

# **IIASA 50th Anniversary Conference**

"Systems Analysis as a Global Approach: Science and Sustainability in the Mid-Latitude Region"

Date: October 12, 2022

• Venue: Schubert Hall, Hotel President (16 Eulji-ro, Jung-qu, Seoul, Republic of Korea)

As part of the 50<sup>th</sup> anniversary celebrations of the International Institute for Applied Systems Analysis (IIASA), the Korean IIASA Committee and IIASA are jointly organizing a conference in Seoul, South Korea to highlight and consolidate ongoing collaboration. The conference in Seoul will welcome researchers, including IIASA alumni, to explore how systems analysis can provide sustainable solutions to global, regional, and local challenges. This conference will take place in person and online and will consider several issues, including environmental problems in the Mid-Latitude Region (MLR), global challenges in the water-food-energy nexus under climate change and carbon neutrality, and pollution and well-being under carbon neutralization.

#### Hosted by:

- International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria
- National Research Foundation of Korea (NRF), Seoul, Republic of Korea

### Organized by:

- OJEong Resilience Institute at Korea University (OJERI@KU), Republic of Korea
- Social Eco-Tech Institute at Konkuk University (SETI@KU), Republic of Korea

#### Supported by:

- Korean Society for Atmospheric Environment (KOSAE), Republic of Korea
- Institute for Sustainable Development (ISD), Korea University, Republic of Korea
- Department of Technology Fusion Engineering (DTFE), Konkuk University, Republic of Korea
- Human Resource Development Program for Carbon Neutrality, Korea University, Republic of Korea
- KU2 (Konkuk-Korea University) Graduate Program Specialized in Air Quality Management, Republic of Korea
- BK21 FOUR R&E Center for Environmental Science and Ecological Engineering, Korea University, Republic of Korea
- Department of Climate Environment (Korea University Graduate Program Specialized in Carbon Sink; KU-GPSCS), Republic of Korea









## **Program**

09:00-09:30 (KST)	Registration
09:30-10:05	Opening Session  (Moderated by Prof. Je Yong Yoon, Professor, School of Chemical and Biological Engineering, Seoul National University)  - Greetings from the National Research Foundation of Korea (5 min)  • Prof. Kwang Bok Lee, President, National Research Foundation (NRF) of Korea  - Keynote speech from IIASA Director General (15 min)  • Dr. Albert van Jaarsveld, Director General, IIASA  - Keynote speech from Korean Side (15 min)  • Prof. Myung-Rae Cho, Distinguished Professor, Carbon Neutrality Studies, Dankook University; 18th Minister of Environment of the Republic of Korea  - Video presentation on IIASA-Korea collaboration
10:05-10:15	Group Photo & Break Time
10:15-11:25	Session 1: Water-Food-Energy Nexus in the Mid-Latitude Region (MLR)  (Moderated by Prof. Woo-Kyun Lee, Professor, Division of Environmental Science and Ecological Engineering & Dr. Sonam Wangyel Wang, Research Professor, OJEong Resilience Institute (OJERI), Korea University, Republic of Korea)  - Presentation by Moderator (10 min)  • Prof. Woo-Kyun Lee, Professor, Division of Environmental Science and Ecological Engineering, Korea University, Republic of Korea  - Presentation by IIASA researchers (20 min)  • Dr. Rastislav Skalsky, Research Scholar, Biodiversity and Natural Resources Program, IIASA  • Dr. Andrey Krasovskiy, Research Scholar, Biodiversity and Natural Resources Program, IIASA  - Invited Panel Discussion (40 min)  • Prof. Je Yong Yoon, Professor, School of Chemical and Biological Engineering, Seoul National University, Republic of Korea  • Prof. Sangchul Lee, Professor, School of Environmental Engineering, University of Seoul, Republic of Korea  • Dr. Jong Ahn Chun, Research Fellow, Prediction Research Department, APEC Climate Center, Republic of Korea  • Prof. Janay Sagintayev, Professor, School of Engineering and Digital Sciences, Nazarbayev University, Kazakhstan (virtual)  • Prof. Rijan Bhakta Kayastha, Professor, Department of Environmental Science and Engineering, Kathmandu University, Nepal (virtual)
11:25-11:30	Break Time









