new peace colloquium was held on October 29 at Bunkyo Kumin Center, Tokyo, where Prof. Kaneko (Rissho Univ.) gave a lecture "Japan-US Security Treaty (5)".
- 2) The 86th new peace colloquium was held on November 26 at Bunkyo Kumin Center, Tokyo, where Prof. Kaneko (Rissho Univ.) gave a lecture "Japan-US Security Treaty and Okinawa problem".
- 3) The group of individual members organized a study meeting about Cuba on December 6 at Cuban Café, Tsukiji, Tokyo. They appreciated movies "Laves in Cuba" and "Evening in Cuba", and discussed the whole of Cuba with a Cuba embassy official.

SHIGA BRANCH

The book club held 2nd meeting on October 10, where they read the later half of book "Marx is still alive" written by Mr. Fuwa (Japan Communist Party).

KYOTO BRANCH

- 1) The 2nd Science and Technology Forum was organized on October 30 at Ryukoku University, where two lectures were delivered: a) Prof. Yoshihiro (Ryukoku Univ.) "Recent topics in the discussion of human evolution", and b) Dr. Hirohara "The future of Kyoto-Osaka-Kobe urban area".
- 2) The group of individual members held a study meeting on October 30 at Kyoto Institute of Technology, where four lectures were delivered: a) Prof. Manabe "Separation of exploitation concept", b) Prof. Tanabe "Battle for rare metals", c) Prof. Yasui "Wild animals problem in Kyoto", d) Prof. Onishi "Visiting Tibet".
- 3) The group of individual members held a fieldwork around Amagase Dam, Uji River, Kyoto, on December 5. They discussed redevelopment project of Amagase Dam with the aid of Mr. Siki and Mr. Kotani (Uji citizens thinking of disaster prevention).

OSAKA BRANCH

- 1) On October 23 at Nakazakicho mall, Osaka, the branch held the 20th Kitatenma Science Café, where Mr. Yokota (Osaka Univ.) explained his scientific study on human events in movies.
- 2) The study group Contemporary Capitalism held a regular meeting on October 18 at the branch office. Prof. Suzuki (Momoyama Gakuin Univ.) made a talk about multinational companies.
- 3) The study committee of philosophy held a regular meeting on October 29 at the branch office. Mr. Sugihara (Nitta Gelatine co.) gave a lecture on cells as hierarchy structure based on book "*Biology of conformation*" written by Honda.
- 4) The study group Hegel's 'the Great Logic' held a regular meeting on October 30 at an office of Momoyama Gakuin University. Three expository lectures on section 165 Concept in Hegel's logic lecture 1831 were given.
- 5) The branch held the 21st Kitatenma Science Café, where Prof. Koga (British Columbia Univ.) delivered a lecture on subtle blending of water and alcohol.
- 6) The study group of "The capital" held a regular meeting on November 15 at the branch office. Mr. Matsubara and Mr. Hiraishi lectured on rate of surplus value based on Marx's "The capital".
- 7) The dialectic champuru study group organized a study meeting on November 29, where Mr. Hiraishi lectured the theory of Bourdieu and Mr. Yamamoto recall method for sever perceptual disturbance patients.
- 8) The 2nd Suita Science Café was held on December 4 at café Volcano near Kansai University. Dr. Fujiwara (space research) was invited to give a lecture on asteroid explorer *Hayabusa*.

HYOGO BRANCH

The branch and peace activists held a public lecture on November 5, Kobe, where Ms. Takato talked her experience of peace movement in Iraq and expressed her opinion on Japanese responsibility to verify Iraq war.

TOTTORI BRANCH

On December 10 the branch held a meeting, where Prof. Shionoya (Tottori Univ.) to hear his explanation about book "Child growth and circumstances, ten recommendations" written by Shionoya and Kimura.

FUKUOKA BRANCH

On November 27 the environmental research group held a study meeting concerning the history of four dams constructed at Chikugo River in the Edo period under the tuition of by Mr. Sasaki (local history, Ogori City).

OKINAWA BRANCH

On November 10 at Ryukyu University, the branch held a meeting to discuss the near future of Ryukyu University, where Prof. Takara raised some questions.

ARTICLES OF "JOURNAL OF JAPANESE SCIENTISTS"

The Journal of Japanese Scientists (JJS) or NIHON NO KAGAKUSHA (in Japanese) covering all the scientific fields is monthly published and distributed to all the members and other readers

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