## ICAST 2019 Day 1 – September 25 (Wed)

- Please be advised that sessions will be held in two KBSI campus in two different cities, Daejeon and Ochang.
- (Daejeon) **Room D-1**: Conference Room(2F), Main Bldg.
- (Ochang) Auditorium: Bldg. 103 | Room O-1: Conference Room, Bldg. 101 | Room O-2: Conference Room(2F), Bldg. 204

| Time  |                                   | Progarm   | Venue               |
|-------|-----------------------------------|---|---------------------|
|       | [S1]                              |   |                     |
| 10:00 | Magnetic                          | Dong Hyun Kim Chungbuk National University  | (Daejeon)           |
| -     | Property<br>Measurement<br>School | TBA   | Session<br>Room D-1 |
| 18:00 |                                   | Kyoung-Woong Moon Korea Research Institute of Standards and Science   |                     |
|       |                                   | TBA   |                     |
|       |                                   | Jaeyoung Kim Institute for Basic Science  |                     |
|       |                                   | X-ray Magnetic Circular Dichroism and Soft X-ray Resonant Scattering  |                     |
|       | [S2]                              |   | T                   |
| 13:00 | SIMS School                       | Byeon Gak Choi Seoul National University  | (Ochang)            |
| -     |                                   | TBA   | Auditoriu           |
| 18:00 |                                   | Changkun Park Korea Polar Research Institute  | -                   |
|       |                                   | SIMS analysis of stable isotopes in minerals  |                     |
|       |                                   | Sung-Kyu Kim National Institute for Nanomaterials Technology  |                     |
|       |                                   | Use of SIMS in Steel analysis   |                     |
|       |                                   | <b>Jinkyu Park</b> Korea Atomic Energy Research Institute   |                     |
|       |                                   | Uranium Isotope Analysis of Nuclear Particles in Environmental Samples using Secondary Ion Mass Spectrometry    |                     |
|       |                                   | Jong Sung Jin Korea Basic Science Institute<br>Introduction of Hybrid SIMS                                      |                     |
|       |                                   | Jeongmin Kim Korea Basic Science Institute  |                     |
|       |                                   | TBA   |                     |
|       | [S3]                              |   |                     |
| 13:00 |                                   | Yong-Ho Park Chungnam National University Hospital  | (Ochang)            |
| -     | EM                                | Functional and Histopathologic Changes in the Ear of Diabetic and Aging Mouse                                   | Session             |
| 18:00 |                                   | Chaeuk Chung Chungnam National University Hospital  | Room O-             |
|       | CNU                               | Co-targeting YAP/PD-L1 signaling and autophagy key factor p62 overcomes EGFR-TKI resistance in lung cancer      |                     |
|       | Hospital<br>Workshop              | Joon Won Kang Chungnam National University Hospital   |                     |
|       |                                   | Prenatal stress, as a cause of epilepsy in infants  |                     |
|       |                                   | Hee-Seok Kweon Korea Basic Science Institute  |                     |
|       |                                   | Advanced Immuno-Electron Microscopy in Life Sciences  |                     |
|       |                                   | Coffee Break  |                     |
|       |                                   | Eun-Kyeong Jo Chungnam National University Hospital   |                     |
|       |                                   | Autophagy and Host Defense in Mycobacterial Infection   |                     |
|       |                                   | Chang Hwa Jung Korea Food Research Institute  |                     |
|       |                                   | Studying selective autophagy in lipid droplets and mitochondria using transmission electron microscopy          |                     |
|       |                                   | <b>Dong Woon Kim</b> Chungnam National University Hospital  | 1                   |
|       |                                   | PLGA nanoparticle applications in Neuropathic Pain animal model   | _                   |
|       |                                   | Jae Hyuck Jang Korea Basic Science Institute  |                     |
|       |                                   | New analytical insight into nano-bio materials research   |                     |
|       |                                   | Coffee Break  | -                   |
|       |                                   | Hyon-Seung Yi Chungnam National University Hospital   | -                   |
|       |                                   | Relationship between loss of muscle mass and bone marrow inflammation   |                     |
|       |                                   | Kyung-Bok Lee Korea Basic Science Institute   |                     |
|       |                                   | Imaging of bindings between chemical drug and its target protein kinases by redistribution assay in living cell |                     |
|       |                                   | Sang-Chul Lee Korea Basic Science Institute   |                     |
|       | [\$4]                             | Machine Learning for Data Analysis  |                     |
| 13:00 | [S4]<br>MS                        | Jeongkwon Kim Chungnam National University  | (Ochang)            |
| -     | User Meeting                      | TBA   | Session             |
| 18:00 | g                                 | Tae-Young Kim         Gwangju Institute of Science and Technology   | Room O-             |
| 10100 |                                   | TBA   |                     |
|       |                                   | Jong-Ho Park Chonbuk National University  |                     |
|       |                                   | TBA   |                     |
|       |                                   | Yeol Gyun Lee Proteinworks  |                     |
|       |                                   | TBA   |                     |
|       |                                   | Jong Bok Seo Korea Basic Science Institute  |                     |
|       |                                   | TBA   |                     |
|       |                                   | Heeyoun Hwang Korea Basic Science Institute   |                     |
|       |                                   | Machine Learning Classifies Core and Outer Fucosylation of N-Glycoproteins Using Mass Spectrometry              |                     |

