



**Moonhor Ree**

*Professor and Fellow*

Department of Chemistry, Division of Advanced Materials  
Science, and Polymer Research Institute

*Science Advisor (Former Director)*

Pohang Accelerator Laboratory (PAL)

Pohang University of Science & Technology (POSTECH)

77 Cheongam-ro, Hyoja-dong, Nam-gu, Pohang 37673,  
Republic of KOREA

Tel: 82-54-279-2120

Fax: 82-54-279-3399

E-mail: ree@postech.edu

<http://mree.postech.ac.kr>

January 29, 2016

**Dear Professor Jill Trehella, Chair**

*IUCr Commission for Small-Angle Scattering*

*cc:*

Dr. Daniel Clemens

EM-ISFM

Helmholtz-Zentrum Berlin für Materialien und Energie GmbH

Hahn-Meitner-Platz 1

14109 Berlin Germany

**Dear Professor Trehella, Chair:**

First of all, we are wishing Professor Trehella (chair), commission members and SAS community a happy new year with health and many blessings. And we thank you all very much for the great efforts being made on the IUCr Commission for SAS and the general small-angle scattering community in the world.

Please accept this bid from the Korean SAS Community (which has grown with strong supports from Korea Synchrotron Radiation Users Association (KOSUA), Korea Neutron Beam Users Association (KNBUA), Korean universities, professional societies in science and technologies, national and industrial research institutes, industries, and large facilities (High-Flux Advanced

Neutron Application Reactor (HANARO) Center and Pohang Accelerator Laboratory (PAL)) to host the XVIII International Small Angle Scattering Conference (SAS 2021) at the Gyeongju Hwabaek International Convention Center (HICO), Gyeongju, Gyeongbuk, Korea, in September 2021. The document material of this bid is given below.

### **1. The proposed date(s) for the Conference**

The Conference venue is available on September 27 – October 1, 2021.

### **2. Motivation for wanting to host the Conference**

We are very excited to host the 18<sup>th</sup> International Small Angle Scattering Conference (SAS 2021) in Korea. During SAS 2021, we would like to introduce the current status and visibilities of small-angle scattering researches of our nation, as well as the diverse and magnificent SAS researches from around the world. There are three nationwide large SAS research facilities in Korea: Neutron Facility in Daejeon (HANARO), 3<sup>rd</sup>-Generation Synchrotron Radiation Facility (PLS-II, PAL), and 4<sup>th</sup>-Generation Synchrotron Radiation (i.e., X-ray Free Electron Laser: XFEL) Facility (PAL-XFEL). In addition, a proton facility is in Gyeongju: Korea Multi-Purpose Accelerator Complex (KOMAC). Having these large SAS facilities in proximity has tremendously benefited and aided SAS researches in Korea to raise more than 200 domestic SAS user groups from universities and industries as well as the facilities and a huge amount of research outputs within a few decades.

SAS 2021 in Korea will provide a welcoming place for the exchange of experiences and expertise in instruments, materials, analysis methods, software, and so on for high-level researchers, as well as beginning students. We expect that more than a thousand of domestic and foreign SAS researchers to attend SAS 2021 and pursue fruitful, deep discussions regarding the importance of industrial applications of small-angle scattering to realize real life contribution of science and technology.

### **3. Names of the Members of the Local Organizing Committee**

#### *Co-chairs*

- Prof. Moonhor Ree, POSTECH & Pohang Accelerator Laboratory (PAL)
- Representative (2020-2021), Korea Neutron Beam Users Association (KNBUA)
- Director (2020-2021), HANARO Center
- Director or Representative (2020-2022), PAL

### ***Members***

- Prof. Sooyoung Park, KNU
- Prof. Sung-Min Choi, KAIST
- Dr. Kwang-Woo Kim, PAL
- Dr. Chang-Hee Lee, HANARO, KAERI
- Dr. Baik Suk Seong, HANARO, KAERI
- Prof. Tae Joo Shin, UNIST
- Dr. Young Soo Han, HANARO, KAERI

## **4. Name(s) of the Chairperson(s) of the Scientific Program Committee**

### ***Co-Chairs***

- Prof. Sooyoung Park, KNU
- Prof. Tae Joo Shin, UNIST
- Dr. Baik Suk Seong, HANARO, KAERI
- Dr. Byeongdu Lee, ANL

