



# **2012** **UNESCO-WTA** **International Training** **Workshop**

**Valorization: Tangible benefits from S&T parks**

**DATE** 14-17 November 2012

**VENUE** Conference Hall(2F), Daedeok Innopolis, Daejeon, Korea

# Table of Contents

## Keynote Session p. 7~56

### Keynote Lecture A ..... 9

#### **Valorization : Tangible Benefits from Science & Technology Parks (Communities creating innovation, technology and knowledge)**

· *Prof. Deog-Seong Oh*

*(Vice President of Chungnam National University, Secretary General of WTA, Rep. of Korea)*

### Keynote Lecture B ..... 37

#### **The Impact of Science and Technology Parks**

· *Prof. Eberhard Becker*

*(Former Rector, TU Dortmund University, Germany)*

## Session 1. Technological Commercialization / Entrepreneurship p.57~108

### Session 1-1 ..... 59

#### **CONNECT- Springboard Orientation Powering the Innovation Economy**

· *Mr. Ruprecht Von Buttlar*

*(Vice President Business Creation & Development, CONNECT, USA)*

### Session 1-2 ..... 71

#### **Technopolis Benchmarking: A Maturity Model and Database**

· *Prof. Fred Phillips*

*(SUNY Stony Brook and General Informatics LLC, USA)*

### Session 1-3 ..... 89

#### **Regional Resilience and Panarchy: A Promising Framework for Regional Innovation Studies or A fuzzy Concept?**

· *Prof. Cheol-Joo Cho*

*(Chungju University, Rep. of Korea)*

**Session 2. Support Systems : Patent/Licensing Offices /  
Venture Capital p.109~166**

**Session 2-1 ..... 111**

**Transforming Oregon**

· *Mr. Gordon Hoffman* (Northwest Technology Ventures, USA)

**Session 2-2 ..... 123**

**Science and Technology Parks as an Open Innovation Valorization Catalyst**

· *Prof. Desai Narasimhalu* (Singapore Management University, Singapore)

**Session 2-3 ..... 155**

**Daedeok Innopolis and new initiative for technology transfer:  
a case study of Research Institute Spin-off**

· *Dr. Jun-Seok Seo* (INNOPOLIS Foundation, Rep. of Korea)

**Session 3. Science Park Governance & Management p.167~224**

**Session 3-1 ..... 169**

**Unleashing Innovation**

· *Ms. Trudi Schifter* (CEO, TallyFox Social Technologies AG, Switzerland)

**Session 3-2 ..... 183**

**State Science and Technology- Based Economic Development Efforts :  
The New Jersey Case**

· *Prof. Peter K. Jeong* (Vice President Bloomfield College, USA)

**Session 3-3 ..... 203**

**Science & Technology Park as Regional Innovation Platform:  
A Case of Chungnam Techno Park, Korea**

· *Prof. Hak-Min Kim* (Soonchunhyang University, Rep. of Korea)

**Country Presentation p.225~426**

**Section 1 : Science & Innovation Strategy / Business Incubation  
(in alphabetical order)**

- 1-1. Costa Rica** \_\_\_\_\_ **231**  
From entrepreneurial promotion to company acceleration  
*- Eugenia Ferreto Gutierrez, University of Costa Rica*
- 1-2. Egypt-a** \_\_\_\_\_ **237**  
Role of the City of Scientific Research and Technological Applications  
(SRTA-City) for the Development and Innovation of Industry  
*- Prof. Essam Khamis Ibrahim, City of Scientific Research & Technological Applications (SRTA-City)*
- 1-3. Egypt-b** \_\_\_\_\_ **243**  
New Borg El-Arab City, a Proposed Knowledge City Mode  
*- Prof. Yasser Refaat Abdel-Fattah, Supreme Council for Research Centers and Institutes, Ministry of Scientific Research*
- 1-4. Indonesia-a** \_\_\_\_\_ **259**  
The role and function of Bandung Techno Park in growing and developing  
technopreneur in Indonesia  
*- Jangkung Raharjo, Bandung Technopark*
- 1-5. Indonesia-b** \_\_\_\_\_ **267**  
Solo Technopark Center for Vocation and Technological Innovation in  
Surakarta-Indonesia  
*- Laurentius Sumadi, Solo Technopark*
- 1-6. Indonesia-c** \_\_\_\_\_ **273**  
Batam Technopark, Batam Indonesia Freezone Authority  
*- Tri Novianta Putera, Batam Indonesia Free Zone Authority/Batam Technopark*
- 1-7. Iran** \_\_\_\_\_ **283**  
A Glance at the Dynamisms in the Behavior of the Knowledge based Firms  
Inhabited Science and Technology Parks  
*- Dariush Poursarrajian, School of management of university of Tehran*
- 1-8. Japan** \_\_\_\_\_ **289**  
The Present State of the Japan's Cluster Program  
*- Prof. Sangryong Cha, University of Nagasaki*

