

【Name of Institution】

Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology

【Project Name】

Asia-Europe International Training Program for Young Investigators in Eco-Bio Technology

【Project Outline】

In the 21st century, we are encountering serious global issues that have never experienced over the history of human beings until now. Those issues involve global warming, energy depletion, and human overpopulation, etc. In order to solve those global issues, we need to develop a new science and technology platform focusing on the harmonization of the eco-system and the life of human beings. Accordingly, we should consider the effective utilization and renewal of limited biological resources on earth, the high-speed and continuous measurements of a variety of changes in the global environment, and the analyses/evaluations of influences of environmental factors on living organisms.

In the Tokyo Institute of Technology, the Graduate School of Bioscience and Biotechnology has five major departments where faculty members and scientists have been conducting education and research in bioscience and biotechnology fields. Our ultimate goal is to integrate our knowledge and expertise produced in the science and technology and to foster human resources to solve the global issues.

“Asia-Europe International Training program for Young Investigators in Eco-Bio Technology” designed by our graduate school has a goal of developing human networks among our graduate school and major universities in European countries (UK, Germany, and Switzerland) and China. Scientifically, we will try to integrate currently disparate research fields, such as Biological, Medical, Pharmaceutical, and Agricultural Sciences and Engineering, to achieve our goal.

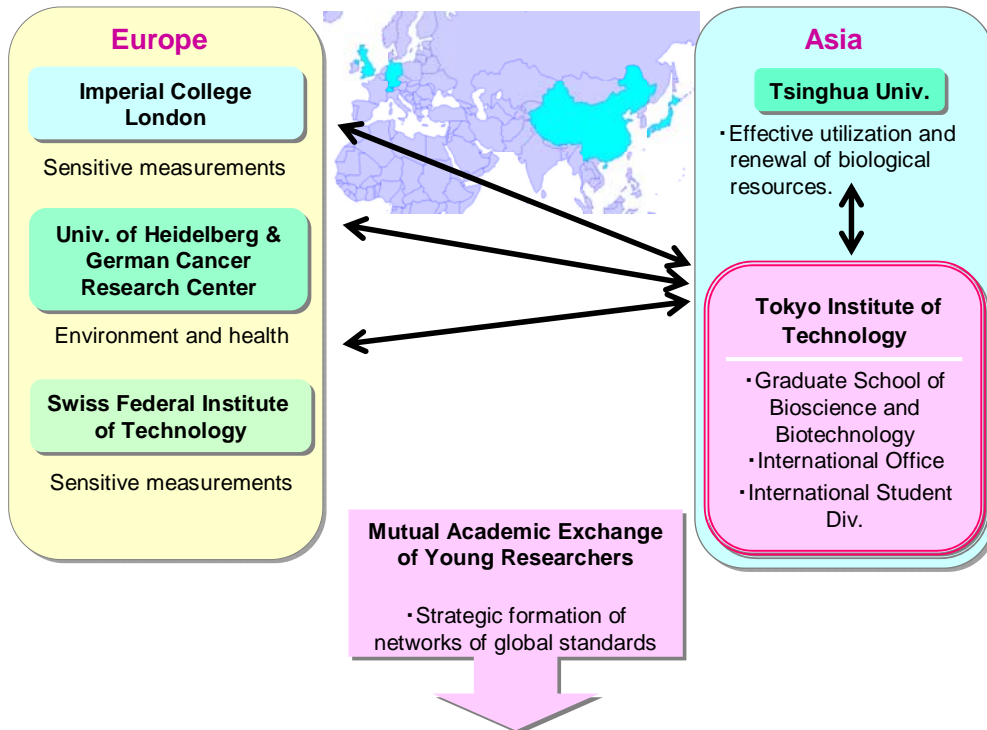
In this program, we will prepare education and research programs in the field of “Eco-Bio Technology”. Namely we will develop collaboration research projects in three areas, i.e., (1) effective renewable technology for non-utilized biomass, (2) sensitive measurements for environment, and (3) high-speed analyses of influences of environmental factors on living organisms including human beings. With this respect, we will provide young researchers and graduate students of our graduate school and overseas partner institutes with opportunities to study abroad for a designated term, and thereby promote mutual exchanges of young scientists. Furthermore, we will make joint plans with overseas partner institutes to organize symposia in the field of “Eco-Bio Technology” and to create strong human networks between Asia and Europe.

【Domestic Partner Institution(s)】**【Overseas Partner Institution(s)】**

- Faculty of Engineering, Institute of Biomedical Engineering, Imperial College London London, United Kingdom
- Department of Chemistry, Swiss Federal Institute of Technology Zurich, Switzerland
- The Medical Faculty, University of Heidelberg/German Cancer Research Center Heidelberg, Germany
- Dept. of Chem. Eng. & Dept. of Biol. Sci. and Biotech., Tsinghua University Beijing, China

【Conceptual Scheme of the Project】

Asia-Europe International Training Program for Young Investigators in Eco-Bio Technology



Eco-Bio Technology

Education: Fostering human resources responsible for the future.

- Advanced research at world-class leading universities.
- Training for rational consideration and explanation.
- Cultivating teamwork and leadership abilities.
- Mutual enlightenment of young scientists.

Research: Jointly developing new biotechnology to support sustainable development society.

Establishing global networks for fostering young researchers

【Contact】

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