### ***Members***

- Prof. Daewon Sohn, Hanyang Univ.
- Prof. Youngkyoo Kim, KNU
- Prof. Hyunjung Kim, Sogang Univ.
- Prof. Kwanwoo Shin, Sogang Univ.
- Prof. Du Yeol Ryu, Yonsei Univ.
- Prof. Byeong-Ki Cho, Dankook Univ.
- Prof. Joona Bang, Korea Univ.
- Prof. Dong-Ki Yoon, KAIST
- Prof. Moon-Jeong Park, POSTECH
- Prof. Myeong Cheol Choi, KAIST
- Prof. Jinhwn Yoon, Dong-A Univ.
- Prof. Soyeon Kim, UNIST
- Dr. Young Soo Han, HANARO, KAERI
- Dr. Jehan Kim, PAL
- Dr. Kyeong Sik Jin, PAL
- Dr. Taehwan Kim, KAERI
- Dr. Hyeongjoo Ahn, PAL

## **5. Name(s) of the Chairperson(s) of the Local Committee**

### *Co-Chairs*

- Dr. Kwang-Woo Kim, PAL
- Dr. Chang-Hee Lee, KAERI

### *Members*

- Dr. Jehan Kim, PAL
- Dr. Kyeong Sik Jin, PAL
- Dr. Hyeongjoo Ahn, PAL
- Dr. Taehwan Kim, HANARO, KAERI
- Dr. Baik Suk Seong, HANARO, KAERI
- Dr. Young Soo Han, HANARO, KAERI

## **6. Name(s) of the Chairperson(s) of the Advisory Committee**

### *Co-Chairs*

- Prof. Hyun Hoon Song, Hannam Univ.
- Prof. Kilwon Cho, POSTECH
- Prof. Kookheon Char, SNU

### *Members*

- TBD in near future

## **7. Name(s) of the International Advisory Committee**

- TBD in near future

## **8. Evidences of previous successful conference organizations**

- The 5<sup>th</sup> Pacific Polymer Conference (1998, Kyeongju, Korea)
- The 9<sup>th</sup> International Conference on Synchrotron Radiation Instrumentation (SRI 2006, co-hosted by PAL & JASRI, Daegu, Korea)
- The 5<sup>th</sup> Asia and Oceania Forum for Synchrotron Radiation Research (AOFSSRR 2010, hosted by PAL, Pohang, Korea)
- The 17<sup>th</sup> International Conference on Accelerators and Beam Utilizations (ICABU 2013, November 11-13, Daejeon, Korea)
- The 18<sup>th</sup> International Conference on Accelerators and Beam Utilizations (ICABU 2014, November 12-14, Jeonju, Korea)

- The 19<sup>th</sup> International Conference on Accelerators and Beam Utilizations (ICABU 2015, November 4-6, Gyeongju, Korea)
- The Annual Synchrotron Radiation Users' Workshop (since 1988, Pohang, Korea)
- *More*

## **9. Details of any special scientific sessions or initiatives that are proposed**

- Polymers
- Bio- and medical materials
- Energy materials
- Hybrid nanocomposites
- Colloids and complex fluids
- Magnetic materials
- Interfaces and surfaces
- Dynamics
- Data analysis, and software
- XFEL/FEL sciences (CXI, XPP, SFX, XPCS, and etc.)
- Instrumentations & new facilities
- Industrial applications
- Others

## **10. Details of any local initiatives or legislation that may promote (e.g., scientific or cultural exchange agreements) or hinder (e.g., visa restrictions, travel embargoes) the attendance of delegates from various parts of the world**

We have chosen the venue (Gyeongju Hwabaek International CONvention Center (HICO)) to simplify attendance logistics.

### **Visa Information**

Any foreign visitors wishing to enter the Republic of Korea must have a valid passport and obtain a Korean visa before the visitation. However, people of 103 countries who wish to visit Korea temporarily are permitted to enter without a visa according to visa-exemption agreements or in accordance with principles reciprocity or national interest. The comprehensive information is provided at [http://www.mofa.go.kr/ENG/visa/application/index.jsp?menu=m\\_40\\_10](http://www.mofa.go.kr/ENG/visa/application/index.jsp?menu=m_40_10). An official letter of invitation will be sent to any registrant upon request. This invitation, however, implies no obligation for visa. Application form for the invitation letter will be updated when it is ready.

