

PROGRAM AT A GLANCE

Time	8. 31 (Thu)	9.1 (Fri)				9.2 (Sat)		
Morning	Registration	Scientific Session (NT)	Scientific Session (ST)	Special Session (Leadership)	YWS Camp & SS Workshop II	MAPWiST		
	Opening Ceremony							
	Plenary Session I							
Afternoon	Lunch					Closing		
	APNN Country Exhibition		Poster Session II			Optional Tour		
	Scientific Session (IT)	Special Session (Future Society)	YWS Camp & SS Workshop I	Scientific Session (BT)	Special Session (Women in Industry)		Scientific Session (E ³ T)	YWS Camp & SS Workshop III
	Plenary Session II		Plenary Session III					
	Poster Session I		Poster Session III					
	Welcome Reception		Banquet					
Evening								

Grand Ballroom (B2)
 Orchid Hall (4F)
 Maple Hall (4F)
 Oak Room (4F)
 Serve Room (B2)

Scientific Sessions

- BT : Biotechnology
- IT : Information Technology and Convergence
- E³T: Environment / Energy / Earth Technology
- NT : Nano Technology
- ST : Space Technology

YWS Camp & SS Workshop

KWSE / APNN (Asia Pacific Nation Network) International Young Woman Scientist Camp & Smart Sister Workshop

MAPWiST

The Meeting of Asia and Pacific Women in Science and Technology

Poster Sessions

- I. IT, E³T, Basic Science
- II. NT, ST, YWS Camp & SS Workshop I
- III. BT, Policy, YWS Camp & SS Workshop II

PLENARY SPEAKERS

PLENARY SESSION I



Jae Ung JUNG

Distinguished Professor and Chair, University of Southern California, USA

Zika Virus & Brain Defects in Babies

11:10-12:00, August 31 (Thu)

PLENARY SESSION II



Justine CASSELL

Professor and Associate Dean, Carnegie Mellon University, USA

Socially Aware Artificial Intelligence: Women Changing the Future of Computer Science

17:00-17:50, August 31 (Thu)

PLENARY SESSION III



Marlene KANGA

President Elect, World Federation of Engineering Organizations, Australia

Smart Diversity Strategies for Shaping a Sustainable Future

17:00-17:50, September 1 (Fri)



CONFERENCE PROGRAM

August 31 (Thu)

10:30-11:10 Opening Ceremony Grand Ballroom, B2

Plenary Session Grand Ballroom, B2

11:10-12:00 Zika virus & brain defects in babies
Jae Ung JUNG (University of Southern California)

12:00-13:00 Lunch Grand Ballroom, B2

Scientific Session IT (Human-Centric Computing and Interaction) Orchid Hall, 4F

14:00-14:30 Wearable healthcare (bio-medical systems & circuits)
Hoi-Jun YOO (Korea Advanced Institute of Science and Technology)

14:30-14:50 Smart homes and HCI
Jaeyeon JUNG (Samsung Electronics Limited)

14:50-15:10 Developing and applying machine learning methods for computational social science
Alice OH (Korea Advanced Institute of Science and Technology)

15:10-15:30 Making use of "big data" in educational technology research
Gahgene GWEON (Seoul National University)

15:30-15:50 Coffee Break

15:50-16:10 Reconstruction of 3D objects from freeform sketch
Hyewon SEO (Universite de Strasbourg - CNRS)

16:10-16:30 Mobile VR technology and applications
Soo-Mi CHOI (Sejong University)

16:30-16:50 Notes on virtual reality
Kyoungju PARK (Chung-Ang University)

CONFERENCE PROGRAM

Special Session Future Society (4th Industrial Revolution and Future Society) Maple Hall, 4F

- 14:00-14:40 Potentials and predictions of the fourth industrial revolution: from imagination to implementation
So Young KIM (Korea Advanced Institute of Science and Technology)
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- 14:40-15:05 Social implications of artificial intelligence
Shubha GOKHALE (Sejong University)
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- 15:05-15:30 The 4th industrial revolution and the strategic response
Jin Ha KIM (Korea Institute of Science & Technology Evaluation and Planning)
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- 15:30-15:45 Coffee Break
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- 15:45-16:10 Recent trends of 3D bioprinting technology
Hyun-Wook KANG (Ulsan National Institute of Science and Technology)
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- 16:10-16:35 Soft wearable robot
Kyu-Jin CHO (Seoul National University)
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- 16:35-17:00 A-cent technologies learning from ancient futures
Jinhee KIM (National Institute of Ecology)

