TRAINING PROGRAM FOR SCIENCE & TECHNOLOGY PARK DEVELOPMENT

SHARING OF KOREA’S STP EXPERIENCE
Dear Colleagues,

I am pleased to invite you to the STP (Science & Technology Park) training program in Korea.

We are living in a knowledge-based era, where the creation and utilization of knowledge determine national competitiveness. Thus, there is a rising interest in the role of innovation clusters.

Started in the 1970’s, INNOPOLIS Daejeon has accumulated remarkable R&D capabilities impacting significantly on the process of Korea’s astonishing economic growth, to which the world is now paying keen attention.

The STP training program was launched in 2008 to share our vast experience in science & technology parks. It is a two-week course for participants to learn theories of the STP development and operational know-how based on the INNOPOLIS model, which has been tried and tested for over the last four decades. I am confident that, on completing this course, you will be able to play a pivotal role in building and running science parks in your own country. The INNOPOLIS model, which was first implemented under tough economic circumstances, is naturally a good benchmark for countries undergoing similarly tough economic condition.

In tandem with the training program, we are conducting on-site feasibility surveys and one-on-one consulting services to those countries who wish to develop their own science and technology parks. We have undertaken many joint projects that encompass consulting and R&D cooperation with the countries where program participants are from. We will continue to make every effort to support organizations and nations that want to learn from our experience to adopt Korean-model STPs.

I hope that you too, can help lay the foundation for building science parks in your home country by acquiring knowledge and organizational know-how of Korean-model STPs via our STP Training Program.

Cha Dong Kim
President & CEO, INNOPOLIS Foundation
The region has been publicly designated by the government in accordance with the Special Act on the Support of Special Research and Development Zone. In this special global innovation cluster, efforts are ongoing to achieve a virtuous circle in business where R&D, technology industrialization, and re-investment activities reinforce each other.

Vision of INNOPOLIS

To power Korea beyond the US$40,000 per capita GNP level while building an innovative economy through a dynamic ecosystem of knowledge creation, technology expansion and entrepreneurship.

INNOPOLIS Cultivation Model

Creative innovation convergence cluster of Science, culture, and industry

Constructing Creative Ecosystem

Public support

The Central Government
Establsih innovation cluster, public support

Universities and Research Institute
Produce knowledge, cultivate human resources, technology consulting and technology transfer

Local Government
Establish infrastructure (settlement conditions), policy mix

Linkage support

Networking
Domestic and international exchange cooperation, strengthen community, exchange meeting

Financial Support
Pre-seed, fund management
Pre-seed, Fund management

Technology startup and management support
Technology transfer, provide information, start-up support, M&A, etc. mix

INNOPOLIS Foundation

The INNOPOLIS Foundation was established in 2005 by the special law to contribute to the innovation of national technology and development of national economy by facilitating the R&D in universities, research institutes in Daedeok area. We have been committed to revitalizing their mutual cooperation and supporting the commercialization of R&D performance. INNOPOLIS has led Korea's science technology advancement. It is now growing into a world-class innovation cluster where R&D and business are converged by building a system to connect INNOPOLIS Daedeok, INNOPOLIS Daegu, INNOPOLIS Gwangju, and INNOPOLIS Busan.

INNOPOLIS Foundation
INNOPOLIS Overview

INNOPOLIS has been creating high value added for over forty one years. We are doing our best to commercialize the results of new science and technology on a global scale.

- **Continuous Development of “Innovation Cluster”**
  - Enhancement of the capabilities of innovation players
  - Enhancement of the capabilities and advancement of INNOPOLIS Foundation

- **Enhancement of INNOPOLIS Community**
  - Enhancement of the network between innovation players within INNOPOLIS
  - Enhancement of the network and expansion of achievements
  - Enhancement of the global network

- **Creation of a venture-company ecosystem where a virtuous circle of technology, entrepreneurship and growth is achieved**
  - Improvement and expansion of the technology commercialization environment
  - Support and focus on the full lifecycle of technology commercialization

- **Improvement of Corporate and Living Environments**
  - Expansion of the industrial infrastructure for a corporate-friendly environment
  - Improvement of living conditions for enhanced quality of life

INNOPOLIS, built around INNOPOLIS Daedeok and linked closely to INNOPOLIS Gwangju, INNOPOLIS Daegu and INNOPOLIS Busan, will open a new era for the innovation cluster model.

