



<http://iss2018seoul.com>

The International **Joseph A.** Schumpeter Society

17th ISS Conference
**"Innovation, Catch-up,
and Sustainable Development"**

02 July – 04 July, 2018, Seoul, Korea



Local Hosts
Seoul National University
Korea Development Economics Association
Center for Economic Catch-up

☐ **Local Hosts**

- SNU Economics Department (BK21 Plus)
/Institute of Economic Research (Center for National Competitiveness)
- Korea Development Economics Association
- Center for Economic Catch-up

☐ **Co-sponsors**

한국경제발전학회

Korea Development Economics
Association



Institute of
Economic
Research
SEOUL National University

Institute of Economic Research
Center for National Competitiveness



BrainKorea21 PLUS



Center for Economic Catch-up



Social Science Korea (SSK)



National Research Foundation of Korea



Center for Research on Innovation and
Competition (SSK)



Korea Foundation For Advanced
Studies(KFAS)



오로라월드(주)



Seoul Metropolitan Government



Technology Management, Economics and
Policy Program



Institute of Management Research

☐ Table of Contents

Local Organizing Committee	
ISS (International Schumpeter Society)	
Welcoming Remarks	
Profiles of Selected Speakers	
Program Overview	
Monday, 2, July 2018	
Tuesday, 3, July 2018	
Wednesday, 4, July 2018	
Detailed Program	
Monday, 2, July 2018	
Tuesday, 3, July 2018	
Wednesday, 4, July 2018	
Poster Presentations	
Schumpeter Prize Competition 2018	
General Information	
Information for Presenters	
Information of Restaurant and Cafe on Campus	
Attractions on Campus (Gwanak), SNU	
Index of Presenting Authors and Session Chairs	

□ Local Organizing Committee

○ Conference Chair

- Prof. Keun Lee
Professor of Economics, Seoul National University
Director, Center for Economic Catch-up, Inc
- Department of Economics, Seoul National University, Shillim Dong, Seoul, 08826 KOREA
- Phone: +82 10-2729-0418, Fax: +82 2-886-4231
- Email: kenneth@snu.ac.kr

○ Conference Chief Secretary

- Raeyoon Kang
Ph. D. in Economics
Phone: +82 10-9875-1008
Email: iss2018seoul@gmail.com

○ Conference Secretary

- Wonjin Song (Ph. D. in Economics/icatchup@hanmail.net/+82 10-2528-9634)
- Sunyoung Lee (Ph. D. in Economics/iss2018seoul2@gmail.com/+82 10-4558-1668)
- Zhuqing Mao (Ph. D. candidate in Economics/mm7ng7ng@snu.ac.kr/+82 10-2084-8802)
- Geonho Lee (Ph. D. student in Economics/goleegh@snu.ac.k/+82 10-2228-8833)
- Jinhee Kim (Ph. D. student in Economics/jhkim9170@snu.ac.kr/+82 10-9145-9170)

○ Committee Members

Eduardo Albuquerque(UFMG, Brazil)
Reiko Aoki(Fair Trade Commission, Japan)
JaeYong Choung(President of KOSIME, South Korea)
Xiaolan Fu(Oxford University, UK)
Mei-Chih Hu(National Tsing Hua University, Taiwan)
Chen Jin(Tsinghua University, China)
Jae-young Kim(Seoul National University, South Korea)
Hyeog Ug Kwon(Nihon University Japan)
Jeong-Dong Lee(Seoul National University, South Korea)
Jungsoo Park(Sogang University, South Korea)
Slavo Radosevic(University College London, UK)
Dong-Kee Rhee(Seoul National University, South Korea)
Keunkwan Ryu(Seoul National University, South Korea)
Yoshinori Shiozawa(Graduate School for Creative Cities, Japan)
Jaeyong Song(Seoul National University, South Korea)
WonKeun Song(Chairman of KDEA, South Korea)
Nicholas Vonotas(George Washington University, US)
Xiaobo Wu (Zhejiang University, China)
Wong Chan Yuan (University of Malaya, Malaysia)

□ **ISS (International Schumpeter Society)**

○ **Executive Committee**

- **President (2016-2018)**
Keun LEE (South Korea)
- **President-elect:**
Massimo Egidi (Italy)
- **Vice-Presidents:**
Mariana MAZZUCATO (UK)
Jason POTTS (Australia)
- **Board of Management (2016-2018)**
Semih AKCOMAK (TUR)
Valeria ARZA (ARG)
David AUDRETSCH (USA)
Dieter BÖGENHOLD (AU)
Guido BÜNSTORF (GER)
Jose Eduardo CASSIOLATO (BRA)
Carolina CASTALDI (NED)
Andreas CHAI (AUS)
Mario CIMOLI (CHI)
Aldo GEUNA (IT)
Magnus HOLMÉN (SVE)
Erika KRAEMER-MBULA (South Africa)
André LORENTZ (FR)
Elicia Maine (CAN)
Yao Ouyang (CHN)
Martha PREVEZER (UK)
Hiroshi Shimizu (JAP)
- **Editor (JEE: Journal of Evolutionary Economics)**
Andreas Pyka & Uwe Cantner, Germany
- **Auditing Committee:**
Thomas Grebel, Germany; Werner Hözl, Austria
- **Secretary General/Treasurer:**
Horst Hanusch, Germany
- **Administrative secretary:**
Mrs Olga Gaessner
Friedrich-Schiller-University Jena
Faculty of Economics and Business Administration
Chair of Microeconomics
Carl-Zeiss-Str. 3, 07743 Jena / Germany
Phone: +49 3641 943200
Fax: +49 3641 943202
e-mail: olga.gaessner@uni-jena.de

□ Welcoming Remarks

All the participants of the ISS 2018 in Seoul!

You are warmly welcome to Seoul, and Seoul National University (SNU).

Also, welcome back to Asia; 26 years have passed since the ISS conference was held in Kyoto, Japan in 1992. This years ISS has gathered about 350 participants or papers from more than 52 countries around the world; initial submission was more than 420 though.

The ISS was first established in 1986 in Germany and its secretariat office is still based in Germany, with Horst Hanush serving as the chief secretary for many years. Here I thank him tremendously for his excellent service for the Society. We publish the journal, *Journal of Evolutionary Economics*, which will be introduced further in the Journal session by the editors, A. Pyka and Uwe Canters.

Although Korea is often considered as a latecomer or emerging country, it is well-known for its extensive history, with a close to 5,000 years of history, more than 200 times older than the history of the USA. For example, the Yi Dynasty ran for 500 years from the 14th century, and it is one of the top 3 longest dynasties in the world. Probably it is the only dynasty in the world that has still kept all the tombs of the 28 kings of the dynasty. The tombs are all around Seoul city, and were designated as one of the UNESCO heritage. You can visit them during your stay in Seoul.

The Korean had also invented printing; The *JIKJI* which is the world's oldest extant printed book, was first printed in 1377, 78 years prior to Gutenberg's Bible. There was a record that such book was published but no one had it. After several centuries it was finally found in a French library by Dr. PARK Byeong-sen (1923-2011, class of 1950, SNU) thanks to his 13 years of searches. In 2001, this copy was inscribed on UNESCO's *Memory of the World Register* as the world's oldest metalloid type. You may visit the University Museum and the Gyu-jang-kak archive on campus for related exhibitions on Korean history.

In the fourteenth century, the Korean invented Hangul, the Korean Alphabet (consisting of 5 main vowels and 14 consonants). Since its invention, Hangul has taken an important part in the Korean history as an excellent alternative of Chinese characters for Korean people. If you go to downtown Seoul, Gwanghwa-moon plaze, there is a statue of the King Sejong who invented Hangul with his scholars; there is also a Hangul Museum nearby (We will arrange buses from the campus going to this area after the farewell lunch at the end of the conference). However, at the time when Hangul was invented, the Korean Alphabet was not respected or disregarded by the established elites and scholars who were just immersed in the Chinese classics. So, Hangul was used only among the Commoner classes, and it took more than a hundred year that became dominant way of writings.

As you know, all the new inventions and innovations spend hard time being acknowledged at the beginning. It takes time to be established as a new dominant design. I think this is our subject of study. Schumpeterians are for innovations, inventions and new discoveries, which are regarded as the most importance factor for economic growth. Schumpeterian scholars consider that innovations can be explained or predicted, rather than something exogenous or inexplicable residuals as considered in neoclassical economics.

Although Korea used to have its own institutions of education and teaching at several tiers for

centuries, university in modern or Western style started to be established since the late 19th century, and this university, SNU, was established in 1946 after the Korean War. Despite its short history, SNU is THE university in Korea, the leading institution that has produced a large number of the leaders in this country who have been leading the process of both rapid industrialization and also active democratization. This campus was the home of student activism; In expression of their feeling of resistance against the military dictatorship in the 1970s and 1980s, many students committed suicide in this campus, by burning themselves to death or by jumping out of the window of the library building. Today, there is the Path of Democracy on campus where we set up a statue in memory of student leaders who committed suicides. Somehow, that day of turbulence is more or less gone, and we now devote more to scholarship. SNU has ranked recently between 30th to 40th in the QS World University Ranking. It has enrollments about 16,000 undergraduates and 12,000 graduates, and about 3,000 faculty numbers.

Finally, I would like to thank tremendously those who has made long trips to Korea, contributing both financially and academically to make this conference a success. Especially, participations by old time members of the ISS is highly appreciated; you are the one who make the ISS keep going, giving inspirations to next generations of Schumpeterian scholars. Of course, many thanks also go to those sponsoring organizations listed in the program book.

Thank you!

Enjoy the Conference, SNU, and Seoul, Korea, and return home safely.



Keun Lee,

A handwritten signature in black ink, consisting of stylized Chinese characters and a surname, written over a white background.

President of the ISS; Professor of Economics, SNU

□ Profiles of Selected Speakers

Monday (02 July)



Bengt-Åke Lundvall is the Professor Emeritus at Department of Economics and Management, Aalborg University, Denmark. He has served as special invited professor at Tsinghua University, Beijing and at Sciences Po, Paris. In collaboration with Christopher Freeman he has constructed the concept National Innovation Systems and together with Björn Johnson The Learning Economy. Lundvall, B.-Å. (2016), *The Learning Economy and the Economics of Hope*, Anthem Press brings together his most important contributions.

In his lecture Lundvall will demonstrate that transformative innovation policies require a system's perspective. In order to open up new directions for innovation and to tackle the most important challenges of our time – growing income inequality and global warming – it is necessary to understand what ties that bind and what chains need to be broken. He will also argue that an evolutionary understanding and broad definition of knowledge and learning are necessary to overcome the prevailing pessimism and to develop the Economics of Hope.



