A case of Atsushi Tsuchida

Atsushi Tsuchida, a physicist, Doctor of Philosophy of the University of Tokyo, is investigating resource physics<sup>1)</sup> at the Institute of Physical and Chemical Research (Riken)<sup>2)</sup>. Recently, he was degraded from his position, extraordinary research scientist<sup>3)</sup>, without formal procedures or announcements. Riken is making his study difficult not only from the financial side but also by annomission of his report from the annual report of the institute<sup>4)</sup>, a reduction of regular salary rise<sup>5)</sup>, disallowance of his invited lecture at universities<sup>6)</sup> and other meetings<sup>7)</sup>, refusal of his nomination as a member of the Committee for the Safety of the Working Place<sup>8)</sup>, etc., especially by (so far unsuccessfully) ordering him to investigate a theme out of his speciality and interest.

Such obstructions are widely believed, from the situation as well as informal but publicly known talks of the institute directors, to be due to his activity against nuclear power plant and big technology. He has been sharply criticizing the pollution by industry. Resource physics is a fruit of his scientific activities on environmental problems as an physicist and is now becoming an effective tool for the critical analysis of systems of modern technology.

Tsuchida's talks are always clear-cut and easy to follow even by lay citizens. Researchers in favour of nuclear power plants or other plans such as P-4 facilities for biohazard containment or nuclear fusion, etc., have consistently decline to discuss with him publicly 9. By the same reason, mass-communication media often quote his speeches and local governments invite him for the debate at local assemblies on the construction of such facilities. People who do not want such facilities near their lodging also want to hear his opinion and advice. Riken does not approve his attendance

to such meetings, cut his salary becarse of his absence from the institute on those occasions 7) and have sometimes actually issued warnings against the content of his talk. In 1981, Riken administration prepared for a punishment because of his talk at Tsukuba on a P-4 facility being planned there by Riken. The talk was performed on Sunday. Punishment did not materialize at that time. It is said that Japanese government orders Riken, perhaps implicitly, to suppress Tsuchida's activity in the campaign against big technology projects.

Tsuchida and the labour union of Riken, to which he belongs as an active member, have struggled against Riken administration. Some part was debated as an object of collective bargaining between the union and the institute. Scientists in Riken have organized a forum to discuss problems in research work where all workers have equal footing. Several times Tsuchida problem has been an object to be discussed in the forum and a resolution has been passed to disapprove the exclusion of Tsuchida's part from the annual report of the institute (1981) and another renouncing the disallowance of Tsuchida's lectures at Saitama University, Osaka City University and the University of Tokyo (1984). Some twenty members of the Physical Society of Japan made inquiries about what was happening and published in 1985 the results of what they found. Informal meetings were held on the problem at the annual meeting of the society in that year. Many researchers consider that the problem will not be restricted to Tsuchida but will be adopted to all scientific investigations and investgators in Japan at large because government and administrators eagerly want to develop and control science and technology in Japan along their needs.

Besides researchers, petitions were carried out twice, mainly by residents of Tsukuba science city area and by active citizens against nuclear power plants.

About two thousands signatures were collected. A Committee for the Protection

of Human Rights in the Tokyo Second Bar Association has been investigating the case, according to Tsuchida's personal appeal. Remonstrance to the Riken administration is expected to be advanced.

In spite of such efforts, campaign against Riken has not so far been very much effective. It is possible that Tsuchida will be sacked in near future becarse of his fight. The problem is deeply connected to the policy of Japanese government on science and technology, development and control for the high growth rate of economy.

### 1) Resource physics:

An interdisciplinary science originated by Tsuchida to analyze macroscopically the flow of energy and materials from resources to wastes. A key concept is entropy. Starting as a physicist investigating solid state and chemical physics, he found that an analysis of human activity from the stand point of physics is necessary and effective to attack problems of pollution. A booklet entitled "Entropy Studies on Ecology and Economy", a resume of lectures given in an international symposium "Man's Coevolution with the Biosphere in the Age of Advanced Technology", held by the Institut de la Vie, may serve as an introduction to his ideas. The Society for Entropy Studies was established in 1983 and is now functioning actively in Japan along his ideas, with some hundreds of members including physicists, economists, biologists, general citizens in antipollution campaign, etc.