The INNOPOLIS and its linkage to the international science business belt cultivates the DNA that will drive national economic growth into the future through geographical and conceptual congruence, thus resulting in faster momentum toward the goal of becoming a leading global economic power. Home to the Korea Rare Isotope Accelerator and head laboratory of the Institute for Basic Science, INNOPOLIS Daedeok is where the business functions that connect basic science and original technology will be strengthened and where the R&D functions of INNOPOLIS Gwangju, INNOPOLIS Daegu, and INNOPOLIS Busan will further developed to their full potential through mutual cooperation with the science belt. INNOPOLIS will pioneer a new innovation model where R&D and business are joined through a strong inter-linkage framework within the innovation cluster.
The STP Training Program has introduced the differentiated management systems of Korean Science & Technology Parks (STPs). Participants in the program are able to acquire the know-how in relation to the development, operation and management of Korean Science & Technology Parks of the past 41 years and obtain systematic, practical and useful information via a wide array of programs such as seminars, workshops, site visits and other activities.

Characteristics of STP Training Program

Background of the STP Program

Science and Technology Park (STP) is the source of competitiveness, talent and entrepreneurial spirit and serves as the core infrastructure that supports the growth in the global knowledge-based economy today. As Korea’s most represented STP, INNOPOLIS Daedeok has served as a central pillar of economic growth in Korea for over forty years by developing amazing advanced new technologies, including the mobile technology standard CDMA and the WIG Craft, also known as the flying boat. Recently, developing countries have paid an attention to STP as a means of economic development. Many countries have also asked INNOPOLIS Foundation to share its know-how in STP. Through the “Korea STP Program” we would like to share our knowledge with the developing countries from around the world.

Main Goals of the STP Training Program

- Sharing the know-how and experience in the development and operation of Korean Science & Technology Parks
- Offering customized solutions as a consulting service to countries which are currently executing STP development plans
- Building a social network and seeking ways to cooperate with experts representing their respective sectors

Expected Effects of the STP Training Program

Participants will learn core knowledge necessary in creating science parks in their countries through this program. Lecturers will provide tips and/or ideas to further develop STP for your country.

Host/Organizer

- Ministry of Science, ICT and Future Planning
- INNOPOLIS Foundation
The program is structured to discuss both systematic theory and practical applications.

**STP Curriculum**

The program is structured to discuss both systematic theory and practical applications.

**Introduction of INNOPOLIS**
- Development Processes of Korea's Industrial Economy and Science and Technology Policies
- Development Processes and Achievements of the Government-Funded Research Institute System
- Research on Successful Cases of Korea's R&D Policies

**Policy Sectors**
- Development Processes of Korea's Industrial Economy and Science and Technology Policies
- Development Processes and Achievements of the Government-Funded Research Institute System
- Research on Successful Cases of Korea's R&D Policies

**Case Study & Simulation Workshop**
- Country Reports by participants on home country's STP policies, future plans and current status
- STP Implementation / Evaluation Practicing and presenting simulation for real master plans such as finance, infrastructure and human resources, all of which are related to STP establishment
- Concept of STP, STP Formation and Development Strategy
- Case Studies of International STPs
- History of INNOPOLIS Daedeok and its development strategy

**STP Formations and Development Sector**
- Concept of STP, STP Formation and Development Strategy
- Case Studies of International STPs
- History of INNOPOLIS Daedeok and its development strategy

**On-the-Spot Study**
- Visits to Daedeok's leading R&D Operations, Universities and Corporations.
- Visits to Techno Parks throughout the Nation.

**STP Operations and Support Activities**
- **INNOPOLIS Support Programs**
  - Linking R&D and Businesses
  - STP's Management Skills and Infrastructure
  - Introduction to Techno Parks (TPs) and Regional Industrial Development Policies
  - Incubation & Commercialization Supporting Tools & Skills

**Company Presentation and 1:1 Matching**
- Distinguished speakers will deliver presentation and company CEO will present information of their company technologies and products
- 1:1 business matching time will be provided for participants wanting to further do business with tenants of INNOPOLIS Daedeok.

**Cultural Experience**
- Participants will also have time to enjoy and become familiar with Korean culture through the excursion and Korean class.