David Sainsbury read History and Psychology at King's College Cambridge and received an MBA from the Columbia Graduate School of Business. He worked in the family business from 1973 to 1998 and was UK Minister of Science and Innovation from 1998 to 2006. In 2007 he produced a review of the Government's science and innovation policies called "The Race To The Top", and in 2015 produced a second Government report which led to a major reform of the technical education system in England.

He is the author of "Progressive Capitalism: How to Achieve Economic Growth, Liberty and Social Justice", and was elected the Chancellor of the University of Cambridge in 2011.

In his talk he will argue that we need to have a new theory of economic growth and will describe the 'Dynamic-Capability Theory' of economic growth that he will put forward in a new book.



Massimo Egidi is the Professor Emeritus at Luiss University in Rome, where teaches Behavioral Economics and Psychology and where has served as Rector. His main research interests are related to the study of bounded rational behaviour in organizations and institutions, as well as of organizational learning.

Reading Schumpeter's "creative response" through the lenses of the cognitive sciences.

Schumpeter considers the entrepreneurial activity as a "*creative response*" to external changes. He claims that this activity can be understood ex-post, but cannot be predicted "ex-ante". This apparently contradictory statement acquires coherence if we assume an evolutionary environment where there is a permanent knowledge heterogeneity and competence gap among firms. On the ground of Simon bounded rationality approach we analyze the "creative response" as a process of discovery under uncertain conditions that leads to creation of new knowledge. The elements that foster or prevent the emergence of a creative response, are examined, both with experiments on games and with findings from multivariate neuroimaging analysis.



Horst Hanusch is a Professor Emeritus at the Institute of Economics of the University of Augsburg (Germany). He is also Secretary General of the "International Joseph A. Schumpeter Society", Founding Editor of the "Journal of Evolutionary Economics" and Honorary President of the "International Institute of Public Finance". His main research focuses on the interplay between the real, the financial and the public sector in the process of a Schumpeterian economic development based on innovations.

"Creative Destruction" is one of the key concepts in Schumpeter's work. Until now history has proven that the beneficial, creative part of change always dominated economic development. It was able not only to compensate the negative, destructive effects of technological progress, but also to gain a huge economic surplus for society. But, will that be true also for future times which can be described by radical disruptions having even the character of a singular technological revolution?

The paper shows that already today in many regions of the capitalistic world the negative effects of progress overcome the beneficial ones and that it will be hard to find consensual solutions how to manage the revolutionary destructive part of development.

Mike Gregory is Head of the Manufacturing and Management Division of the University of Cambridge Engineering Department and of the Institute for Manufacturing (IfM).



Following an early career in industry he was the founder member of the team which established the Manufacturing Engineering Tripos, a senior undergraduate programme covering, marketing, design, production, distribution and service with very close industrial engagement. Subsequent developments in research and collaboration with industry reflected this broad view of manufacturing and led to the establishment of the IfM in 1998. Linking science, engineering, management and economics and integrating education, research and practice the IfM now has over 230 staff and research students and a further 100 undergraduate and Masters students. Mike Gregory's work continues to be closely linked with industry and government and he has published in the areas of manufacturing strategy, technology management, international manufacturing and manufacturing policy. External activities have included membership of various government and institutional committees including currently the High Value Manufacturing Catapult Board. He served as Executive Director of the Cambridge MIT Institute from 2005-2008 and was Springer Visiting Professor at UC Berkeley in 2008/9. He chairs the UK Manufacturing Professors Forum and co-chairs the Manufacturing Advisory Group of the UK Governments Department of Business Innovation and Skills.



CHEN Jin is a Professor of Department of Innovation, Entrepreneurship and Strategy in Tsinghua SEM. He received his Bachelor in chemical process control in the Department of Chemical Engineering from Zhejiang University in 1989; and Ph.D. in Management Engineering in the Department of Management also from Zhejiang University in 1994. Dr. CHEN Jin went to MIT Sloan School of Management in 1998 as a visiting scholar. In 2000, he went to SPRU of Sussex University as a visiting fellow. Dr. CHEN Jin has been awarded Special Government Allowance from the State Council of China, and the Huo Yingdong Youth Teacher Prize and the Third "Young university teachers award" from the Ministry of Education of China. He awarded the Outstanding Youth Fund in 2002 by National Science Foundation of China. In 2009, he was selected for the China's National Talents Project. In 2014, Professor Chen Jin was honored as a distinguished professor of Chang Jiang scholars,

and actually he is the first Chang Jiang scholar in the field of China's technological innovation management. Dr CHEN worked as the Executive Vice Dean of the Undergraduate School and the Chu Kechen Honors College before joined Tsinghua SEM. His research and teaching mainly focuses on management of technological innovation.



João Carlos Ferraz is an Associate Professor, Instituto de Economia, Universidade Federal do Rio de Janeiro since 1987. Executive Director, Brazilian Development Bank (BNDES), 2007-2016. Director, Division of Productive Development, Economic Commission for Latin America and the Caribbean, United Nations (UN/ECLAC), Chile, 2003-2007. DPhil, Science Policy Research Unit, University of Sussex, UK, 1984.

The paper "Evaluating, foresighting and explaining the diffusion of digital technologies in the Brazilian industry" analyses current and expected (up to 2027) use of different generations of digital technologies by Brazilian industrial firms. It is based on a survey with 753 industrial firms and it shows that: (i) currently most firms lag behind but, by 2027, significant progress is expected; (ii) firms from technology intensive sectors, larger size, stronger capabilities and long-term planning show higher probability of progress. Is a selective process in the making? Is there a role for public policies? Of which nature?



Slavo Radosevic is a Professor of Industry and Innovation Studies at the UCL where he has also been acting director of School of Slavonic and East European Studies. He had worked at University of Sussex SPRU as a researcher (1993-1999) and before that as a researcher in Croatia. His main research interests are in science, technology, industrial change, foreign direct investments and innovation policy in Europe, with particular reference to central and eastern Europe (CEE). He has published extensively in international journals in these areas and has edited several volumes on these issues. He favours empirically oriented and policy relevant research projects, based on neo-Schumpeterian economics. He acts as an expert for the EC, OECD, UNESCO, UNIDO, World Bank, UNECE and Asian Development Bank and several governments in CEE. He also had significant policy-making experience in Croatia and ex-Yugoslavia at the highest policy level. He is a special advisor to the EC DG Commissioner for Regional and Urban Policy.



Giovanni Dosi is a Professor of economics at the Scuola Superiore Sant'Anna in Pisa, Italy. He also serves as co-director of the 'Industrial Policy' and 'Intellectual Property Rights' task forces at the Initiative for Policy Dialogue at Columbia University; he is a continental Europe editor of the journal *Industrial and Corporate Change*; and is included in the ISI Highly Cited Research list. In 2016, he received the Wiley TIM Distinguished Scholar Award by the Technology and Innovation Management Division of the American Academy of Management.

A selection of his works has been published in two volumes: *Innovation, Organization and Economic Dynamics. Selected Essays*, and *Economic Organization, Industrial Dynamics and Development: Selected Essays*, Edward Elgar, 2000 and 2012.



Justin Yifu LIN is the Dean of Institute of New Structural Economics and Institute of South-South Cooperation and Development at Peking University. He was the Senior Vice President and Chief Economist of the World Bank, 2008-2012. He is the author of more than 20 books including *Beating the Odds: Jump-starting Developing Countries*; *Going Beyond Aid: Development Cooperation for Structural Transformation*, *the Quest for Prosperity: How Developing Economies Can Take Off*, *New Structural Economics: A Framework for Rethinking Development and Policy*, *Against the Consensus: Reflections on the Great Recession*, *Economic Development and Transition: Thought, Strategy and Viability*, and *Demystifying the Chinese Economy*. He is a corresponding fellow of the British Academy and a fellow of the Academy of Sciences for Developing World.

His speech will discuss what have and have not changed in Chinese economy after 40 years of extraordinary growth since the reform and opening up in 1978.



Hiroyuki Odagiri taught at Oberlin College (USA) and the Universities of Tsukuba, Hitotsubashi, and Seijo in Japan. During 2012-2016 he was a Commissioner of Japan Fair Trade Commission (JFTC). Currently, he is an Emeritus Professor of Hitotsubashi University and a Special Advisor to JFTC. His fields of specialization are the theory of the firm, industrial organization, and economic studies of innovation. He has written numerous books and papers including *The Theory of Growth in a Corporate Economy*, *Growth through Competition*, *Competition through Growth*, *Technology and Industrial Development in Japan*, and *Intellectual Property Rights, Development, and Catch-Up*.

Innovation and Competition Policy: General Issues and Japanese Cases

Competition Policy is very much related to the issues on innovation such as R&D and patents. Joint efforts for innovation among competitors are common and, even though usually beneficial to the society, they can also have anti-competitive effects, harming the consumers. Or, patent-holders may use their patents to exclude rivals and newcomers with anti-competitive consequences. Therefore, competition authorities around the world today are watchful lest such anti-competitive behavior take place. I will discuss these issues taking the Japanese cases as examples.



Jang-Hee Yoo is an economist and a former President of the Korea Institute for International Economic Policy (KIEP). He is also a former President of the Korea-America Economic Association and a former President of the Korean Economic Association. He was trained at Seoul National University (B.A), UCLA (M.A.) and Texas A&M University (Ph.D.). Before joining Ewha, he taught at Clark University in Massachusetts, Virginia Commonwealth University, and Seoul National University. He authored numerous books and articles. He was decorated with a National Medal of Honor by the Korean government for his distinguished service in international policy-making. He is the former Dean of GSIS, and served as a vice president of Ewha Womans University until 2006. He is currently a professor Emeritus of Ewha Womans University and a member of the National Academy of Sciences.

Tuesday (03 July)



Keun Lee is a Professor of Economics at the Seoul National University, and the winner of the 2014 Schumpeter Prize for his monograph on *Schumpeterian Analysis of Economic Catch-up* (2013 Cambridge Univ. Press). He is now the President of the International Schumpeter Society, a member of the Committee for Development Policy of UN, an editor of *Research Policy*, and a council member of the World Economic Forum. He obtained Ph.D. in economics from the University of California, Berkeley. One of his most cited articles is a paper on Korea's Technological Catch-up published in *Research Policy*, with 1,060 citations (Google Scholar). His H-index is now 37, with 88 papers with more than 10 citations. In the ISS conference, he will deliver the Presidential address on The Art of Economic Catch-up: barriers, detours, and leapfrogging, which is based on his forthcoming book with the same title from the Cambridge Univ. Press



John Mathews is a Professor of Strategy at Macquarie Graduate School of Management, Macquarie University, Sydney. Professor John Mathews is a leading scholar of the greening of capitalism and the role that China and East Asian countries play in this process. In September 2014 he and his collaborator Dr Hao tan had an article published in *Nature*, on the theme of renewables, energy security and China. This interest in greening of business stems from a decade and more of scholarship focused on the competitive dynamics of international business, the evolution of technologies and their strategic management, and the rise of new high technology industries, especially their creation in East Asia through strategies of technology leverage and the management of technology diffusion. His work now focuses on the emergence of the 'green economy' and the transition to renewable energies, and the institutional changes needed to provide industrial capitalism with genuine long-term sustainability.



