## My Journey around the World: Gender Issues and Entrepreneurial Spirit in Science

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Half a century ago I was an undergraduate student at the University of Tokyo. At the time the ratio of women to men in the student body was 1 to 27. I wondered why the ratio was so small even though there was no discrimination against women in the entrance examination. Most of my fellow students were men. That was the fact. Nonetheless I was not under the shadow of men. Since then, I broke the wall of a role model concept for women and explored my career in science while keeping traditional core values. There were no ready-made career paths in front of me. I pursued my work to be consistent with the quality of life. I pioneered my own path with entrepreneurial spirit throughout my life.

I started my journey abroad as a graduate student in 1972 when I got a scholarship from German Academic Exchange Service. The academics environment in Germany was supportive even for young visiting researchers although male professors dominated the institute. After one year in Germany, I moved to southern California to join my spouse at University of California, Irvine where he was a graduate student in physics. There was no solid earth geophysics program there that imposed me to commute somewhere else, driving 110 miles everyday. When we moved to Austin, Texas in 1982, the university was expanding with abundant oil money and recruited a number of new scientists. I got a permanent position but there were only few female scientists around me. There were unstable situations and pressures depending on the funding and economy. In 2002 we moved back to Japan. I settled in Hiroshima and my spouse in Kyoto. I was one of two female professors in School of Natural Sciences at the university. Right after I was appointed as Professor there, I was asked to serve for so many committees, not only within the university but also in scientific societies and Ministry of Education, Culture, Sports, Science and Technology (MEXT). At the time MEXT had an agenda to improve numbers associated with women and young scientists, for whom I continued speaking up. But I had very little time to do my own research. Upon the retirement of my spouse in 2009, we moved to Germany. We both got offers as guest professors with supports from a major initiative in Germany. This was the first time when I got a post equal to my spouse at the same institution. After three years in Germany, we came back to the Alma meter of my spouse (UCI) in southern California. Yet there is no established solid earth geophysics program there, just like four decades ago. This time I was given an opportunity to create a new course for physics general education, and have been teaching the class in the past few years.

Recently I visited the websites of several universities/institutions where I used to be a student or on the faculty/research staff. The percentage of female students at the University of Tokyo is about 20 % now. At the institute in Texas the percentage of female research scientists with permanent appointments is also about 20 %. Some other institutions show higher numbers of women faculty members. The systems of employments have been making progresses around the world. However, when the system is improved, more fundamental issues in scientists' world can rise to the surface, regardless of genders. Given the resources are limited, you can enrich your life with entrepreneurial spirit and pioneer your own path under any circumstance.

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