

Social responsibility of scientists

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Kimihiro HIRAO
Special Advisor, RIKEN

I wrote this manuscript at the end of November 2009. On November 13, the budget screening team of the Government Revitalization Unit concluded, based on a mere one-hour discussion, that the Next Generation Supercomputer project, which I have been involved in, should be “frozen.” Science and technology policies are to be promoted in accordance with the nation’s basic principles. The above-mentioned project is deemed to be important by a great number of scientists as well as the industrial circle, and has been promoted as a national project. Where and how are their professional judgments ensured? Such a hasty conclusion could substantially undermine our nation’s science and technology and ultimately the welfare of the Japanese people.

By any measure, this round of the budget screening process is unreasonable. The budget screening team also concluded that the basic expenses of universities and research institutions should be cut. It is particularly severe that budgets that provide support for graduate students, the fostering of young researchers and support for female researchers will be reduced across the board if the team’s recommendation is put into practice as it is. Japan is endowed with no resources other than human resources. As a means to live and prosper, Japan should aim to become a nation with an internationally dominating presence for its wisdom through science and technology as well as culture. It is young people that bear the future. This series of budget screening conclusions conveys a negative message to youths who aspire to become professionals in the field of academia or science and technology, and therefore could discourage them from entering such fields. There is no future for any government that abandons young people.

I have developed strong feelings from this round of budget screening. To put it concretely, I have felt the necessity for those who are involved in technology and science to regularly communicate the contents and importance of their academic research to society in an easily comprehensible manner. When it comes to basic science, such communication is all the more necessary. We have to strive more than ever to convince the Japanese people that the achievements of scientific and technological research

can contribute to the enrichment of intellectual properties not only for our nation but also for humanity, even if such research may not generate short-term returns. Our future course depends on how much society understands and accepts the significance of this. We can follow the path toward a nation based on the creativity of science and technology and culture only after society is ready to shoulder its fair share of responsibility.

Back in the 20th century, science and technology prevented disasters and accidents, supported industries, provided people’s livelihood with material affluence, overcame diseases and enabled longevity. Science and technology certainly met society’s needs and lived up to people’s expectations. At the same time, the deepening and fragmentation within the fields proceeded. Nowadays, the accomplishment of having built a rich and convenient society has become somewhat less visible. In other words, science and technology have become distant and unapproachable. This is a phenomenon called “science alienation.” Nevertheless, if it were not for scientific considerations, we wouldn’t be able to live through modern times. That’s a characteristic of modern times.

Since the beginning of the 21st century, there has been a big change in the undercurrent of science and technology. It is a paradigm shift toward new science and technology that will support people and contribute to the sustainability of human society. Science is not simply for the sake of knowledge but must be for the sake of society and peace. We are under pressure to find solutions to ensure a cultured life, welfare, ethics, the dignity of individuals and so on, while also sharing serious problems, such as issues concerning the environment, resources and energy, to be solved on a global scale. What should we do to live up to social expectations? We should illustrate our vision and objectives in an easily comprehensible manner. The social responsibility of researchers is now being questioned more than ever.

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The *Kagaku to Kogyo* (Chemistry and Chemical Industry) Editorial is responsible for the English-translated article.