Bjørn T. Asheim is the full professor of economic geography and innovation theory at the University of Stavanger, Norway. He initiated, was co-founder, deputy director and director of CIRCLE at Lund University, 2002-2012. He has been editor of *Economic Geography* and of *Regional Studies*. In 2011 professor Asheim became an Academician at the British Academy of Social Sciences. He is one of the internationally most well-known researchers within economic geography and regional innovation studies with almost 18.000 Google Scholar citations. He has pioneered theories of regional innovation systems and learning regions, and has developed the differentiated knowledge base approach, which today is widely used by innovation researchers.

The paper, 'Diversity and beyond for new path development', aims at broadening the scope for new perspectives on innovation theory and policy with important implications for promoting the most radical forms of new path development, path diversification based on unrelated knowledge combinations and new path creation. This basically concerns expanding the access to diversity in knowledge exploration and exploitation sub-systems of (regional) innovation systems.



Bo Carlsson is a Professor of Economics (Emeritus) and former Director of the Doctor of Management Program and Associate Dean for Research and Graduate Programs at the Weatherhead School of Management, Case Western Reserve University, Cleveland, Ohio. He is currently a Research Affiliate at CIRCLE, Lund University, Sweden. From 1972 to 1984 he was a Research Associate and Associate Director of the Institute for Industrial Economics (IFN, formerly IUI) in Stockholm, Sweden.

Bo Carlsson has published over 20 books and numerous articles in industrial dynamics, innovation systems, entrepreneurship, technological change, and innovation policy.

While most of the literature on innovation systems focuses on the supply side (the creation of technology), the current paper focuses on entrepreneurial experimentation as central in driving the dynamics of both the supply side and the demand side (the market interface between supply and demand) of innovation systems, linking both innovation and entrepreneurship to economic growth.



Yoshinori Shiozawa is the Professor Emeritus at Osaka City University. He was the president (2002-2005) and a fellow of Japan Association for Evolutionary Economics. And he was awarded the prize of Japanese Association for Evolutionary Economics (JAFEE) in 2016.

Based on his forthcoming book co-authored with M. Morioka and K. Taniguchi, Shiozawa reports how a modern version of the classical theory of value (i.e. Ricardo's cost-of-production theory of value) provides analytical framework for evolutionary economics. Its basic tenet is the fundamental separation of price and quantity adjustments. This is in sharp contrast with neoclassical general equilibrium theory. Prices and quantities have clear different functions. The price stability obtained from extended version of Samuelson's non-substitution theorem provides a basis for technical choice and development, which is one of main pillars of evolutionary economics. The new theory of international values provides similar results for international trade situation. This opens the possibility to analyze the emergence of global value chains and technical change in the international competition.



Ben Martin is a Professor of Science & Technology Policy Studies (SPRU - Science Policy Research Unit, Business and Management) Professor Ben Martin studied physics as an undergraduate at Cambridge and science policy as a postgraduate at Manchester. He has carried out research for 30 years in the field of science policy, serving as the Principal Investigator or Project Leader on over 50 research projects and commissioned studies. These have been mostly concerned with the development of techniques for generating systematic information to aid decision-making in relation to science, engineering and technology.



Franco Malerba (Ph.D. in Economics, Yale University), is a Professor of Applied Economics and is in the Department of Management and Technology at Bocconi, University, Milan. He is Editor of the Journal "Industrial and Corporate Change", Advisory Editor of the Journal "Research Policy" and Associate Editor of the "Journal of Evolutionary Economics". He has been Director of CESPRI and President of ICROS, Bocconi University. He has been President of the International Schumpeter Society and President of EARIE (European Association of Research in Industrial Economics). In 2012 he received the Schumpeter Price. His work and writings relate to innovation studies; economics of technological change; industrial dynamics and industry evolution; sectoral analyses; innovation systems; history-friendly models; entrepreneurship; economic development and industrial catch-up; industrial, science and technology policy. His most recent book is "Innovation and the Evolution of Industries" (Cambridge 2016) with R.Nelson, L.Orsenigo and S. Winter.

He will have a keynote speech on "Innovation and industrial dynamics in related industries" in 2018 ISS conference in Seoul.



William Maloney is the Chief Economist for Equitable Growth, Finance and Institutions at the World Bank 2014-present and was Chief Economist for Trade and Competitiveness 2013-2014. He previously taught at the University of Illinois, Urbana Champaign.

Since Schumpeter, economists have argued that vast productivity gains can be achieved by investing in innovation and technological catch-up. Yet, as this volume documents, developing country firms and governments invest little to realize this potential. Using new data and original analytics, the authors uncover the key to this innovation paradox in the lack of complementary physical and human capital factors, particularly firm managerial capabilities, that are needed to reap the returns to innovation investments. Hence, countries need to rebalance policy away from R&D-centered initiatives – which are likely to fail in the absence of sophisticated private sector partners – toward building firm capabilities, and embrace an expanded concept of the National Innovation System that incorporates a broader range of market and systemic failures.

Wednesday (04 July)



Andreas Pyka graduated in Economics and Management at the University of Augsburg, Germany in 1998 and then spent two years as a Post Doc in Grenoble, France participating an European research project on innovation networks. Afterwards he was assistant professor at the chair of Prof. Dr. Horst Hanusch Augsburg. His fields of research are Neo-Schumpeterian Economics and Evolutionary Economics with a special emphasis on numerical techniques of analyzing dynamic processes of qualitative change and structural development. From October 2006 to March 2009 he worked at the University of Bremen as Professor in Economic Theory. Since April 2009 Andreas Pyka holds the chair for innovation economics at the University of Hohenheim, Stuttgart.

His presentation Innovation Slowdown or Transformation towards Sustainability? is about fundamental transformations of economic systems which are not easy to be detected with traditional tools even if they are already visible everywhere.



John P. Walsh is a Professor of Public Policy at Georgia Institute of Technology, and International Affiliated Fellow at Japan's National Institute of Science and Technology Policy. He studies the work and organization of science and innovation.

There are growing concerns about an increasing rate of pathologies in science. Drawing on organizational theory, we argue that division of labor may be a key factor contributing to pathologies in science. Using retractions as an indicator of pathologies, and drawing on a sample of 262 retracted and 494 paired papers that were not retracted, we find the rate of retractions is higher as division of labor increases (net of team size). We also find high-stakes incentives and institutional corruption are associated with increased retractions. We discuss of the implications of these findings for science policy, in particular for organizing team science projects.



Kazuyuki Motohashi is a Professor of TMI department and the director of international technology Management Program. Until this year, he had taken various positions at the Ministry of Economy, Trade and Industry of the Japanese Government, economist at OECD and associate professor at Hitotsubashi University. His research interest covers a broad range of issues in economic and statistical analysis of innovation, including economic impacts of information technology, international comparison of productivity, national innovation system focusing on science and industry linkages and SME innovation and entrepreneurship policy. He has published several papers and books on above issues, including *Productivity in Asia: Economic Growth and Competitiveness* (2007), *Global Business Strategy: Multinational's Venturing Into Emerging Economies* (2014)

This talk is based on the list of university startups by MEXT(Japanese Ministry of Education, Science and Technology), linked with IIP patent database and economic census of Japan. By comparing their performance with not university based startups with matching method, we provide the statistical evidence concerning the university startup promoting policies in Japan.



Cesar Hidalgo leads the Collective Learning group at MIT. Hidalgo studies the intensity and diffusion of knowledge to illuminate the processes by which teams, organizations, cities, and nations learn.

In this session, Hidalgo will introduce three new papers in the field of economic complexity. These papers focus on identifying optimal industrial diversification strategies, connecting the complexity of economic activities to their spatial concentration, and describing the empirical diversification behavior of countries. Hidalgo has also lead the creation of popular online data distribution services, like DataUSA, DataChile, and DataAfrica. These platforms have won multiple awards and receive hundreds of thousands of visitors every month. His latest book is "Why Information Grows." A native of Santiago de Chile, Hidalgo holds a PhD in Physics from the University of Notre Dame and a bachelor in Physics from the Universidad Catolica de Chile.



Xiaobo WU is the Qiushi Chair Professor of Strategy and Innovation Management, Former Dean of School of Management, Cheung Kong Scholar Chair Professor of Ministry of Education, China. He is currently serving as Director of National Institute for Innovation Management (NIIM), the director of the Zhejiang University—Cambridge University Joint Research Center for Global Manufacturing and Innovation Management and Ruihua Institute for Innovation Management. He also serves as a board member and the vice-president of the Central, East European and Middle Asian Network on Management Development Association (CEEMAN).



Mei-Chih Hu is a Professor and Director at the Institute of Technology Management, National Tsing Hua University, Taiwan (email: mchu@mx.nthu.edu.tw). Her research is in the areas of innovation system, intellectual property rights, emerging industries in Asia, and latecomer strategy. Her research focus is to investigate how the Asian latecomers are able to strategically shift from pursuing 'competitive advantages' to the addition of 'collaboration advantages' in the global innovation system. She is also working as an Advisory Editor and Associate Editors with the international journals of *Research Policy*, *Technological Forecasting and Social Change*, and *Science, Technology and Society*.

The topic she would wish to share is taking Southeast Asian emerging economies as empirical cases to explore how Taiwan, adopted a different approach from traditional foreign direct investment and promoting knowledge transfer via multinational corporations, is empowering its universities and public research institutes to act as seeders of indigenous innovation niches further enabling SEA countries to overcome reverse salients and develop new socio-technical regimes.