## **ICAST 2019** Day 2 – September 26 (Thu)



## • (Daejeon) Auditorium: Main Bldg. | Room D-1: Conference Room(2F), Main Building

| me  |                | Progarm   | Venue              |
|-----|----------------|---|--------------------|
| :00 | Registration   |   | Lobby              |
| :30 |                |   | Main Bldg          |
|     | [C1]           |   |                    |
|     | Opening &      | Hisayoshi Yurimoto Hokkaido University  | (Daejeon)          |
|     | Plenary 1      | Isotope microscope and the application  | Auditori           |
| :00 | ·              |   |                    |
| :00 | Lunch          |   | Cafeteri           |
| -   |                |   |                    |
| :00 |                |   |                    |
|     | [C2]<br>HVEM & | Shunguka Muta Nagaya Uniyangity   | (Daejeon           |
|     | Cryo-EM        | Shunsuke Muto Nagoya University<br>High-voltage scanning/transmission electron microscopy at Nagoya   | Auditor            |
| :00 |                | - Where do we come from? What are we? Where are we going? -   | Auditoriu          |
| .00 |                | Seung Jo Yoo Korea Basic Science Institute  |                    |
|     |                | In-situ TEM studies of nanostructured materials within an atomic level  |                    |
|     |                | Akihiro Osaki JEOL  |                    |
|     |                | Development of Cryo-Ultra-High Voltage Electron Microscope  |                    |
|     |                | Coffee Break  |                    |
|     |                | Hidehiro Yasuda Osaka University  |                    |
|     |                | In situ experiments by ultra-high voltage electron microscopy at Osaka University   | -                  |
|     |                | Yang Hoon Huh Korea Basic Science Institute   |                    |
|     |                | Unique Features of Bio-HVEM and its Application in Structural Analysis of Bio-Nano Materials<br>by 3D Tilting Electron Tomography                       |                    |
|     |                | <b>Kea Joo Lee</b> Korea Brain Research Institute   |                    |
|     |                | Volume Electron Microscopy of Cortical Synaptic Structures in Elevated Protein Synthesis of   |                    |
|     |                | Microglia   |                    |
|     |                | Hiromitsu Furukawa SYSTEM IN FRONTIER Inc.  |                    |
|     |                | The tutorial of Post Processing for electron tomography   |                    |
|     |                | Coffee Break  | -                  |
|     |                | Im Joo Rhyu Korea University  |                    |
|     |                | High Voltage Electron Microscopy & its Contribution to Biomedical Researches Sohei Motoki JEOL  | -                  |
|     |                | Development of CRYO ARM – Cryo High-Resolution TEM Equipped with Cold Field Emission  |                    |
|     |                | Gun for Structural Biology  |                    |
|     |                | Sung-Hoon Jun Korea Basic Science Institute   | -                  |
|     |                | Structural basis of transcription activation by general transcription factor TFE $\alpha$   |                    |
|     |                | Jin Young Kang Korea Advanced Institute of Science and Technology   |                    |
|     |                | Structural study on prokaryotic transcription – how RNA polymerases pause and go  |                    |
|     | [C3]           |   | -                  |
| :00 | SIMS           | Martin J. Whitehouse Swedish Museum of Natural History  | (Daejeon           |
| -   |                | Novel ion imaging applications in the earth, environmental and planetary sciences using large-  | Session            |
| :00 |                | geometry SIMS   | Room D             |
|     |                | <b>Xian-Hua Li</b> Institute of Geology and Geophysics, Chinese Academy of Sciences<br><i>Ultra-high precision SIMS Si-isotope microanalysis</i>        |                    |
|     |                | Nagoya Sakamoto       Hokkaido University   |                    |
|     |                | EXTREME 160-RICH MATERIALS IN CH CHONDRITES   |                    |
|     |                | Jeongmin Kim Korea Basic Science Institute  |                    |
|     |                | Introduction of high precision isotope microscope system in KBSI  |                    |
|     | [C4]           |   |                    |
| 00  | AP-XPS         | Beomgyun Jeong Korea Basic Science Institute  | (Daejeon           |
| ·   |                | The new ambient pressure XPS end-station at Pohang Light Source   | Session<br>Room D- |
| 00  |                | <b>Wenbing Yun</b> Sigray, Inc.   |                    |
| :00 |                | Development of a laboratory-based X-ray absorption system for energy material research<br>Bongjin Simon Mun Gwangju Institute of Science and Technology |                    |
| :00 |                | Recent progress of ambient pressure XPS and its application   |                    |
| :00 |                | TANALAR DE TANA KA MATATAN DA MATATAN MATA ANA ATATAN MATATAN MATATAN MATATAN MATATAN   | 1                  |
| :00 |                |   |                    |
| :00 |                | Ki Jeong Kim Pohang Accelerator Laboratory  |                    |
| 00  |                |   |                    |
|     | Conference Ba  | <b>Ki Jeong Kim</b> Pohang Accelerator Laboratory<br>8A2 KBSI-PAL AP-XPS beamline for in situ and operando science at Pohang Accelerator<br>Laboratory  | TBA                |

