
A JAERI Research Fellow in Tokai

Research Group for Bifurcation in Thermal Convection Hsi—shang Li

Sooner than I can appreciate, one year has gone by. One year is far from adequate to have an overview of the vast culture heritage of Japan, let alone write something about it. Therefore, I will only discuss my working experience as a JAERI research fellow. Besides, I was asked by the editors to write honestly about my experience, good or bad. Writing only about science makes me feel much more comfortable.

Coming to Japan and working for the prestigious Japan Atomic Energy Research Institute is truly a privilege. To be further associated with the newly established Advanced Science Research Center (ASRC) is more than I bargained for. This new center is organized in a way that a central management office oversees activities of 14 independent research groups, whose interest ranges from neutron scattering to theoretical fluid dynamics (which I am involved in). A very high standard is established to measure each scientist's progress. A research fellow like me has to constantly justify his activity through quarterly reports and will be subjected to annual reviews conducted by a panel of outside experts. Such a system has created a very competitive environment that keeps every individual scientist here to constantly perform at his best. To stay focused and productive after relocation is never an easy task. It is particularly difficult if the destination is at a different country. One has to adjust to a new working environment as well as overcome culture and language barriers. Thanks to the capable staffs of the ASRC management office, I was able to move my family into a nicely furnished house within the first week of my arrival. And, waiting for me at JAERI are a clearly defined research project and a thoroughly equipped office, engineered ingeniously by my host Dr. Fujimura. The fact that I was able to engage in active research immediately and never feel alienated from the first day I arrived is a small wonder. However, I did experience some administrative problems during the past year that I think should be fixed in order to run this institute more effectively and efficiently.

One thing that amazes me most is how the purchasing department can always manage to buy things at the highest prices available. I understand that things are expensive here in Japan. But, with the purchasing prices above the street prices of Tokyo by 30 to 40 per cent is simply

outrageous. And constantly paying inflated prices for air tickets is ridiculous. I think JAERI should abandon present exclusive purchasing channel and start to involve researchers in where to buy the right staff at the right price. If the government can trust us with designing and building a nuclear fusion reactor cost billions of taxpayer's money, they should trust us with finding the best buys for our equipment. It will increase each group's funding by 30 per cent without asking one penny more from STA. The budget situation of JAERI will become very competitive when compared with other institutes.

Another problem ought to be fixed is the way the published materials are made available. I was surprised to find out that the books we need have to come from one particular book company. Even when the books are only available from other bookstores, there is no way you can buy them directly. We will have to wait 9 to 12 months for the company to get the books for us. (That is, if you are lucky. One case I heard took two years.) In the days of information superhighway, 9 to 12 months is nothing short of barbarian. When the book arrived, the information contained is probably out of date already. Well, that brings me to another personal setback I didn't expect out of a national research institute. For people who depend on computers for their research, an efficiently managed mainframe and network means everything to them. I didn't find enough support from our computer center and its resources are not managed professionally. Especially, I take the denial of the access of supercomputer to foreign researchers as discrimination. Nothing I can learn from using a supercomputer will jeopardize the Japanese supercomputer industry. On the other hand, the possibility of superior research works made possible by granting the needed ones the access of a supercomputer should appeal to JAERI's interest. These are problems that can be fixed easily and JAERI itself will be the biggest beneficiary.

I was probably out of line in criticizing the conduct of other departments. However, my motivation is pure and my suggestions are sincere. Anyway, at the end, I would like to use this opportunity to thank my colleagues for their assistance and patience to a stubborn gaijin who doesn't know a thing about the Japanese way.