☐ Program overview

Time	Monday 2nd
8:00 - 8:30	Registration : Coffee and Pastries (Cultural Center Lobby: Building No 73 on campus map)
8:30 - 10:30	<p align="center">Parallel Sessions A1 to A10</p> <p>A1:Cultural center #73 / A2:Asia center #101 Youngwon Hall / A3: Bldg #16. Room 312 / A4: Asia center#101 Room 230 /A5:Asia center#101 Room 240 / A6:Bldg #16.Room 301 / A7: Bldg #83. Room 203 / A8: Bldg #83. Room 301 /A9:Bldg #83. Room 501 /A10:Bldg #83. Room 602</p>
10:30 - 10:55	Coffee Break (Cultural Center Lobby #73)
10:55 - 12:10	<p align="center">Opening Session (Cultural Center #73)</p> <p align="center">Chair and Welcoming remarks: Keun Lee</p> <p align="center">Opening Keynote Speech</p> <p>I: Bengt-Åke Lundvall (Aalborg Univ): Transformative innovation policy and global challenges: a system's perspective</p> <p>II: Lord David Sainsbury (Cambridge Univ.): New Economic Thinking: A Dynamic-Capability Theory of Economic Growth</p>
12:10 - 13:40	Lunch (Cultural Center Square #73)
13:40 - 15:10	<p align="center">Special Sessions</p> <p>I. Creative Destruction and Capitalism: (Cultural Center #73, Chair: Hiroshi Shimizu)</p> <p>M. Egidi: Are the effects of disruptive innovations destabilizing democracy?</p> <p>Ulrich Witt: Innovative Expansion of Capitalism and Institutional Destabilization</p> <p>Dengjian Jin: The Skeptical Stance and Disruptive Innovation: Missing Link between Capitalism and Creative Destruction</p> <p>Horst Hanusch: Schumpeter's "Creative Destruction" Revisited</p> <p>II. Innovation Policies and Strategies (Asia Center #101/Youngwon Hall, Chair: Nick Vonotars)</p> <p>Mike Gregory: Beyond economics - what policymakers (also) need to know about technology & management.</p> <p>Chen Jin: Dependent on your partners: Antecedents of organizational ambidexterity in open innovation</p> <p>Joao Carlos Ferraz: Evaluating, foresighting and explaining the diffusion of digital technologies in Brazil</p> <p>Slavo Radosevic: Technology upgrading in catching up context: theory, metrics and policy challenges</p> <p>Mammo Muchie: The African Catching-up along the GVC with the unified innovation system?</p> <p>III. Evolutionary Explorations of Productivity Slowdown (Social Science Bldg #16, Room 312, Chair: Taehyun Jung)</p> <p>Giovanni Dosi: Agent based model of deunionization and productivity</p> <p>Herbert Dawid: ABM model of financialization and productivity dynamics</p> <p>Xiaodan Yu: Wage and productivity dynamics in China</p> <p>A. Secchi et al: Wage and Productivity Dynamics in Europe</p>
15:10 - 15:30	Coffee Break (Cultural Center Lobby #73)
15:30 - 17:30	Parallel Sessions B
17:30 -	Coffee Break (Cultural Center Lobby #73)

17:45	
17:45 - 19:00	<p>Issues in East Asian Economies (Cultural Center #73, Chair: Jae-Young Kim)</p> <p>I. Justin Yifu Lin (Peiking Univ): The Economics of China's New Era</p> <p>II. Hiroyuki Odagiri (Hitotsubashi Univ): Innovation and Competition Policy with cases in Japan</p> <p>III. Jang-Hee Yoo (Ewah Womans Univ.) : Crisis of Multilateralism: A Korean Perspective</p>
19:00 PM	Welcoming dinner/reception (Cultural Center Square #73)
21:00	Buses Leave for Hotels

Time	Tuesday 3
8:10 - 8:30	Coffee and Tea (Cultural Center Lobby #73)
8:30 - 10:30	Parallel Sessions C
10:30 - 10:55	Coffee Break (Cultural Center Lobby #73)
10:55 - 11:50	<p>President address (Cultural Center #73: Chair: Lakhwinder Singh)</p> <p>Keun Lee (SNU): The Art of Economic Catch-up: Barriers, Detours and Leapfrogging</p>
11:50 - 13:20	Lunch (Cultural Center Square #73)
13:20 - 15:00	<p>Semi-Plenary Sessions I & II</p> <p>I . Schumpeterian Economics (Cultural Center #73, Chair: Jaeyong Song)</p> <p>John Mathews: A Neo-Schumpeterian account of the drivers and dynamics of the global green shift</p> <p>Bjorn Asheim: Diversity and beyond for new path development</p> <p>Bo Carlsson: Entrepreneurial Experimentation: A key function in Systems of Innovation</p> <p>Y. Shiozawa: Micro Foundations of Evolutionary Economics</p> <p>II. Research Ethics & Meet-the Editors (Asia Center #101/Youngwon Hall, Chair :Dirk Meissner)</p> <p>1. Opening talk by Ben Martin: A Taxonomy of Research Misconduct: the Case of Business School Research</p> <p>2. Journals: Research Policy (Ben Martin, Kazu Motohashi)</p> <p>Journal of Evolutionary Economy & Special issue/proceeding (Uwe Canter, Andrea Pyka)</p> <p>Industrial & Corporate Change (Giovanni Dosi/Franco Malerba); Science & public policy (N. Vonotars)</p> <p>3. Special Issues (Journals and a Book):</p> <p>Journal of Tech. Transfer (N. Vonotars): Changing Interface between Local Capacity & Global Connections;</p> <p>Singapore Econ Review (C. Wong/E Albuquerque): Innovation Issues in Emerging Economies</p> <p>Edited Book (S. Radosevic, JD Lee, D.Meissner): Challenge of Tech. Upgrading in Emerging Economies (OUP)</p>
15:00 - 15:20	Coffee Break (Cultural Center Lobby; Asia Center/Youngwon Hall)
15:20 - 17:00	1. Book Launching Session (Cultural Center #73, Chair: Ebrahim Kashani)

	<p>Kurt Dopfer/P Saviotti/A Pyka: Modern Evolutionary Economics (by R. Nelson): 30 mns</p> <p>Choi/Witt/Potts: Openness to Creative Destruction: Sustaining Innovative Dynamism (by Diamond): 35 mns</p> <p>Sung-Hee Jwa: A General Theory of Economic Development: Toward a Capitalist Manifesto; 20 mns</p> <p>Daniel Benoliel: Patent Intensity and Economic Growth; 15 mns</p>
	<p>2. SJE Symposium: Political Economy of the Middle Income Trap (Asia Center #101/Youngwon Hall, Chair: JD Lee)</p> <p>Clemente Ruiz Y Duran: Mexico, middle income trap (MIT) and the failure of catch up</p> <p>Eduardo Albuquerque: BRAZIL AND THE MIDDLE INCOME TRAP: its long term historical roots and policies for catch up</p> <p>Wong Chan Yuan: The Middle Income Trap: The Case of Malaysia</p> <p>Patarapong Intarakumnerd: Thailand's Middle-Income Trap; A Challenge for Technology Upgrading and Innovation</p>
	<p>3. Special Session in Honor of Luigi Orsenigo (Asia center#101 Room 230, Chair F. Malerba/G. Dosi)</p> <p>Uwe Cantner: The Compositional Nature of Productivity and Innovation Slowdown</p> <p>Luigi Marengo: Multi-Factor Productivity and Evolutionary Accounting in Presence of (Persistently) Heterogeneous Firms</p> <p>John Foster: The Consumption Function: a New Perspective</p> <p>Edward Lorenz: Mobile money, credit constraints and innovation</p>
	<p>4. Potentials and Challenges of the 4th Industrial Revolution (Buiding #16, Room 312, Chair: Sangook Park)</p> <p>Roman Jurowetzki: Exploring Potentials of Machine Learning and AI from an Evolutionary Economics Perspective</p> <p>Simone Vannuccini: On the brink of the 4th Industrial Revolution? Systemic view on countries' readiness for tech. transformation</p> <p>Yong Suk Lee: Robotics and Business Dynamics</p> <p>Roberto Mavilia: The Sino-German Alliance for the Fourth Industrial Revolution: Dynamics and Policy Implications</p> <p>Arthur Diamond: Robots and Computers Enhance Us More than They Replace Us</p>
17:00-17:20	Coffee Break (Cultural Center Lobby #73)
17:20 - 18:30	<p>Keynote Speech II (Cultural Center #73, Chair: Paolo Saviotti)</p> <p>I. Franco Malerba (Bocconi Univ): Innovation and industrial dynamics in related industries</p> <p>II. William Maloney (World Bank): Innovation Paradox: Capabilities and the Unrealized Promise of Technological Catch-Up</p>
18:45	Dinner Place Buses leave for the
19:30	<p>Gala dinner-Schumpeter Prize Banquet (Floating Island in Han River)</p> <p>Hosted by Aurora World, the Korea Foundation for Advanced Studies and City of Seoul</p>

Time	Wednesday 4
8:10 - 8:30	Coffee and Tea (Cultural Center Lobby #73)
8:30 - 10:00	Parallel Sessions D
10:00 -	Coffee break (Cultural Center Lobby #73, Asia Center #101)

10:15	
10:15 - 11:45	Parallel Sessions E
11:45 - 12:00	Coffee break (Cultural Center Lobby #73)
12:00 - 13:30	<p>Twin Sessions: Frontier of innovation studies I & II</p> <p>I. On Advanced economies (Cultural Center #73, Chair: Rudi Bekker)</p> <p>A. Pyka: Innovation Slowdown or Transformation towards Sustainability?</p> <p>John P. Walsh: Pathogenic organization in science: Division of labor and retractions</p> <p>Jason Potts: The Destruction Phase of Public Sector Innovation: a case study on Australian government schooling</p> <p>Kazu Motohashi: University startup as source of employment growth? : Empirical analysis by using data of Japan</p> <p>II. On emerging economies (Asia Center #101/Youngwon Hall, Chair: Alenka Guzmán)</p> <p>Cesar Hidalgo: What's next in economic complexity research?"</p> <p>Xiaobo Wu: Beyond the catch-up in China</p> <p>Mei-chi Hu: Acting as an innovation niche seeder: The case of Taiwan & Southeastern Asia</p> <p>Young Back Choi: Innovation Policies: An Entrepreneurial Perspective, With Illustrations from Korea</p>
13:30PM	Farewell lunch/reception(Cultural Center Square #73)
13:35PM	General Assembly of the Society (ISS, Cultural Center/ Exhibition Hall)
3:00PM	Buses leave for Drops at Downtown Seoul (Gwanhwa-moon Plaza/Hangul Museum/Palace)

[Information for the Parallel Sessions]

To be added later or provided in a separate file

□ Schumpeter Prize Competition 2018

The International Joseph A. Schumpeter Society (ISS) is to announce the winner(s) of the 2018 Schumpeter Prize Competition on Innovation, Catch-up, and Sustainable Development: Schumpeterian Legacies from Asian and Global Perspectives.