**STP Training Program Time Table**

<table>
<thead>
<tr>
<th>Time</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 ~ 9:50</td>
<td>Korean Class</td>
<td></td>
<td>Case Study Workshop</td>
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</tr>
<tr>
<td>10:00 ~ 10:50</td>
<td>Orientation</td>
<td>INNOPOLIS Overview</td>
<td>Support policies and program for SME</td>
<td>Study Visit (Techno Park)</td>
<td>Culture Tour</td>
<td>Culture Tour</td>
<td></td>
</tr>
<tr>
<td>11:00 ~ 11:50</td>
<td>Development History</td>
<td>Country Reports</td>
<td>KAIST &amp; Innovation Cluster</td>
<td>Study Visit (Techno Park)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12:00 ~ 13:30</td>
<td>Daedeok INNOPOLIS &amp; STP</td>
<td>Study Visit (University)</td>
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</tbody>
</table>

**STP Program Schedule**

This program encourages active dialogue to maximize knowledge sharing experience among students. For two weeks, participants will be able to acquire the know-how in relation to the 41-year development, operation and management of INNOPOLIS Daedeok as an innovative cluster in Korea and obtain systematic, practical and useful information via a wide array of programs such as seminars, workshops, site visits and real experiences of Korea STP.
## Course Details

### Admission Requirements
- Ability to understand lectures conducted in English
- Persons from relevant government ministries and organizations
- Persons with experience in STP development areas (preferred)

### Expenses
- Tuition, accommodation and meals are provided
  (Airfare is not included)

### Program Venue
- Daejeon, Korea, INNOPOLIS Foundation
- 2 weeks program

### Application Submission
- Please visit our official website at www.stp.or.kr and follow the guideline of application submission. For further questions or contact, please e-mail at stp@innopolis.or.kr

## STP Faculty

- **Prof. Deog-Seong Oh**  
  Vice President, Chungnam National University / Secretary General, World Technopolis Association

- **Dr. Moon-Joong Tcha**  
  Executive Director, Center for International Development, KDI

- **Dr. Jong-In Choi**  
  Professor and Chair, Department of Management, Hanbat National University

- **Dr. Jun-Seok Seo**  
  Director, Global Business Team, INNOPOLIS Foundation

- **Prof. Byung-Ju Kang**  
  Professor, Hannam University, Urban Real Estate Department

- **Prof. Hak-Min Kim**  
  Professor, Sookmyungwoman University, Department of Public Administration

- **Dr. Gi-Don An**  
  Professor, Department of Economics, Chungnam National University

- **Prof. Sun-Yang Jung**  
  Professor, Technology Management Department, Konkuk University

- **Prof. Byung-Ju Kang**  
  Professor, Technology Transfer Management Team, ETRI

- **Ik-Chan Lee**  
  Director, Technology Transfer Management Team, ETRI

- **Dr. Jang Chae Lee**  
  Principal Researcher, KISTEP / Senior Advisor, Korean Federation of Science and Technology Societies

- **Kyung-Jin Hyung**  
  Senior Manager, Korea Technology Finance Corporation (KOTEC/KIBO)

* Instructors are subject to change
Overview (about our service)

The INNOPOLIS Foundation provides customized consulting service with a wide range from designing STP infrastructure to strategic planning on technology transfer models. Based on 41-year experience in STP management, The INNOPOLIS Foundation has become a qualified and reliable partner for implementing STP and innovation cluster. In principle, we conduct every consultation with specialized experts case by case.

Service Scope (what we offer)

**Timely Diagnosis** on demand of clients with situational understanding

**Analysis of requirements** for STP infrastructure or innovation cluster models

**Practical action planning** on networking and technology commercialization

**Recommendation** of know-how on STP management

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### STAGE 1

- Initial Experience
- Capacity Building

### STAGE 2

- Consultation 1
  - On-site Training
  - On-site Advisory
  - STP Model Consulting
  - Operational Roadmap Design

### STAGE 3

- Consultation 2

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**Training course**

- Initial Experience
- Capacity Building

**Consultation**

- On-site Training
- On-site Advisory
- STP Model Consulting
- Operational Roadmap Design