- 1-9. Maldives** \_\_\_\_\_ **295**  
National ICT Incubator Maldives  
*- Nazima Adam, Maldives Incubator*
- 1-10. Mongolia** \_\_\_\_\_ **299**  
Promotion of Innovation: A Mongolian Perspective  
*- Prof. Jargalsaikhan Khishigsaikhan, The Mongolian University of Science and Technology*
- 1-11. Philippines** \_\_\_\_\_ **305**  
Manufacturing and IT zones/parks in the Philippines: impact on poverty, average pay, underemployment, and unemployment  
*- Dr. Jonathan P. Sale, University of the Philippines, School of Labor and Industrial Relations*
- 1-12. Serbia** \_\_\_\_\_ **313**  
Development of STP and Technology Incubators in Serbia  
*- Gordana Danilovic Grkovic, Business & Technology Incubator of the Technical Faculties of the University of Belgrade*
- 1-13. Taiwan** \_\_\_\_\_ **319**  
The Development of Southern Taiwan Science park  
*- Prof. Shiann-Far Kung, National Cheng Kung University*

## **Section 2 : STPs Development (in alphabetical order)**

- 2-1. Belarus** \_\_\_\_\_ **325**  
Technological innovation policy and Innovation infrastructure in the Republic of Belarus  
*- Vitaly Gmyrak, Scientific and Technological Park of BNTU "Polytechnic" Minsk*
- 2-2. Cambodia** \_\_\_\_\_ **329**  
Towards a National Science, Technology and Innovation (STI) System for Cambodia  
*- Dr. Neth Barom, Royal Academy of Cambodia*
- 2-3. Costa Rica** \_\_\_\_\_ **335**  
Highlights of the implementation of STP by the University of Costa Rica  
*- Gabriela Gutiérrez, University of Costa Rica*

- 2-4. Egypt-a** \_\_\_\_\_ **341**  
Investment Zone of the City for Scientific Research and Technological Applications:  
A Road for Establishing an Egyptian Science & Technology Park  
*- Prof. Abd El-Hady Kashyout, City of Scientific Research & Technological Applications  
(SRTA-City)*
- 2-5. Egypt-b** \_\_\_\_\_ **347**  
Development of Science Parks in Egypt: SRTA-City Science and  
Technology Park as a Model  
*- Sobhy El Sohaimy, City of Scientific Research & Technological Applications  
(SRTA-City)*
- 2-6. Hungary** \_\_\_\_\_ **353**  
GRAPHISOFT PARK “A magnet for professional talents”  
*- János Kocsány, Graphisoft Park SE*
- 2-7. Indonesia-a** \_\_\_\_\_ **361**  
South Sumatera Science Techno Park As Innovation Centre  
*- Dr. Ekowati Retnaningsih, Research and Development Agency of South  
Sumatera Province*
- 2-8. Indonesia-b** \_\_\_\_\_ **367**  
Development of Science and Technology Park (Stp) in Indonesia is the Key  
Success of Implementing Knowledge Based Economy (Kbe) Concept to  
Support the National Economic Development  
*- Eryda Listyaningrum, Puspiptek/Ministry of Research and Technology*
- 2-9. Iran** \_\_\_\_\_ **373**  
Science and Technology Parks in IRAN  
*- Mohammad Ghavide, Yazd Science & technology Park*
- 2-10. Nigeria** \_\_\_\_\_ **381**  
Review of Efforts on Planning, Establishing and Managing Viable Science  
and Technology Parks in Nigeria  
*- Dr. Umar Bindir, National Office for Technology Acquisition and Promotion (NOTAP)  
(Federal Ministry of Science and Technology)*
- 2-11. Pakistan** \_\_\_\_\_ **397**  
National Science and Technology Park (NSTP): An Overview of Current  
Setup and Future Development  
*- Umer Wasim, National University of Science and Technology*
- 2-12. Poland** \_\_\_\_\_ **403**  
Experiences of entrepreneurship development, Gliwice, POLAND  
*- Ewa Bilewicz, New Gliwice Centre*

- 2-13. Yemen** \_\_\_\_\_ **409**  
Exploring and analyzing the current status of the Telecommunications and Information Technology City in Yemen: Gate to the Information Society  
- *Dr. Khaled Mohammed Hadi, Ministry of Telecommunication and Information Technology of Yemen (MTIT)*
- 2-14. Zimbabwe** \_\_\_\_\_ **417**  
A Heuristic Approach to a Sustainable Science and Technology Park Development: The Case of Harare Institute of Technology (HIT)  
- *Dr. Quinton C. Kanhukamwe/ Dr. Maxwell Chanakira, Harare Institute of Technology*

## **2012 UNESCO-WTA International Training Workshop**

### *Project Steering Committee*

#### **Chairman**

Dr. Deog-Seong Oh, Secretary General of World Technopolis Association (WTA)

#### **Members**

Dr. Lidia Brito, Director, Division for Science Policy and Sustainable Development, Natural Science Sector, UNESCO

Dr. Byung-Joo Kang, Director, UNESCO-WTA Technopolis Development Center

Dr. Malcolm Parry, General Manager, Surrey Research Park, Guilford, UK

Prof. Fred Young Philips, State University of New York at Stony Brook, USA

Prof. Peter Jeong, Vice President, Bloomfield College, USA

Dr. Herbert Chen, Tsinghua Science Park, China

Dr. Raimund Broechler, Vice President of International Network for SMEs

#### **Coordinator**

Dr. Yoslan Nur, Science Policy & Sustainable Development Division, UNESCO

Mr. Yong-Jun In, Program Coordinator, World Technopolis Association (WTA)