YWS Camp & SS Workshop Grand Ballroom, B2

- 14:00-14:30 Vietnam woman in scientific research
Nguyen Thi LAN (Vietnam National University)
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- 14:30-15:00 Korea's policy and key support programs for women in STEM
Wha-Jin HAN (Korea Center for Women in Science, Engineering, and Technology)
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- 15:00-15:50 Smart Sister Program Regional Presentation
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- 15:50-16:00 Coffee Break
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- 16:00-17:00 Oral Presentation

Plenary Session Grand Ballroom, B2

- 17:00-17:50 Socially aware artificial intelligence: women changing the future of computer science
Justine CASSELL (Carnegie Mellon University)

17:50-19:00 Poster Session I Lobby, B2 & 4F

19:00-20:30 Welcome Reception Grand Ballroom, B2

CONFERENCE PROGRAM

September 1 (Fri)

Scientific Session NT (Convergence Research on Nano-technology and Chemistry) Orchid Hall, 4F

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- 09:00-09:40** Nanostructured materials by covalent self-assembly
Kimoon KIM (Pohang University of Science and Technology / Korea Basic Science Institute)
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- 09:40-10:10** Band-engineered graphene for carbon-based semiconductor electronics
Gap Soo CHANG (University of Saskatchewan)
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- 10:10-10:40** DNA-based self-assembly for dynamic nanostructures
So-Jung PARK (Ewha Womans University)
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- 10:40-11:00** Coffee Break
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- 11:00-11:30** Transparency of graphene
Jeong-O LEE (Korea Research Institute of Chemical Technology)
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- 11:30-12:00** Repurposing polymers via post-polymerization modification
Christopher BIELAWSKI (Ulsan National Institute of Science and Technology)

Scientific Session ST (Future Space Science & Technology with International Cooperation) Maple Hall, 4F

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- 09:00-09:40** Women in space science and engineering: challenges and opportunities
Mazlan OTHMAN (Academy of Sciences Malaysia)
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- 09:40-10:10** Readiness for space situational awareness in Korea
Jung Hyun JO (Korea Astronomy and Space Science Institute)
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- 10:10-10:40** Liquid rocket engines for space exploration
Jinhan KIM (Korea Aerospace Research Institute)
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- 10:40-11:00** Coffee Break
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- 11:00-11:30** "Astronomy for all", hosting the 31st IAU general assembly in Busan, Korea
Hye Sung KANG (Pusan National University)
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- 11:30-12:00** International cooperation for space capability build-up
Ee Eul KIM (Satrec Initiative)

CONFERENCE PROGRAM

Special Session Leadership (Woman Leadership for Better World)

Oak Room, 4F

- 09:00-09:30 What should we prepare for retirement?
Mi Ja LEE (EX Central Research Institute of KT&G)
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- 09:30-10:00 Active role of Korean women scientists and engineers in international society
Kong-Joo LEE (Ewha Womans University)
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- 10:00-10:30 Open science, open toward the future
Sun Hwa HAHN (Korea Institute of Science and Technology Information)
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- 10:30-10:50 Coffee Break
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- 10:50-11:20 Policy making for science & technology
Byung Joo MIN (Ulsan National Institute of Science and Technology)
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- 11:20-12:00 Discussion

YWS Camp & SS Workshop

- 09:00-12:00 Cultural Tour (Gyeongbokgung Palace)

12:00-13:00 Lunch

Grand Ballroom, B2

13:00-14:00 Poster Session II

Lobby, B2 & 4F

Scientific Session BT (Stem Cell Technology and Neurodevelopment)