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### Primary Case

<table>
<thead>
<tr>
<th>Year</th>
<th>Subject</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Building Science and Technology Parks and Technology exchange programs</td>
<td>Kazakhstan</td>
</tr>
<tr>
<td>2012</td>
<td>Management of Science and Technology Parks for building Knowledge City</td>
<td>Application Model Development: Proposal for a Research-oriented University Model with Reference to KAIST</td>
</tr>
<tr>
<td>2012</td>
<td>Creation and development of the Engineering Center within the framework of innovative and intellectual cluster formation under Nazarbayev University</td>
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</tr>
<tr>
<td>2012</td>
<td>Feasibility Study for the Establishment of Kuwait Industrial Technology Park (KITP) at Al-Shebadah Industrial Area</td>
<td>Kuwait</td>
</tr>
</tbody>
</table>

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**Process (how we work)**

The following is the process that INNOPOLIS Foundation follows for the consulting program.

* Please note duration of the steps may vary.

**STEP 1** Request for Consulting

- It is necessary to initiate a consulting project with an official request of government agencies or public organizations.

**STEP 2** Negotiation

- It is essential to design the concept of Terms of Reference (ToR) and other conditions based on the mutual agreement.

**STEP 3** Organization of Expert Group

- After the contract, INNOPOLIS Foundation organizes and coordinates an expert group regarding the client’s requests.

**STEP 4** Contact

- Contact is made to start new partnership between the client and INNOPOLIS Foundation.

**STEP 5** Field Research

- Field research or on-site survey is carried with our experts for more understandings.

**STEP 6** Consulting

- In-depth consulting is implemented by INNOPOLIS Foundation and expert group.

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For further question or contact about consulting, please e-mail at stp@innopolis.or.kr

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* consulting
STP Alumni Organizations

Over 57 countries 212 organizations from across the world have participated in the Korea’s Science and Technology Park (STP) program.

<table>
<thead>
<tr>
<th>No.</th>
<th>Country</th>
<th>Organization Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Egypt</td>
<td>King Hussein Science Park, National Research Council of Egypt</td>
</tr>
<tr>
<td>2</td>
<td>Ecuador</td>
<td>National University of Engineering, Quito</td>
</tr>
<tr>
<td>3</td>
<td>Dominican</td>
<td>Universidad de las Américas/ffield Institute of Technology</td>
</tr>
<tr>
<td>4</td>
<td>Colombia</td>
<td>National University of Colombia</td>
</tr>
<tr>
<td>5</td>
<td>Bulgaria</td>
<td>Technical University of Sofia</td>
</tr>
<tr>
<td>6</td>
<td>Brunei</td>
<td>Graduate University of Science</td>
</tr>
<tr>
<td>7</td>
<td>Egypt</td>
<td>Egyptian National Research Council</td>
</tr>
<tr>
<td>8</td>
<td>Brazil</td>
<td>Universidade Federal Fluminense</td>
</tr>
<tr>
<td>9</td>
<td>Belarus</td>
<td>Belarus National Academy of Sciences</td>
</tr>
<tr>
<td>10</td>
<td>Bangladesh</td>
<td>Bangladesh University of Engineering</td>
</tr>
<tr>
<td>11</td>
<td>Azerbaijan</td>
<td>Baku Technical University</td>
</tr>
<tr>
<td>12</td>
<td>Armenia</td>
<td>Armenian National Academy of Sciences</td>
</tr>
<tr>
<td>13</td>
<td>Egypt</td>
<td>King Hussein Science Park, National Research Council of Egypt</td>
</tr>
<tr>
<td>14</td>
<td>Ecuador</td>
<td>National University of Engineering, Quito</td>
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<tr>
<td>16</td>
<td>Costa Rica</td>
<td>Universidad de Costa Rica</td>
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<td>17</td>
<td>Colombia</td>
<td>National University of Colombia</td>
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<tr>
<td>18</td>
<td>Egypt</td>
<td>Egyptian National Research Council</td>
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<tr>
<td>19</td>
<td>India</td>
<td>Indian Institute of Science and Technology</td>
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<tr>
<td>20</td>
<td>Indonesia</td>
<td>Universiti Teknologi Malaysia</td>
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<tr>
<td>21</td>
<td>Iran</td>
<td>Sharif University of Technology</td>
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<tr>
<td>22</td>
<td>Iraq</td>
<td>Basrah University of Technology</td>
</tr>
<tr>
<td>23</td>
<td>Kazakhstan</td>
<td>Nazarbayev University Research &amp; Innovation System</td>
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<tr>
<td>24</td>
<td>Kenya</td>
<td>University of Nairobi</td>
</tr>
<tr>
<td>25</td>
<td>Kuwait</td>
<td>Kuwait Institute for Scientific Research</td>
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<tr>
<td>26</td>
<td>Thailand</td>
<td>Mahidol University Regents</td>
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<tr>
<td>27</td>
<td>Pakistan</td>
<td>National University of Science and Technology</td>
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<tr>
<td>28</td>
<td>South Africa</td>
<td>University of Pretoria</td>
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<td>29</td>
<td>Germany</td>
<td>Technische Universität Berlin</td>
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<td>30</td>
<td>Mexico</td>
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<td>31</td>
<td>Mongolia</td>
<td>Mongolian University of Science and Technology</td>
</tr>
<tr>
<td>32</td>
<td>Morocco</td>
<td>ENISA/ Institution of Higher Education</td>
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<tr>
<td>33</td>
<td>Lithuania</td>
<td>Kaunas University of Technology</td>
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<td>34</td>
<td>Laos</td>
<td>National University of Laos</td>
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<tr>
<td>35</td>
<td>Nigeria</td>
<td>University of Agriculture, Benin</td>
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<tr>
<td>36</td>
<td>Ukraine</td>
<td>National Academy of Sciences</td>
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<td>37</td>
<td>Pakistan</td>
<td>National Institute of Technology</td>
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<td>38</td>
<td>Panama</td>
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<td>39</td>
<td>Philippines</td>
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<td>Comenius University</td>
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<td>Slovenia</td>
<td>University of Ljubljia</td>
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<td>42</td>
<td>Australia</td>
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<td>43</td>
<td>South Africa</td>
<td>University of Pretoria</td>
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<td>44</td>
<td>Spain</td>
<td>Universidad Nacional de Educación de España</td>
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<td>45</td>
<td>Singapore</td>
<td>National University of Singapore</td>
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<tr>
<td>46</td>
<td>Turkey</td>
<td>Istanbul Technical University</td>
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<tr>
<td>47</td>
<td>Taiwan</td>
<td>National Taiwan University of Science and Technology</td>
</tr>
<tr>
<td>48</td>
<td>Thailand</td>
<td>Mahidol University Regents</td>
</tr>
<tr>
<td>49</td>
<td>Trinidad &amp; Tobago</td>
<td>University of the West Indies</td>
</tr>
</tbody>
</table>