The Prize is awarded every two years in recognition of a recent scholarly contribution related to Schumpeter's work. It carries a cash award of 10,000 EUR and will be awarded during the Schumpeter Prize Banquet. The selection committee is chaired by the President-elect of the ISS, professor Massimo Egidi.

o Sponsor of this year's Schumpeter Prize:

Noh, Hee-Yeol (Chairman of Aurora World)

o Schumpeter Prize Banquet: Tuesday, 03 July, 2018

2018 Schumpeter Prize Banquet will be held at Sebitseom (Floating Island Convention). Sebitseom is a cultural complex built to be a landmark on the Han River in the heart of downtown Seoul, a place where you can enjoy special cultural contents at the water's edge. On Tuesday (03 July) at 6:45 pm or after the end of the sessions, there will be buses to Sebitseom in front of the Cultural Center on campus

o Former Schumpeter Prize Winners

2016	Dengjian Jin, Shane Greenstein
2014	Geoffrey M. Hodgson, Keun Lee
2012	Franco Malerba, Richard Nelson, Luigi Orsenigo, Sydney Winter
2010	William Lazonick, Bart Nooteboom
2008	Mario Amendola, Martin Fransman, Jean-Luc Gaffard, Thomas McCraw
2006	Philippe Aghion, Clifford T. Bekar, Kenneth I. Carlaw, Rachel Griffith, Richard N. Langlois, Richard G. Lipsey
2004	J. Peter Murmann
2002	Steven Klepper
2000	Brian J. Loasby, Jason Potts
1998	Masahiko Aoki, Frank R. Lichtenberg, Mancur Olson
1996	Maureen D. McKelvey
1994	Elias Dinopoulos, Jean Fan
1992	Christopher Green, Richard Musgrave
1990	W. Brian Arthur, Joel Mokyr, Manuel Trajtenberg
1988	Christopher Freeman

□ General Information

○ Venue

Seoul National University, Cultural Center (#73)
1 Gwanak-ro, Gwanak-gu, Seoul 08826, Korea

○ Date

2-4, July, 2018

○ Homepage

You can find the detailed information on the conference website: <http://iss2018seoul.com>

○ Arrival

○ How to get to Seoul from Incheon International Airport

- By Airport Railroad(AREX)

No matter where you arrive at Terminal 1 or Terminal 2, you can travel to downtown Seoul by taking the Airport Railroad, AREX within 1 hour. From 'Gimpo airport station', you can transfer to Seoul metro. Please check the right transfer station according to your accommodation location, and refer to operating hours and travel time of trains as below.

Express Train

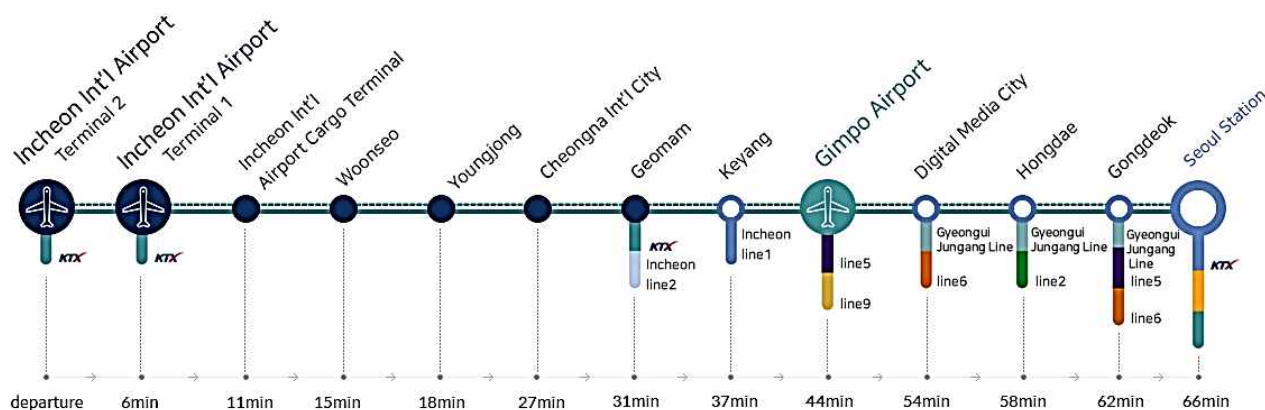
- Terminal 1 Station → Seoul Station, 05:23 (first train) - 22:48 (last train) / Approx. 43 min
- Terminal 2 Station → Seoul Station, 05:15 (first train) - 22:40 (last train) / Approx. 51 min

All Stop Train

- Terminal 1 Station → Seoul Station, 05:25 (first train) - 23:39 (last train) / Approx. 58 min
- Terminal 2 Station → Seoul Station, 05:18 (first train) - 23:32 (last train) / Approx. 66 min

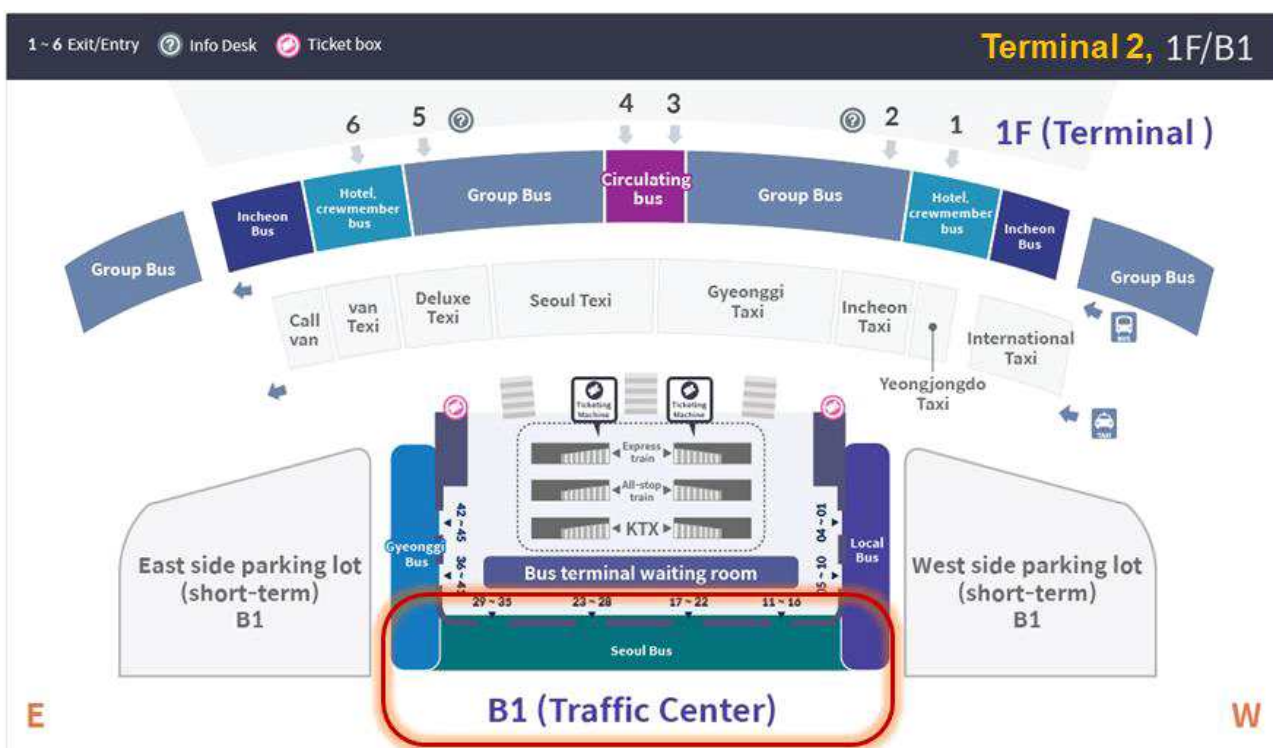
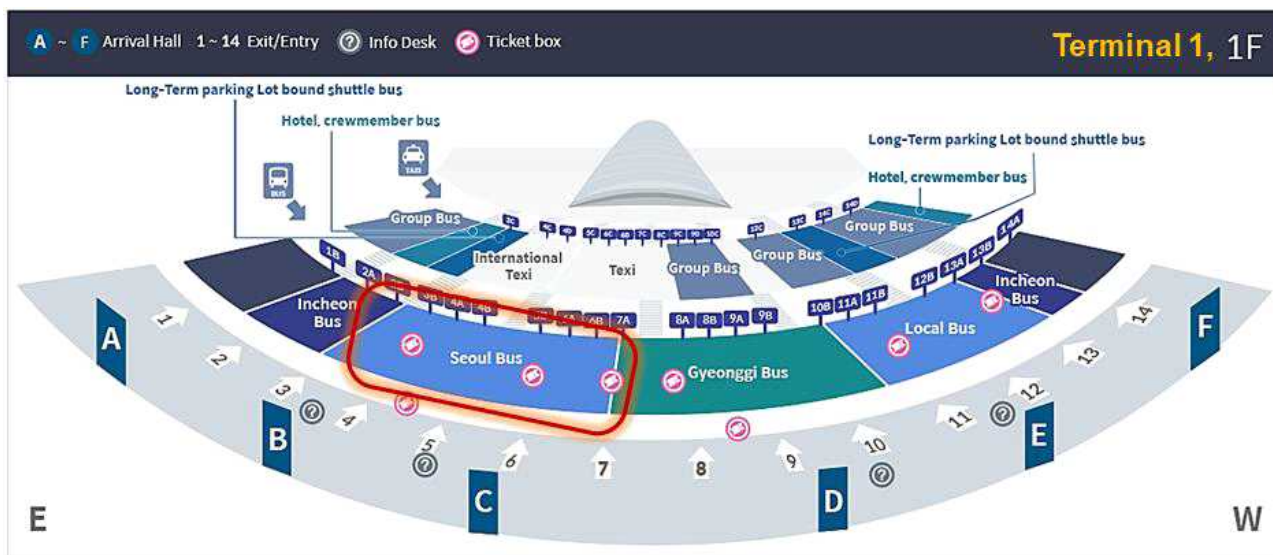
※ If you want more information, please check the official website of AREX;

<https://www.arex.or.kr/main.do>



- By Airport Limousine bus

You can also travel to downtown Seoul by Airport limousine buses, running from the Airport to many areas of Seoul. Tickets can be purchased at the ticket booths just outside the 1F Arrivals Hall of each terminal. Please check the right route number of buses according to your accommodation location.



※If you want more information, please check the official website of Airport Limousine bus;
http://www.airportlimousine.co.kr/eng/lbr/all/lbr02_2_6000.php.

[From airport to SNU]

- By Limousine Bus

The 'Limousine bus' is a convenient and economical way to get to SNU Gwanak Campus from Incheon International Airport. You may take airport limousine bus number 6017 or 6003. The bus 6017 goes directly from the airport to the SNU rear gate (& Hoam Faculty House) in 70 minutes. You can get on this bus in front of the exit gate number 6 in Terminal 1, and in front of the exit gate number 27 of the Traffic center Basement 1 in Terminal 2). The bus 6003 goes to the SNU main gate via Gimpo Airport, and it takes

110 minutes under normal traffic conditions. You can get on this bus in front of the exit gate number 6 in Terminal 1, and in front of the exit gate number 24 in the Traffic center Basement floor in Terminal 2). Both Buses are available everyday from early morning to night time with no charge for the baggage.

