

Faits divers

## Comments on Oceanographical Society of Japan and its 50th Anniversary\*

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### 1. Introduction

The Oceanographical Society of Japan (OSJ) celebrated its 50th Anniversary in October, 1991. As far as I know OSJ is the oldest learned society (LS) in the world, solely dedicated to oceanography. I have been a member, since about 1947 or 1948 and I congratulated its longevity together with other members.

This short note is the outcome of my rather random thinking about problems related to OSJ, some of which were already expressed in my recent correspondence with my colleagues in Japan and also in JECSS Newsletter published in the Journal of the Oceanographic Society of Japan (JOSJ).

This is not systematic critics on conduct of OSJ. Consider it as a view from a member who was long associated with OSJ, but quite detached from its operation or influences. Submittal of this note to "La mer" is through encouragement of Professor Hideo Sudo, a member of the Editorial Board of La mer.

I remember some time ago, some editors in the U.S. stated that a LS may not be sustained without heavy subsidies from private or government sources with memberships less than 2,000 if the LS publishes a journal at regular decent intervals and provides one or two general meetings every year with an affordable membership charge. Thus it is considered a great achievement to sustain OSJ for fifty years. (For that matter it is beyond my comprehension how the French-Japanese Oceanographical Society did

not go under with membership, perhaps below 500.)

### 2. LS's services to its members

Any LS's professed purposes include promotion of its specified academic discipline and dissemination of information and knowledge related to its discipline in order to improve scientific skill and status of its members.

After perusal of many back issues of JOSJ, where most of the information on activities of OSJ were described in "News" items in Japanese, I come upon the following comments. These are in comparison with publications such as EOS, Bulletin of American Meteorological Society and Physics Today, respectively representing service sectors of American Geophysical Union, American Meteorological Society and American Institute of Physics. Of course for strict comparisons in statistical sense and in social science rigors, it should be taken into account of membership size, hierarchy of status of each discipline within academic and social standings at each country. However, I stated at the beginning that this note is not the result of rigorous study, but only a cursory impression of one overseas member of OSJ.

As far as Vol. 47, No. 4, August 1991, every number of JOSJ contained "News" as a service to members of OSJ, except Forum which started in Vol. 46 to include contributions from members, but seemed to have been dropped within a year. The "News" includes minutes of monthly meetings of the OSJ executives, announcements with paper titles of annual society meetings of spring and fall, change of the society directories with new members, their addresses, reports

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of national and international scientific meetings related closely or barely to oceanography and occasionally book reviews and lecture or a summary of researches by Okada Prize Awardees.

However, we are reminded that the Editorial Board of the OSJ does not adopt the principle of the New York Times that "all the news fit for printing is printed".

Therefore perusal of "News" items does not give any picture of the Japanese oceanographic community nor the trend of its scientific orientation unlike other U.S. publications mentioned above. Even constituents of OSJ membership are not pictured clearly in the "News". I suggest that a first step of upgrading the service of OSJ is to make a census of its members through a little bit more penetrating questionnaires, for example on the status of employment, job classification, salary and other compensation levels, academic training and highest degrees, past job experiences, current and past (in previous several year) work categories, job satisfaction, etc. Of course responders could be anonymous.

The result of these questionnaires may be handled by a group including sociologists as well as oceanographers besides a primary processing of the data. The actual mechanism may be left to a committee to be set up for this purpose. This kind of census might be updated every two or three years and could be used for promotion of marine sciences among the general public or for that matter for lobbying them to Japanese Science Congress (Nippon Gakujutsu Kaigi) or even to the Japanese Parliament.

The second, relatively easy step is to make a list of organizations and institutes of Japan which conduct research, development, services and education related to marine sciences. This list may include mainly those supported by local and central governments, but also those supported by industries. It should list numbers of scientific and supportive staffs, possibly project descriptions and typical or average annual budgets. Such data always seems to be available for much wider

disciplines in science and technology in Japan as seen by several kinds of promotional brochures prepared by MITI (Ministry of International Trade and Industries) and other ministries for propaganda purposes in order to deflect sharp criticisms from overseas against Japan's lack of efforts on research versus her predatory trade practices. It seems that OSJ may be limited to much narrower fields of marine science and thus does not need extensive search for information nor extravaganza of luxuriant format of these brochures. (a new Japanese journal of "Umi no Kenkyu" of OSJ in its first issue included a chapter listing institutes and their research projects except budgets and staff members.)

In conjunction with or in consequence to this second step, OSJ should publish annual statistics of total budgets for marine sciences at different agencies and perhaps manpower statistics of working marine scientists and those who are in preparation, that is, graduated and undergraduate students. These statistics could be updated yearly or every other year. They could be used for marine science/marine services planners for their efforts in immediate future plan of their projects or capital assessment, manpower recruitment and budget negotiations with government and other funding sources.