	Session 2: Impact of Carbon Neutral Future on Pollution and Well-being in
	Northeast Asia
	(Moderated by Prof. Jung-Hun Woo, Professor, Department of Civil and Environmental Engineering, Konkuk University, Republic of Korea)
	- Presentation by Moderator (10 min)
	<ul> <li>Prof. Jung-Hun Woo, Professor, Department of Civil and Environmental Engineering, Konkuk University, Republic of Korea</li> </ul>
	- Presentation by IIASA researchers (20 min)
	<ul> <li>Dr. Keywan Riahi, Program Director, Energy, Climate, and Environment Program, IIASA</li> <li>Dr. Zbigniew Klimont, Research Group Leader, Energy, Climate, and Environment Program,</li> </ul>
	IIASA - Panel Discussion with (40 min)
11:30-12:40	Dr. Caroline Zimm, Research Scholar, Energy, Climate, and Environment Program, IIASA (virtual)
	<ul> <li>Prof. Chang-Geun Song, Professor, Department of Urban and Environmental Engineering, Ulsan National Institute of Science and Technology (UNIST), Republic of Korea</li> </ul>
	• Dr. Seong Ok Han, Research Fellow, High Temperature Energy Conversion Laboratory, Korea Institute of Energy Research (KIER), Republic of Korea
	• Dr. Yeora Chae, Chief Research Fellow, Division for Climate and Energy, Korea Environment Institute (KEI), Republic of Korea
	• Dr. Yong-Gun Kim, Director General, Climate and Air Quality Research Group, Korea Environment Institute (KEI), Republic of Korea
	Prof. Shuxiao Wang, Professor, Division of Air Pollution Control, Tsinghua University, China
	• Dr. Satoru Chatani, Chief Senior Researcher, Regional Environment Conservation Division,
	National Institute for Environmental Studies (NIES), Japan
12:40-14:00	Lunch
	Session 3: IIASA: A Catalyst for Enhancing Systems Analysis Research
	(Moderated by Dr. Gansen Pillay, Interim Head, Communications and External Relations Department, IIASA)
	- Systems Analysis methodologies and outstanding outcomes using systems analysis (30 min)
	Dr. Fabian Wagner, Dean, Capacity Development and Academic Training Unit, IIASA
14:00-15:45	- Using systems thinking for knowledge co-production: beyond participatory system dynamics approaches (15 min)
	<ul> <li>Dr. Susanne Hanger-Kopp, Research Scholar, Population and Just Societies Program, IIASA (virtual)</li> </ul>
	- Systems Analysis research experience (30 min)
	• Dr. Jihoon Min, Research Scholar, Energy, Climate, and Environment Program, IIASA (10 min)
	• Dr. Younha Kim, Research Scholar, Energy, Climate, and Environment Program, IIASA (10 min)
	Dr. Jung-Hee Hyun, Research Scholar, Advancing Systems Analysis Program, IIASA (10 min)
	- Discussion (30 min)  * This session give to raise the awareness of MASA and attract more attention from researchers towards system analysis
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15:45-15:55	Break time
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	Alumni Session
15:55-17:55	(Moderated by Prof. Kil-Choo Moon, Chair Professor, Korea University, 22nd President of
	Korea Institute of Science and Technology, Chair of NRF IIASA Committee)
	- Introduction of YSSP and IIASA capacity building programs
	Dr. Gansen Pillay, Interim Head, Communications and External Relations Department, IIASA
	- Voice from alumni: important research themes, collaboration stories, and their experiences
	<ul> <li>Prof. Moonil Kim, Professor, School of ICT-Integrated Studies, Pyeongtaek University</li> </ul>
	• Dr. Cholho Song, Research Professor, OJEong Resilience Institute (OJERI), Korea University
	Dr. Yuyoung Choi, Researcher, Division of Technical Supervision, Green Technology Center
	<ul> <li>Ms. Eunbeen Park, Ph.D. Candidate, Department of Environmental Science and Ecological Engineering, Korea University</li> </ul>
	<ul> <li>Mr. Hyun-Woo Jo, Ph.D. Candidate, Department of Environmental Science and Ecological Engineering, Korea University</li> </ul>
	<ul> <li>Mr. Jinseok Kim, Ph.D. Candidate, Department of Advanced Technology Fusion, Konkuk University</li> </ul>
	<ul> <li>Ms. Youjung Jang, Ph.D. Candidate, Department of Advanced Technology Fusion, Konkuk University</li> </ul>
	• Mr. Minwoo Park, Ph.D. Candidate, Department of Advanced Technology Fusion, Konkuk University
17:55-18:15	Closing Remarks
	<ul> <li>Prof. Kil-Choo Moon, Chair Professor, Korea University, 22<sup>nd</sup> President of Korea Institute of Science and Technology, Chair of NRF IIASA Committee</li> </ul>
18:15-	Dinner









### Table below is for internal use:

13 OCT 2022	Meetings of IIASA delegation with Korean partners
07:30-09:30	Developing future collaboration
	• Meeting with the NRF IIASA committee members (Dalgaebi Restaurant – Address: 16
	Sejongdae-ro 19-gil, Jung-gu, Seoul, Republic of Korea)
	** The place is located 5-10 min walking distance from President Hotel. NRF members and NRF IIASA committee members will join in this meeting from the Korean side. In the case of the IIASA, IIASA Headquarter members, program director, and Research Group leader, etc. will join this meeting.
	Wrap-up discussion
	- In-depth research development between IIASA and Strategic Initiatives Program project team with Korea University and Konkuk University
10:00-12:00	• SIP project team with Korea University (location: Korea University – Address: 145 Anam-ro, Seoungbuk-gu, Seoul, Republic of Korea)
10.00 12.00	• SIP project team with Konkuk University (location: Konkuk University – Address: 120
	Neungdong-ro, Gwangjin-gu Seoul, Republic of Korea)
	* This discussion aims to discuss in-depth project development between IIASA and SIP project team members based on the current collaboration projects. Thus, project participants will attend each university meeting room to develop future research agendas.
12:00-	Cultural program