

Keynote Speech

Setting the Tone

Global Innovation Ecosystem Innovation Ecosystem

Chairperson: Yoko Ishikura

Professor
Hitotsubashi University, Graduate School of International Corporate Strategy
Japan

In the first decade of the 21st century, many countries are being engaged in a mega competition for science-based innovation on a global level. Science-based innovation is defined as the “process in which new technology and breakthrough ideas are created by applying scientific knowledge, and transformed into goods with economic and social value that meet the needs of the society at large.” What has been the focus of attention in this mega competition is the concept of a “National Innovation Ecosystem” (hereby abbreviated as NIES). An NIES is a system in which various sectors of the nation, including a variety of diverse organizations and institutions in both the public and private sector - namely governments, universities, research institutions, business communities, and funding/financing organizations - collaborate and compete with each other, thus creating an environment that fosters innovation. In other words, the main issue will be, how can we generate and maintain “interaction fields” into which scientific knowledge and basic research are fed as input and come out as output that enhances economic and social values toward a better society? In this interaction field, free and open interaction of information, human resources, financial capital and institutions, among other things, takes place.

The “ecosystem” in NIES comes from “ecology,” and thus means an environment in which diverse organizations and institutions interact with dynamism and flexibility, collaborate and compete as the situation requires, and create a more advanced social system. The ecosystem in NIES is conceptualized as a social system that is analogous to the “natural ecosystem” characterized by its “diverse,” “evolutionary,” “collaborative as well as competitive” and “interactive” nature.

The scope of science-based innovation in this conference is focused on advanced economies such as those in Europe, North America, Japan, and the rapidly growing economies in Asia.

In the keynote session that kicks off the conference, issues will be raised from multiple dimensions of time and space in an attempt to define the “Global Innovation Ecosystem.” The following topics will be covered:

- 1) insight into the system to foster “21st century science-based innovation” from the research of OECD countries;
- 2) the progress of European innovative systems, which is contrasted with that of Innovate America; and
- 3) three different perspectives from the Asian region, offered in an attempt to find an approach to GIES
 - a) national innovation policy and initiatives to build a biotechnology cluster in the Asian city-state of Singapore;



- b) lessons learned from the speedy national innovation initiatives involving the public and private sectors with regard to the high-tech sectors of IT in Korea; and
 - c) private-sector and university-led innovation in the city of Kyoto, known for its long history and tradition.
- The interplay of national innovation systems and global innovation systems, and the potential for regional collaboration will also be discussed in this session.

During Session B of the keynote session, an overview of science and technology policies of Japan will be provided. Attempts will be made to define elements of an innovation ecosystem and clarify the input and output of the system. Elements of interaction fields, which form the core of this conference, will be raised. The agenda and objective of the subsequent panels and the overall structure of the conference toward the last wrap-up session will be described.

The overall objective of this keynote session is to raise issues in defining GIES and explore tradeoffs in implementing GIES, so that the foundation is laid for the following discussions of this conference.