### 3. Respectability of OSJ

One of the basic deficiencies in OSJ may not have originated in itself, but in the cultural background of Japan, where the up-and-above have all the responsibilities, even in the field of science. In practice, the LS in Japan seems to have little voice in framing and implementing policies in science even if they are closely related to advancements of national welfare. This is in great contrast to the Western nations, notably in the U.S. and Britain, though in recent decades, influences of the academic on policy matters seemed to wane. Still there are some examples where Congresses or Parliaments listened to voices of scientists through LSs, for example in the US for global warming the Congresses and

the Administration paid attention to opinions by scientists through the American Meteorological Society or AGU or for Space Station to discussions summarized by a dozen of LSs.

On the other hand, OSJ seems to be mute in any subjects when the Japanese oceanographic community was requested to participate in global projects or considered as responsible for Japan as a nation such as marine environmental problems.

Global aspects aside, I heard many grumblings by Japanese marine scientists about the shortcomings of the current system. Strong voices were aired against the concentration of research budgets in some government agencies in contrast to universities with rigid mobility of personnel and restrictions in usage of research infrastructures. I believe that many of these may be alleviated through vigorous actions on the part of OSJ. But first of all, the society should start to establish itself as an impartial arbiter of the shortcomings on the basis of the science. This process will take time, but OSJ should start in its direction with education of its members.

A few years ago, in relation to the JECSS (Japan and East China Sea Study) Program a Chinese scientist asked me about the possibility of joint field experiment with Japanese universities and agencies. This is a preliminary plan and his institute could not present official requests to the Japanese side. He considered OSJ might be a suitable channel for such a proposal. When I discussed this with several Japanese colleagues, they categorically dismissed the idea, because OSJ has no standing with universities or agencies. In this particular case, there was almost no budgetwise problem, since the field work involved would use instruments and personnel provided by the Chinese side or even ship time might be also provided. Therefore it seemed that OSJ could not play as an intermediary between two scientific parties nor to advocate or judge on scientific merits of the plan.

There are other subjects that OSJ could

consider its own capacity as an impartial arbiter. For example, Japanese government allocated ship time apparently is not distributed according to needs of different organizations nor to achievements performed previous year. Of course uneven allocations of ship time as well as that of research budgets are themselves not to be worried at all for healthy growth of marine sciences. However, in Japan, many marine scientists employed at some agencies complained that they were engaged so busily in cruise after cruise, there was no time to consider the data from scientific points of view. On the other extreme, many university marine scientists had a hard time making field experiments, thus were forced to deal with purely theoretical problems or only subjects without field data.

The key point that there is very little review process on use of ship time in general leading to a result of some mission oriented agencies continuing routine field work without taking account of developments of technology or improvement of understanding the processes to be measured in the field.

The LSs of U.S. are very conscious about the recruitment of the next generation of scientists of each discipline. Most of the LSs publish status of the graduate students and potential undergraduates who are expected to join the work force. Also some LSs mobilize student chapters on campus for recruitment. In the same fashion, many U.S. LSs have been trying to recruit female and minority scientists to remedy unbalanced representation in science and engineering by these groups. It seems strange for outsiders that OSJ did nothing of that sort in spite of the statistics that showed miniscule percentage of female marine scientists.

Although perhaps Japan does not have a serious problem for minorities, its oceanographic community needs support and cooperation by those of neighboring nations if it wants to extend research scope beyond its adjacent seas. As I became more conscious about this problem while I started JECSS more than ten years ago and kept it going

since then, I have been surprised and a little bit disappointed at lukewarm response of oceanographic community as manifested in overall attitude of OSJ towards JECSS. If the Japanese oceanographic community wants to work in the Western Pacific including its adjacent seas, both scientifically and economically, cooperation and support of neighboring nations are mandatory and should be sought vigorously.

OSJ seems to be almost inactive in attracting industries to oceanography or marine sciences in general. This is incomprehensible, since many industries which are land oriented in other countries are affected by the seas or affect them in many ways. OSJ should take a lead in public relations and education of the public as well as the industrial sectors. This does not mean fund raising or something like that. Rather OSJ should fulfill its obligation by enlightening the public. In this connection, OSJ should act positively and explicitly on environmental problems related to seas and oceans from different aspects of bureaucracies or industries. Again it could serve as impartial arbiter in its scientific judgement.

There might be many other initiatives OSJ could take. These mentioned are only a starting point from which future executives

of OSJ may make big forward movement.

### 3. Conclusion

The first president of OSJ (from 1948-1967), late Professor Koji Hidaka, mentioned his vision more than twenty years ago in "Forty Years with Oceanography" (1968, Japan Broadcasting Publication Co.).

In his statement he said that Japanese oceanographers suffered poor support from the government for their efforts on field experiments and were forced on relying mainly theoretical studies and that they could not take initiatives in global research of the ocean, following the initiatives started by U.S. and other European nations because of uncertainties of support from lack of funds. Also he mentioned that the only Japanese initiated international program, CSK (Cooperative Study of the Kuroshio), languished because only the bureaucrats were involved. Perhaps many of these remarks are no more valid because of amazing advancement of economic status of Japan. It has extremely good infrastructures in marine sciences, capable man power and improvement of the political situation around the western rim of the Pacific Ocean. I hope OSJ will play a key role in this decade and beyond in the 21st century.