

# Toward an era when women will contribute to science and technology

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Ministry of Education, Culture, Sports, Science and Technology has been engaged in “the Support Model Promotion Program for Female Researchers” by allocating the adjustment expense for promotion of science and technology to the said program in recent years. The reason for this is that there are many cases where women who want to continue working have to discontinue their work during the child-raising period, or where they are even forced to quit the job. It is quite difficult to make up for a blank period of a few years especially in the fast-evolving field of science. National, public and private universities have applied for the above-mentioned program, and many of their projects have been adopted. Looking back to one project which had been proposed by my university, I am confident that it was a smart project. Nevertheless, the following question was raised at the final symposium: “As for researchers who were supported during the child-raising period thanks to this project, has each one’s career path for the future been paved?” This means that we cannot claim that this project is a success until we see its result. This challenge will be passed on to the next initiative of “Acceleration of the Female Researcher Training System Reform” which tries to lift the ratio of female researchers. And yet, a question arose at the stage of preparing the initiative proposal. To put it concretely, it is questionable that the number of hired female researchers is required to be shown in personnel planning. It is a good thing to see the number of female researchers increasing. Having said that, I hope it won’t result in lower quality of research due to unreasonable number-crunching.

It can be said that presence of female researchers was recognized in Japan for the first time in 1913 when the Tohoku Imperial University opened its door to three female students: Chika Kuroda (Department of Chemistry), Ume Tange (Department of Chemistry), and Raku Makita (Department of Mathematics). In a sharp contrast to Europe where Madame Curie had received the Nobel Prize in Physics in 1903, Japan has been far behind in terms of female education. Right from the start, Japan has periods when the conventional wisdom had claimed “women do not need to be educated” or even said “science does harm (to women).” Such periods lasted until the late 1800s.

Female researchers have been supported in universities, but how is the corresponding situation for female researchers and engineers in businesses? In the current conditions of “declining birth rates and moving-away from science and engineering,” fewer and fewer youths take up science and technology. For the past several years, Ministry of Education, Culture, Sports, Science and Technology has been promoting a campaign to encourage female students at elementary and junior high schools to “become interested in science.” With this background, aspiration for science seems to be getting stronger in my university as well, which has affiliated schools. It would be difficult to maintain the status as a nation built on the platform of scientific and technological creativity toward a new industrial revolution, unless not only men but also women make contributions in the next generation. That is because more and more engineers who supported Japan in the 20th century now go into retirement. I believe that a new social structure shall be formed if we can take a new turn by adding female sensibility to science and technology which have supported the Japanese economy. Back in the World War II era, the predecessor of Ministry of Education, Culture, Sports, Science and Technology urged the establishment of science-course professional schools for girls in order both to meet rapidly increased demand for scientists and engineers and to make up for a shortage of male labor force when the war intensified. In response to the official request, new science courses were opened one after another in then existing professional schools for girls until 1944. And now, attention is seemingly paid to women again as it was in the war time. In spite of such an ironic viewpoint, I do hope that the movement won’t end up with temporary hiring of women but will have a solid foundation for this time around so that a gender-equal era can be created. To this end, I sincerely ask for corporate support to female scientists and engineers.

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