- By Taxi

The taxi fare from Incheon International Airport to SNU Gwanak campus takes around 60,000 KRW depending on the traffic situation. By Deluxe Taxi (Mobeom Taxi), which offers the advanced service, the approximate fare is 80,000 KRW.

[From hotel to SNU]

- Shuttle bus

Hotel Artnouveau Seocho, Hotel PROVISTA, and ibis Styles Ambassador Seoul Gangnam provide shuttle services from the hotel to SNU every day at 7:30 am.

[From downtown to SNU]

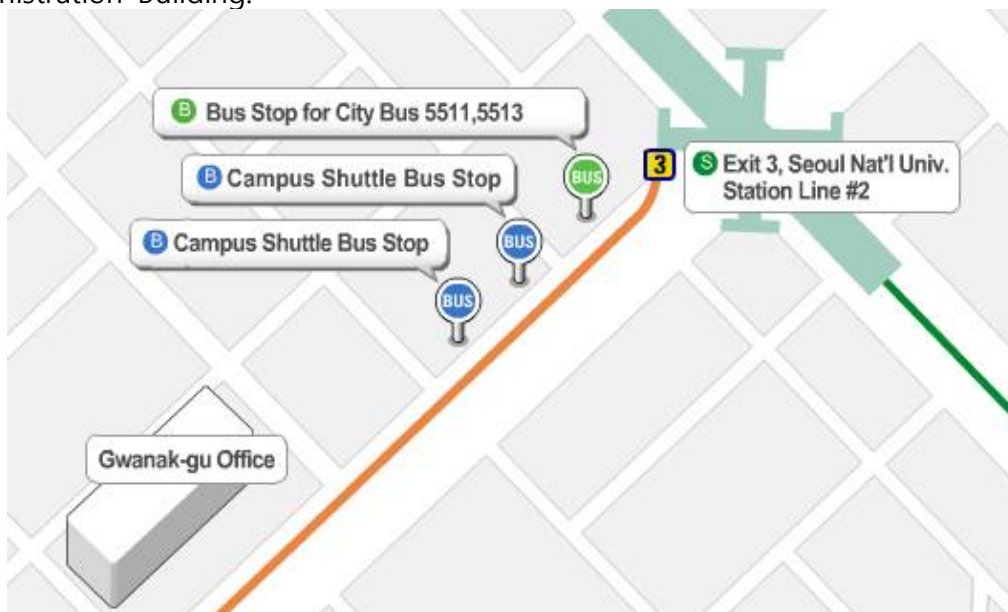
- By subway

When using the subway to visit Seoul National University, please make sure you take Subway Line No. 2 (Green Line) and stop either at the Seoul National University Entrance Station, the Naksungdae Station, or the Shillim Station.

-Subway Line No. 2 (Green Line), Seoul National University Entrance Station (Exit No. 3)

The main entrance of Seoul National University is not within the walking distance from the subway station. You may need to take a bus or a taxi to get to the university. Be sure not to be confused the Seoul National University Entrance Station with the Seoul National University of Education/Court or Prosecutor's Office Station.

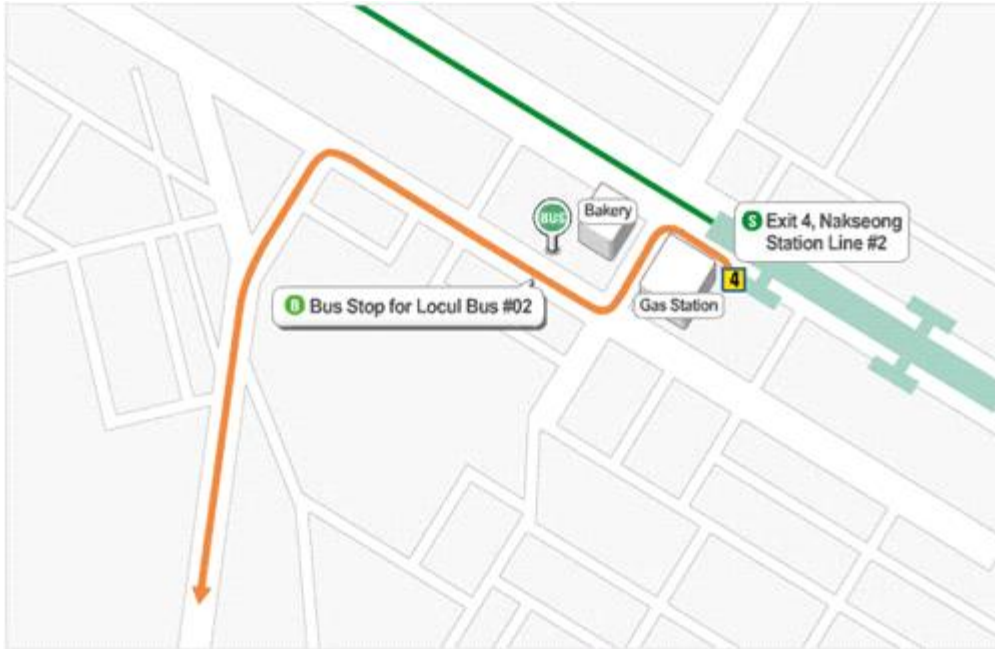
After leaving the station through exit no.3, walk toward the Gwanak-gu Office. You will find the school shuttle bus and also a regular bus that comes to SNU. The campus shuttles are free of charge. The operation interval of the buses differ during vacation time and semester, but is usually in the range of every 5 to 20 minutes. Buses number 5511 and 5513 circulate the campus counter-clockwise, from the university's main entrance to the Administration Building.



-Subway Line No. 2 (Green Line), Naksungdae Station (Exit No. 4)

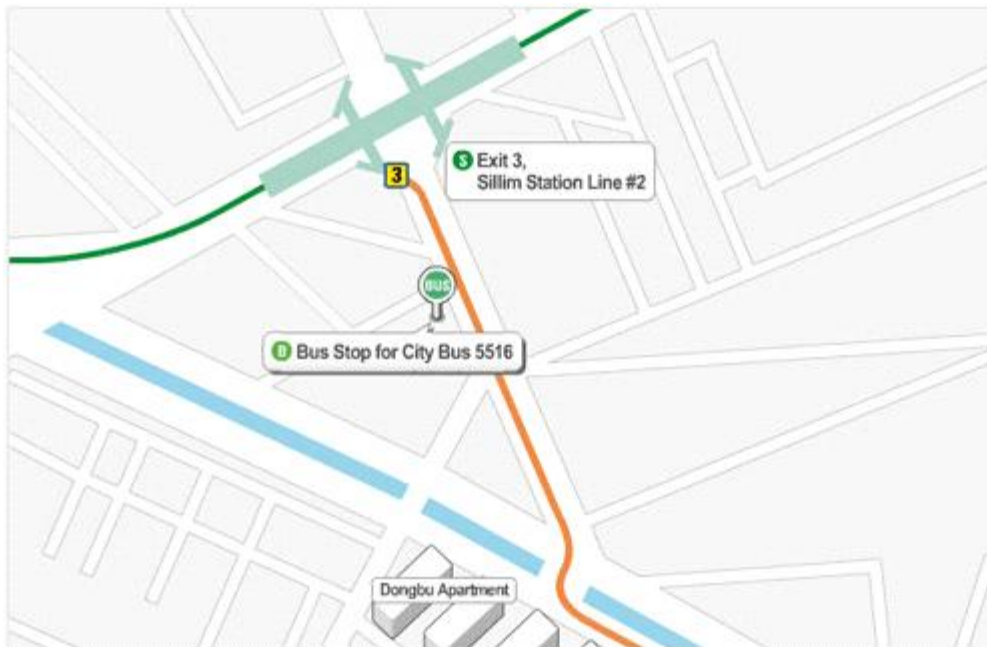
You will need to take additional public transportation when you get off the subway at the Naksungdae Station. After leaving through the exit number 4, go straight and make a left

turn at the gas station. There will be a bus stop in front of the bakery. Take the small green town bus no. 2.



-Subway Line No. 2 (Green Line), Shillim Station (Exit No. 3)

You will need to take additional public transportation when you get off the train at the Shillim Station. After leaving through exit 3, take bus no. 5516, which circulates counter-clockwise from the main entrance to the Administration Building and passes by the College of Agriculture and Life Sciences (Bldg. 200) and College of Engineering (Bldg. #301).



- By bus

5411(GREEN)	Final Stop : SNU ↔ Yeomgok-dong	Major Stops : SNU Subway Station, Yangjae, Yeomgok
5412(GREEN)	Final Stop : SNU ↔ Kangnam Subway Station	Major Stops : Sadang Station, Express Bus Terminal
5517(GREEN)	Final Stop : SNU ↔ Joong-Ang University	Major Stops : Shillim Station, Noryangjin Station
5522(GREEN)	Final Stop : SNU ↔ Nangok	Major Stops : Shillim, Nangok
5528(GREEN)	Final Stop : SNU ↔ Guro Digital Complex	Major Stops : Shillim, Siheung, Gasan
5613(GREEN)	Final Stop : SNU ↔ Yeouido	Major Stops : Shillim, Daebang
5614(GREEN)	Final Stop : SNU ↔ Kemok Girl's Highschool	Major Stops : Shillim, Daebang
6511(GREEN)	Final Stop : SNU ↔ Guro-dong	Major Stops : Shindaebang Station, Shindorim Station
6512(GREEN)	Final Stop : SNU ↔ Guro-dong	Major Stops : SNU Subway Station, Shillim Station, Youngdeungpo
6513(GREEN)	Final Stop : SNU ↔ Chulsan-dong	Major Stops : Shillim Station, Daebang Station, Youngdeungpo
6514(GREEN)	Final Stop : SNU ↔ Shinjung-dong	Major Stops : Shillim Station, Daebang Station, Youngdeungpo Station, Dongsan Station
501(BLUE)	Final Stop : SNU ↔ Jongro 2nd district	Major Stops : Sangdo-dong, Yongsan, Seoul Station
502(BLUE)	Final Stop : SNU ↔ Dongdaemoon Stadium	Major Stops : Shillim, Noryangjin, Hanganjin
750(BLUE)	Final Stop : SNU ↔ Susaek	Major Stops : Gwanak-gu Office, Sangdo Tunnel, Seoul Station, Shinchon

※ A detailed service route of each bus is provided on the Seoul bus network online service website: <http://topis.seoul.go.kr>

[Notice]