Orchid Hall, 4F

- 14:00-14:40 Transcription control of motor neuron diversity and survival
Mi-Ryoung SONG (Gwangju Institute of Science and Technology)
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- 14:40-15:10 Therapeutic implications of directly converted human adult stem cells for neuroregeneration
Mi-Sook CHANG (Seoul National University)
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- 15:10-15:40 Gene regulatory networks in motor neuron development
Seung-Hee LEE (Seoul National University)
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- 15:40-16:00 Coffee Break
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- 16:00-16:30 Regulation of neural stem cell differentiation by defined factors
Yoichi KOSODO (Korea Brain Research Institute)
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- 16:30-17:00 Modeling peripheral genetic disorders by using direct cell engineering tools
Yong Jun KIM (Kyung Hee University)

CONFERENCE PROGRAM

Special Session Women in Industry (Roles and Achievements of Women in Industry)

Maple Hall, 4F

14:00-14:30 Suggestions for improving the utilization of woman R&D manpower
Dong-Gyun KIM (Korea Institute for Advancement of Technology)

14:30-15:00 How to grow as a professional and leader in industry
Mi Nam SHIN (Doosan Fuel Cell)

15:00-15:30 Nurturing female talent in Korea telecom
Sun Joo LEE (KT)

15:30-15:50 Coffee Break

15:50-16:20 Women scientists in Dong-A Pharmaceutical
Hyun Joo SHIM (Dong A Pharmaceutical Co., Ltd.)

16:20-16:50 Woman scientists and engineers in Samsung Electronics
Young Soon LEE (Samsung Electronics Limited)

Scientific Session E³T (Sustainable and Safe Future)

Serve Room, B2

14:00-14:30 Fine particle pollution in Northeast Asia
Gwi-Nam BAE (Korea Institute of Science and Technology)

14:30-14:50 Renewable energy resource mapping using earth observations
Hyun Goo KIM (Korea Institute of Energy Research)

14:50-15:10 Benefits from air quality model simulations at various scales
Si-Wan KIM (NOAA Earth System Research Laboratory)

15:10-15:30 20th century variability and trends of refractory black carbon in Europe retrieved from a caucasian ice core
Saehee LIM (UCI Earth System Science)

15:30-15:50 Coffee Break

15:50-16:10 Climate change mitigation and sustainability: Global trend of critical elements recovery from waste sources
Ji Whan Ahn (Korea Institute of Geoscience and Mineral Resources)

16:10-16:30 Nuclear fuel cycle status in Korea
Eun-Young CHOI (Korea Atomic Energy Research Institute)

16:30-16:50 The legal framework of Korean environmental monitoring and data quality management
Hyen-Mi CHUNG (National Institute of Environmental Research)

CONFERENCE PROGRAM

YWS Camp & SS Workshop

Grand Ballroom, B2

14:00-15:00 Group Discussion (by Major Field of Study)

15:00-15:50 YWS Global Issue Discussion

15:50-16:00 Coffee Break

16:00-17:00 Group Mentoring

Plenary Session

Grand Ballroom, B2

17:00-17:50 Smart diversity strategies for shaping a sustainable future
Marlene KANGA (Engineers Australia, World Federation of Engineering Organisations)

17:50-19:00 Poster Session III

Lobby, B2 & 4F

19:00- Banquet

Grand Ballroom, B2

September 2 (Sat)

MAPWiST (Mapping the future of women in STEM in Asia and the Pacific Nations)

Maple Hall, 4F

09:00-09:40 Balanced development of human resources in STEM for the future of artificial intelligence
Kong-Ju-Bock LEE (Ewha Womans University)

09:40-10:20 Implementing gender policies in higher education institutions: obstacles and levers
Caroline Belan MENAGIER (Head of European Union & International Relations / Université
Confédérale Léonard de Vinci)

10:20-10:30 Coffee Break

Panel Discussion

10:30-11:50 Gender barriers perceived and experienced by members of APNN
Yanghee KIM (Gender & Leadership)

Fumie TAKEI (National Defence Medical College)

Jun HADA (WISE Nepal)

Li-Ling TASI (National Kaohsiung Normal University)

Ariunbolor PURVEE (Mongolian Univ. of Science and Technology)

Open Discussions and Questions from the Floor