Note: The list includes countries and organizations that have participated in the Korea’s Science and Technology Park (STP) program. The list is not exhaustive and may not include all participating countries and organizations.
STP Alumni Organizations Around the World
World-class Innovation Cluster for Future Technologies

INNOPOLIS represents an important milestone in the development of the Korean economy over the last forty years. Now, INNOPOLIS is leading the way of establishing an innovation cluster where R&D and businesses are converged.

Milestone of INNOPOLIS

1970~2014

1970

Establishment of the Infrastructure
Building a foundation to strengthen the national R&D capability

1980

Expansion of the R&D Base
Move-in of government-funded research institutes

1990

Innovation Creation
Move-in of private research institutes and construction of networking base among industry, academia, and research institute

2000

Formation and Rapid Growth of Innovation Cluster
Creating a science & technology network and R&D innovation cluster

2005~2010

Advancement of INNOPOLIS Daedeok
Creating a venture ecosystem for industry, academia, and research institute network and commercialization of cutting-edge technologies
- Inauguration of INNOPOLIS Daedeok in 2005

2011~

Growing into a Global Innovation Cluster
Evolving into a global innovation cluster that leads the commercialization of world-class technologies
- Inauguration of INNOPOLIS Daegu and INNOPOLIS Gwangju
- Inauguration of INNOPOLIS Busan

INNOPOLIS, a world-class R&D innovation cluster

For the past four decades, INNOPOLIS has been committed to developing world-class technologies and creating an innovation-driven economic system by playing a pivotal role for national R&D activities, which has been a milestone of Korea’s amazing economic growth. Now, INNOPOLIS is leapfrogging into a world-class innovation cluster by facilitating the synergy among each sector in Daedeok, Gwangju, Daegu, and Busan.