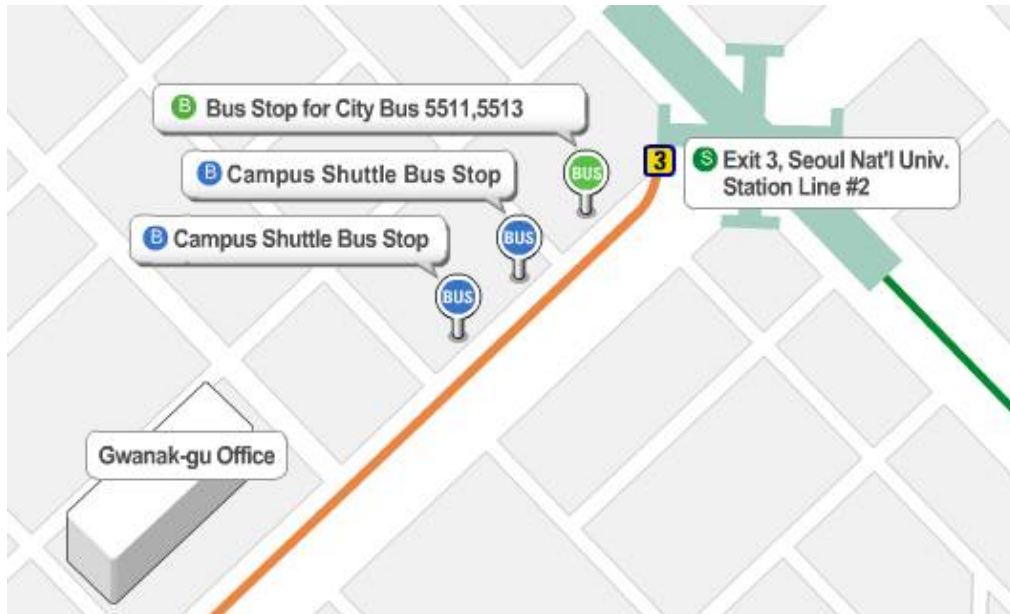
If you have taken a bus that stops in front of the main gate, you may either get off at the gate and transfer to a bus that circulates the campus, or take the on-campus shuttle, stopping at the Administration Building, College of Engineering (Bldg. 301), Gwanak-sa (Dormitory), etc.

o Campus Shuttles

[SNU subway station ↔ SNU Campus]

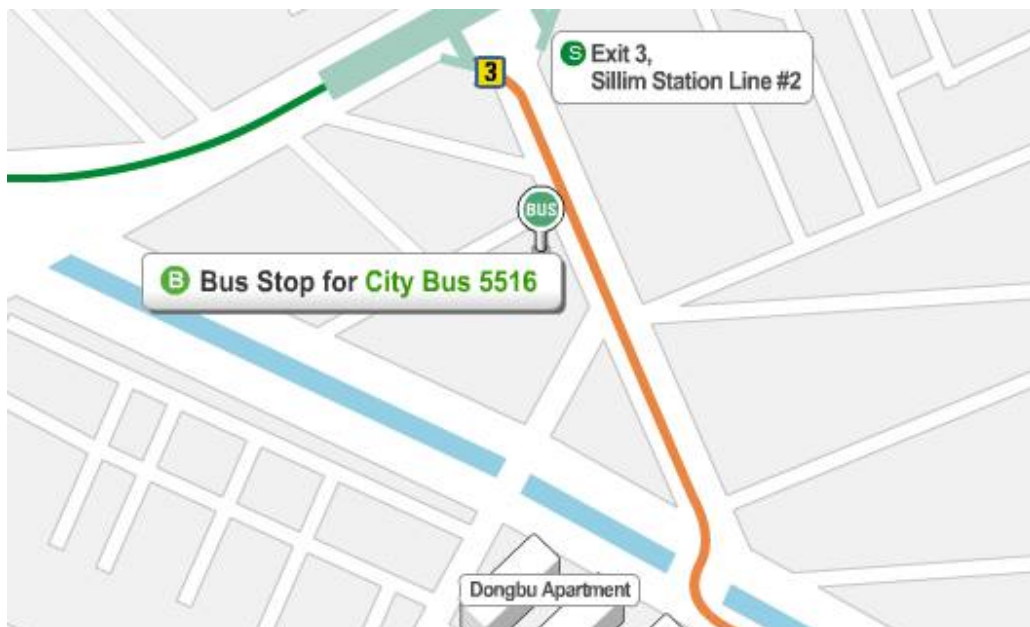
The shuttle bus stop at SNU subway station line #2 is located 100m away from exit #3. This bus will take you to the Administration Building (Building 60) at Gwanak Campus. In order to return to the subway station exit #2, board the shuttle bus at the same spot you got off (bus stop 4-1, on the right side of the two).

Another shuttle bus at SNU subway station line #2 departs for the Engineering Education Building (Bldg. 301 and 302). The bus stop is located about 50m from exit #3. If you want to go to the subway station from Buildings 301 and 302, you may take a local city bus (green bus) or take the shuttle bus from the Administration Building (Bldg. 60).



[Shillim-dong ↔ SNU Campus]

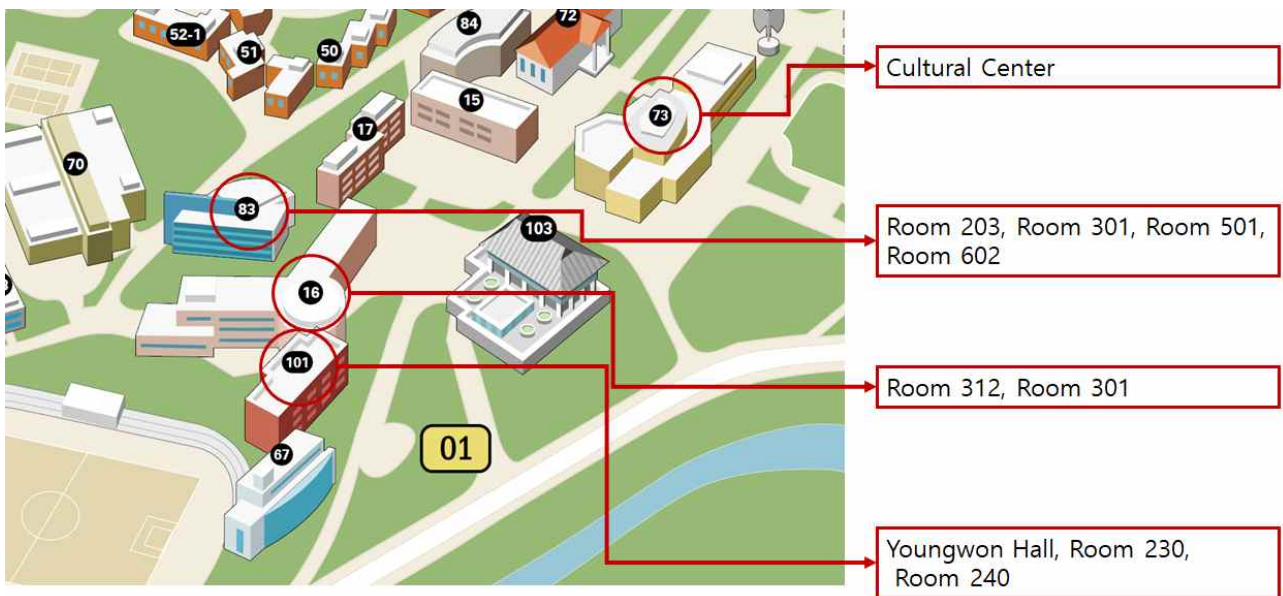
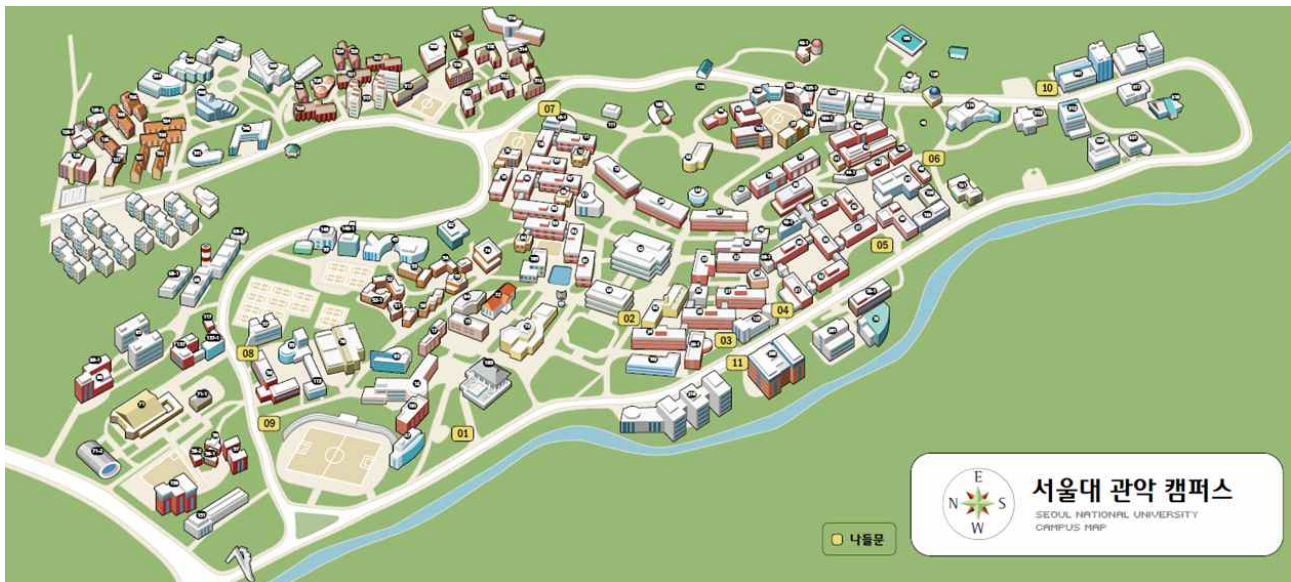
You can take the shuttle bus at Shillim-dong in front of the convenience store "Buy the Way" (about 200m from Woori Bank). You will be able to arrive at the Administration Building (Bldg. 60) as well. Boarding the shuttle bus at bus stop 4-1 (on the left side of the two) will take you back to in front of buy the way.



o Plan of the conference venue

- To download the campus map, click here:

http://www.snu.ac.kr/upload/about/Gwanak_Campusmap_eng.pdf



☐ General Information for the Participants

o Registration

The registration desk is the lobby hall of the conference venue, Cultural Center (building no 73). It will be opened as follows:

Monday (02 July)
08:00-19:00

Tuesday (03 July)
08:00-18:30

Wednesday (04 July)
08:00-13:45

Name tag: Attendants and registered companions will receive a name tag at the desk. Only those with name tags are allowed to be served with lunch and dinner receptions.