## • (Ochang) Auditorium: Bldg. 103

| Time       |                       | Progarm   | Venue                  |
|------------|-----------------------|---|------------------------|
| 10:00      | Registration          |   | Lobby                  |
| -<br>10:30 |                       |   | Bldg. 103              |
| 10.30      | [C5]                  |   |                        |
| 10:30      | Plenary 2             | Minhaeng Cho Korea University   | (Ochang)               |
| -          | ·                     | Coherent Multidimensional Spectroscopy: Recent Developments   | Auditorium             |
| 11:10      |                       |   |                        |
|            | [C6]                  |   |                        |
| 11:10      | Femtosecond           | <b>Kyungwon Wak</b> Korea University  | (Ochang)<br>Auditorium |
| - 12:00    | Laser<br>Spectroscopy | The Intra-band Auger Process of HgS Quantum dot Studied by Femtosecond Infrared Pump-Probe Spectroscopy   | Auditorium             |
| 12.00      | spectroscopy          | Hanju Rhee Korea Basic Science Institute  |                        |
|            |                       | TBA   |                        |
| 12:00      | Lunch                 |   | Cafeteria              |
| -          |                       |   |                        |
| 13:20      |                       |   |                        |
| 12.20      | [C7]                  | Chairdean Chiarteann Ma Dhail Ladid de CDialantid   | $(O_{a}h_{a}m_{a})$    |
| 13:20      | Plenary 3             | <b>Christian Griesinger</b> Max Planck Institute of Biochemistry<br>NMR spectroscopy in chemistry and biology with applications in immunology and | (Ochang)<br>Auditorium |
| - 14:15    |                       | neuroprotection   | <i>ruanonum</i>        |
| 1110       | [C8]                  |   |                        |
| 14:15      | Biomolecular          | Jeong-Yong Suh Seoul National University  | (Daejeon)              |
| -          | NMR                   | Structural and dynamic investigation of type II-A and II-C anti-CRISPR proteins   | Auditorium             |
| 18:00      |                       | Yangmee Kim Konkuk University   |                        |
|            |                       | Functional Flexibilities of Proteins from Thermophilic, Mesophilic, and Psychrophilic Bacteria  |                        |
|            |                       | for Thermal Adaptation  |                        |
|            |                       | Coffee Break Donghan Lee University of Louisville   |                        |
|            |                       | Functional roles of biomolecular dynamics at the hidden time  |                        |
|            |                       | Jung Ho Lee Seoul National University   |                        |
|            |                       | High-Resolution Diffusion NMR at Near Physiological Conditions  |                        |
|            |                       | Joon-Hwa Lee Gyeongsang National University   |                        |
|            |                       | NMR investigation of base-pair opening of nucleic acids in relation to their biological function  |                        |
|            |                       | Kyoung-Seok Ryu Korea Basic Science Institute   |                        |
|            |                       | Nonenzymatic acetylation of ubiquitin Lys side chains is studied by NMR spectroscopy  |                        |

- KBSI Daejeon: [Google Maps] <u>https://goo.gl/maps/aveqP7tH21XZnQDf9</u> | [Naver Maps] <u>http://naver.me/x4nxpQNM</u>

- KBSI Ochang: [Google Maps] https://goo.gl/maps/Lck4Me2pY5zuzVU87 | [Naver Maps] http://naver.me/GkQR57Yc

