

The German-Japanese Scientific Exchange: Past, Present, and Future

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Since the 19th century (Meiji era), there have been intense and amicable relation and contact between German and Japanese chemical communities. Until the end of the second world war, numerous Japanese (and also US American) chemists have studied in Germany and the German chemistry was probable at its heyday, both with respect to science (20 chemistry Nobel laureates between 1901 and 1950) and to industry (world largest conglomerate I.G. Farben). Until the 1980s still, the German chemists were renowned and respected by their good training at the universities and chemical industry was one of the 3 pillars of West German economy. However, synchronous with the reunification between West and East Germany in 1991 and the ensuing profound societal change in Germany, the eminent position of the US American science had established its unrivaled dominance. Both German and Japanese, as everyone else in the world, oriented themselves to the USA. As a consequence of the globalization, around that time major German chemical companies such as Hoechst began to restructure or even to disappear completely, upsetting the employment of chemistry graduates. At present, German universities are facing another dramatic change, as requested by the so-called Bologna process, the well established and traditional education system is undergoing complete restructuring (forcible switch to Bachelor/Master instead of Diploma; abolishing of Habilitation etc.). While these changes may be somewhat confusing at the moment, there are certainly many new opportunities within the more global world.

According to statistics by DAAD (Deutscher Akademischer Austauschdienst), DFG (Deutsche Forschungsgemeinschaft) and the Alexander von Humboldt Stiftung the number of German students and researchers going to Japan and Japanese coming to Germany has steadily been decreasing over the past 3 decades, at least as far as natural science, including chemistry, is concerned. Since presently the living standard as well as the scientific level between Japan and Germany have become comparable and since both the German and Japanese government is actively taking measures to attract foreign scientists to its respective country, there is a good opportunity to reinvigorate the formerly good relationship between German and Japanese chemical communities at all levels. For the exchange of particular younger researchers and students, several issues can be pointed out:

1. Language: Learning Japanese and German language is helpful, but not a necessity to conduct scientific research. Good command of English is sufficient, at least for short-term stays.
2. There are many university-level cooperation already established. Many German and Japanese colleagues have good scientific contacts and this should be extended to younger researchers and students.
3. There is a general lack of information about contacts between Germany and Japan as well as about funding opportunities.
4. Both German and Japanese students of today have some fear of the future (employment situation). It is important to discuss how young scientists can obtain a secure professional future after staying abroad.

This presentation will attempt to focus on the present situation of the German chemical education system and the implication of the future changes for German-Japanese exchange.