Certificate of attendance: Certificates of Attendance are available at the registration desk. If you need the certificates, please ask the personnel at the desk.

o Free Internet (wifi) available in one of the 3 ways

1) Visitors from the eduroam-access institutions may establish a wireless connection using their own university's eduroam credentials after selecting "eduroam" from SSID list.

2) Visitors can use the IP called 'SNU-1st-time' to get Guest-ID. Choose 'Guest' and choose your location as Gwanak campus. Then, type in ID and PW numbers. This access is available initially for 4 hours, and can be renewable by logging back in every 4 hours. At the last page of this program book, more explanation is provided.

3) Also, available by the 'SNU_U+Zone' IP, depending upon your location (#83, #73); Password is: lguplus100.

o Parallel sessions

- The last speaker in each session is the chair of the session. If that person is not present, then the second-to-last speaker takes the role of the chair to start the session on time.
- Session Chairs are expected to be in the assigned lecture room at least 5 minutes prior to the beginning of the session.
- The presentation time is 15~17 minutes per paper. Q&A time is 5~7 minutes.
- A beam projector is available for the presentation. Please, prepare suitable a presentation file (with a PDF reader or MS Office PowerPoint).

o Special/plenary/semi-plenary sessions

- Please consult and coordinate with the chair.

o Poster Presentations

During the first and the second day, posters will be displayed at the exhibition hall just behind the registration desk of the cultural center. The authors are to be present in the hall 40 minutes after the lunch starts for in-person interaction.

o Meals and Coffee for the participants

Coffee break and meal are provided in the cultural center during the conference. In addition, at 15PM on the second day and 10AM on the third day, the coffee break service is also available at the Asia Center (in front of Youngwon Hall).

☐ **Information on Restaurants and Cafes on Campus** (open for breakfast in some of them)

o **Cafe/Restaurants**

Cafe/restaurants	Main users	Menu	Hours	Phone number
Cafeteria NO.1 (Bldg. C-63, Student Center)	Stu.	Meals	08:00-21:00 11:00-17:30	02-880-5543
	Stu.	Sandwiches	08:30-18:30	
Dorm Cafeteria (Bldg.J-919)	Stu.	Meals	07:30-09:30 11:30-13:30 17:30-19:30	02-881-9072
DongWeon Cafeteria (Bldg.F113)	Fac.	Japanese Food, etc.	07:00-09:00 11:00-15:00 17:00-21:00	02-880-8698
College of Engineering Snack Bar(Bldg.E-30-2)	Stu.	Meals,snack (noodles)	08:00-20:00	02-875-0229
College of Engineering Snack Bar,{Bldg.E-30-2}	Stu.	Meals,snack (noodles)	08:00-22:00	02-875-0258
Cafe Sobahn(Bldg.D-501)	Stu./ Fac.	Assorted Mixed Rice	08:00-20:00	02-871-7423
Solbat Cafeteria (Bldg.G-110)	Stu./ Fac.	Korean stews, etc.	08:30-19:00	02-880-5527
Faculty House Cafeteria (Bldg.G-65)	Fac.	Korean traditional & Western cuisine	09:00-18:00	02-880-5238
Jahayeon Cafeteria (Bldg.H-109)	Fac.	Meals	08:00-19:00	02-880-7888
Hamchoon Cafeteria (Medical College Bldg. 4)	Stu.	Meals	08:00-19:00	02-742-9370

* For more details, please visit http://www.snuco.com/html/eng/cafeteria/snuco_eng08.asp

o **Cafe on Campus**

Cafe	Location	Hours	Phone number
Cafe Neutinamu (느티나무)	Bldg #137-1	08:00-19:00	02-880-5552
	Bldg #113	08:30-19:00	02-880-8694
	Bldg #109	08:30-19:00	02-880-7888
	Bldg #54	09:00-19:00	02-880-1613
	Bldg #62	08:00-19:30	02-880-5546
Twosome Place	Bldg #501	08:00~22:00	02-884-2385
PASCUCCI	Bldg #111	08:00-22:00	02-882-8492
HOLLYS Coffee Club	Bldg #74	08:00-22:00	02-877-7186

☐ Attractions on Campus

The Museum of Art (MOA) (Bldg #151)



Seoul National University(MoA), located beside the university's main gate, serves as a contact point for the university and the local community. With U-glass exteriors and steel-framed trusses, the architecture of MoA features a unique design that resembles a gigantic sculptural work floating in the air.

The interior of MoA, with a floor area of 4,486.47 m², consists of three stories and three underground levels. The dynamic spiral passage in the center connects the wings on two sides, making the museum an open cultural space. MoA's entire structural design, the likes of which are rarely seen in Korea, organically connects exhibition spaces, a lecture hall, an auditorium, and various other amenities like a media lounge and cafeteria.

* **Hours:** Tuesday~Sunday 10am~6pm (last ticket issued at 5:30pm)

***Ticketing:** Adults(Ages 19 and over) ₩3,000

For more details:

http://www.snumoa.org/Moa_new/index.asp

Seoul National University Museum (Bldg #70)



It has been established to discover, research, manage, exhibit various artifacts ranging from ancient history, traditional art, human folk, and natural history to provide cultural space for school students and community members. Inside the Museum of Seoul National University, there are three permanent exhibition rooms and a planning exhibition room, which consist of an ancient history room, a traditional art room, and a human folk room. Beginning with the investigation of the ruins of Yangju Sewseongri in 1961, archaeological achievements have been accomplished through more than 100 excavations, including the tombs of Paekje, Seokchon-dong, tombs of Mongchon, and Goguryeo in the Han River. In addition, we hold regular exhibitions and are in charge of social education functions through public lectures and cultural events.

* **Hours:** Tuesday to Saturday: 10:00 to 17:00

* **Admission:** Free

For more details: <http://museum.snu.ac.kr/>



Jahayeon Pond

There are two origins of the name 'Jahyeonyeon'. The first is that the name originates from the interpretation of Chinese characters, "the pond with the purple glow". The second is that it was named after the nom de plume of the lord of Zhao, commemorating his favorite spot. When you look into the water of Jasseon River, it is a clean pond that turtles can be seen with bare eyes, but be aware of the deep water before you go close.



Seoul National University Kyujanggak Institute for Korean Studies (Bldg #103)

Kyujanggak Institute for Korean Studies owns about 282,000 books, including Daedongwajido(The Great Map of the East Land). In addition to book related research activities, it also holds a permanent exhibition session and holds the special exhibitions to introduce a wide range of traditional cultures to ordinary visitors of our researchers.

For more details:

<http://kyujanggak.snu.ac.kr/home/main.do?siteCd=KYU>

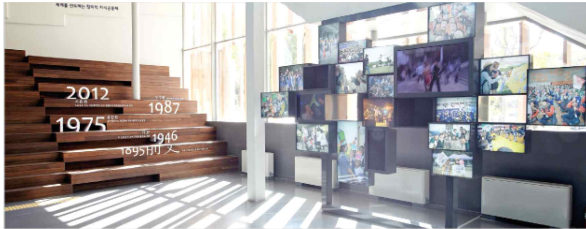


Monument of the 4.19 Civil Revolution

Monument of the 4.19 Civil Revolution was built by students in memory of the April 19th Revolution, a rally against political corruption and oppression.

SNU Hall

(Bldg #64)



SNU Hall is where you can see the past, present, and future of the Seoul National University at one glance.

At the University main gate, go straight passing the parking gate, and find the 'IBM Communication Center'(Bldg #64) on your left side. SNU Hall is on the 2nd floor of the building.

Hours: 10:00-17:00

(Gelf-Guided Tours: 13:00-15:00)

For more details:

<https://snuhall.snu.ac.kr/aroundview>



Path of Democracy

In 2009, Seoul National University officially opened its 'Path of Democracy,' a 1.2-kilometer path leading from the 4.19 Monument near the Main Gate through the College of Humanities, wrapping around the Central Library to the College of Agricultural and Life Sciences that is lined with monuments to 18 former SNU students, including Jong-cheol Park, who gave their lives in the Korean democracy movement that racked the nation in the late 20th century.

o **Free Internet (wifi) available in one of the 3 ways**

1) Visitors from the eduroam-access institutions may establish a wireless connection using their own university's eduroam credentials after selecting "eduroam" from SSID list.

2) Visitors can use the IP called 'SNU-1st-time' to get Guest-ID. Choose 'Guest' and choose your location as Gwanak campus. Then, type in ID and PW numbers. This access is available initially for 4 hours, and can be renewable by logging back in every 4 hours. At the last page of this program book, more explanation is provided.

3) Also, available by the 'SNU_U+Zone' IP, depending upon your location (#83, #73); Password is: Iguplus100.

[Wireless LAN Services]

SSIE	Locations	Available To	Authentication
SNU-1st-time	campus wide (better in Bldg #16, Bldg #101)	Visitors	Temporary Visitor ID & Password
SNU_U+Zone	Some locations (Bldg #73, Bldg #83)	Visitors	Password: Iguplus100
Eduroam	campus wide	Participants from eduroam universities	Eduroam credentials from their original universities

Bus Arrangement to and from the SNU Campus

Date	Departure Time	Place of Departure	Arrival
02 July (Mon)	7:30 AM	1. Hotel Artnouveau Seocho 2. Hotel PROVISTA 3. ibis Ambassador Seoul gangnam	SNU Cultural Center
02 July (Mon)	21:00	SNU Cultural Center	1. Hotel Artnouveau Seocho 2. Hotel PROVISTA 3. ibis Ambassador Seoul Gangnam
03 July (Tue)	7:30 AM	1. Hotel Artnouveau Seocho 2. Hotel PROVISTA 3. ibis Ambassador Seoul/Gangnam	SNU Centural Center
03 July (Tue)	18:45	SNU Centural Center	Floating Island (Place for Gala dinner-Schumpeter Prize Banquet)
03 July (Tue)	22:00	Floating Island (Place for Gala dinner-Schumpeter Prize Banquet)	1. Hotel Artnouveau Seocho via Gyodae station (subway #2,#3) 2. Hotel PROVISTA via Gyodae station (subway #2,#3) 3. ibis Ambassador Seoul Gangnam via GangNam Station(Subway #2) 4. GangNam Station(Subway #2) 5. SNU Hoam Faculty House via Express Bus Terminal Station (Subway #3, #7, #9)
04 July (Wed)	7:30 AM	Hotel Artnouveau Seocho Hotel PROVISTA ibis Ambassador Seoul Gangnam	SNU Cultural Center
04 July (Wed)	15:00	SNU Centural Center	1. GangNam Station(Subway #2) 2. Gwanghwamun Plaza/Palace