# 2) Riken (Institute of Physical and Chemical Research):

An institute that is famous among physicists because of its role in the emergence of Japanese nuclear physics around 1940. Until 1945, the institute was a headquarter of a group of companies, Riken Conglomerate, and are served as a center of modern science and technology in Japan. According to a legend famous among the Japanese scientists, researchers could enjoy full freedom in their work at the institute and some members or sympathizers of Japanese Communist Party, criminals at that time, could work there. After the World War II, the group of companies was wound up by an order of U. S. Army of Occupation. Riken became a "special corporation" in 1958, that is financed and controlled by government, though that is not a national body.

## 3) Extraordinary research scientist:

As in ordinary institutes, researchers in Riken are attached into individual laboratories which include several research scientists and technical assistants. One of them is a chief research scientist, corresponding to a professor in university. The council of chief research scientists corresponds to the faculty. Besides such laboratories, there were several "extraordinary research scientist" until 1983, who belonged formally to a laboratory but actually worked alone. Until 1983, budjet of a laboratory in Riken was composed of two parts: per laboratory part and per capita part. An extraordinary research scientist could use (per capita) + 0.25 (per laboratory) for his investigation without any restraints. Though that was not an official status written in the prescripts of the institute, an extraordinary research scientist was nominated by the Counsil of the chief research scientists and publicly announced in a written document. Tsuchida became an extraordinary research scientist in 1978 for the study of resource physics but it is unknown when he lost that position. That is one of the points of his punishment. (See 5).)

### 4) Annual report:

Riken publishes annually what has been investigated in the institute. In 1981, Tsuchida's part of the report was removed except for the title, from the 1980 volume. The removal was made at the last stage of the publication, after Tsuchida had read the galley proof. From 1982 volume, the title of Tsuchida's investigation (resource physics) failed also to appear and no mention has been made on his work.

#### 5) Salary rise:

Usually, salary of an employee is risen annually in Japan. Reduction of this rise is a punishment. In Riken, this is the third heaviest punishment only headed by dismissal from the position and that from the institute.

Tsuchida's salary rise in 1984 was reduced to 1/2 because he ordered a printer outside the institute the proceedings of the IVth symposium on the "Energy Problems From the Stand Point of Physicists", held in November 1982, "without the permission of the chief research scientist". The cost was about 300,000. During his negotiation of the payment, the board of directors argued that Tsuchida had been degraded. Since there is no official record of this decision in the report of the Counsil of the chief research scientists,

it is very doubtful that the degradation had really been decided before 1982.

6) Lectures by researchers of Riken at universities:

Appointments as a temporary or part-time lecurer at universities have never been rejected to research scientists except for Tsuchida after 1984.

Lectures have been rather encouraged because that is good for publicity of the institute. The board of directors explained the disallowance of Tsuchida's lecures on the basis of the problem of payment of the proceedings of the sympsium (see 5)) first, then of the punishment of him and now of an argument that the theme of the lecture is not part of his assignment in the institute.

Now Tsuchida makes his lecture while taking vacations or going on a strike.

7) Tsuchida's talk in meetings:

Only his lecures at a Parliamentary committee and that at the local assembly of Yatabe-machi (where P-4 facility of Riken was scheduled), both 1982, were admitted by Riken administration. It cannot be considered adequate for a special corporation, financed mainly by the government, to refuse request for a lecture by local governments and groups of citizens.

8) The Committee for the Safety of the Workplace:

This is a legal committee to be set up by equal numbers of members recommended by the employer and employees (ordinary by labour union).

According to a lawyer's opinion, the employer cannot reject a person from the committee who is nominated by the employees.

9) It should be noted here that ordinary Japanese scientists do not want to discuss freely, except on the minor technical problems, especially with a person who has not the same opinion as his. Their attitudes are not so logical. It seems that this is a root of the Japanese success in the present econimic world.