• **Countries under visa exemption agreement**

Total	Passport Type	Countries		
<b>103 countries (up to 90 days unless noticed otherwise)</b>	Diplomatic (2 countries)	Turkmenistan (30 days), Uzbekistan (60 days)		
	Diplomatic & Official (35 countries)	Algeria, Argentina, Azerbaijan (30 days), Bangladesh, Belarus, Belize, Benin, Cambodia (60 days), China (30 days), Cyprus, Croatia, Ecuador (Diplomatic: as needed for work performance, Official: 3 months), Egypt, Gabon, India, Iran (3 months), Japan (3 months), Kuwait, Laos, Mongolia, Pakistan (3 months), Paraguay, the Philippines (Unlimited), Ukraine, Uruguay, Vietnam, Moldova(90 days within 180 days), Tajikistan, Georgia, Myanmar, Bolivia, Kyrgyz (30 days), Armenia, Angola (30 days), Oman		
	Diplomatic & Official & Ordinary (66 countries)	Asia (4 countries)	Malaysia, New Zealand, Singapore, Thailand	
		America (25 countries)	Antigua and Barbuda, Bahamas, Barbados, Brazil, Chile, Colombia, Commonwealth of Dominica, Costa Rica, Dominican Republic, El Salvador, Grenada, Guatemala, Haiti, Jamaica, Mexico, Nicaragua, Panama, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Venezuela (Diplomatic/Official: 30 days, Ordinary: 90 days), Uruguay	
		Europe (32 countries)	[Schengen countries (except for Slovenia out of the 26 Schengen countries)], Austria (Diplomatic/Official: 180 days), Belgium, Czech Republic, France, Germany, Greece, Hungary, Italy, Liechtenstein, Lithuania, Latvia, Luxemburg, Malta, Netherlands, Poland, Portugal (60days), Slovakia, Spain, Switzerland * Denmark, Estonia, Finland, Iceland, Norway, Sweden (90 days within 180 days)	
		Europe (32 countries) Africa & Middle East (5 countries)	[Non-Schengen countries] Bulgaria, Ireland, Romania, Turkey, UK, Kazakhstan * Russia (60 days in a row, not exceeding 90 days within 180 days)	
		Israel, Liberia, Morocco, Tunisia(30 days), Lesotho(60 days)		

\*Italy: Despite visa exemption for a stay of up to 60 days under agreement, the reciprocity principle allows a stay of up to 90 days from June 15, 2003.

\*Japan: Visa exemption for a stay of up to 90 days for ordinary-passport holders based on exchange of note verbale (Visa exemption agreement concluded for diplomatic and official-passport holders).

• **Nationals of countries / regions allowed for visa-free entry(up to 30 days unless noticed otherwise) into Korea**

<b>Continents</b>	<b>Countries or Regions</b>
Asia or regions (6 countries)	Brunei (30 days), Hong Kong (90 days), Indonesia (diplomatic and official, 30 days), Japan (90 days), Macau (90 days), Taiwan (90 days)
America (7 countries)	Argentina (30 days), Canada (6 months), Ecuador (90days), Guyana (30 days), Honduras (30 days), Paraguay (30 days), United States (90 days)
Europe (11 countries)	Albania (30 days), Andora (30 days), Bosnia-Herzegovina (30 days), Croatia (90 days), Cyprus (30 days), Monaco (30 days), Montenegro (30 days), San Marino (30 days), Serbia (90 days), Slovenia (90 days), Vatican (30 days)
Oceania or regions (13 countries)	Australia (90 days), Fiji (30 days), Guam (30 days), Kiribati (30 days), Marshall Islands (30 days), Micronesia (30 days), Nauru (30 days), New Caledonia (30 days), Palau (30 days), Samoa (30 days), Solomon Islands (30 days), Tonga (30 days), Tuvalu (30 days)
Middle East and Africa (12 countries)	Bahrain (30 days), Egypt (30 days), Kuwait (30 days), Lebanon (diplomatic and official 30 days), Mauritius (30 days), Oman (30 days), Qatar (30 days), Saudi Arabia (30 days), Seychelles (30 days), South Africa (30 days), Swaziland (30 days), United Arab Emirates (30 days)

**11. Details of the proposed venue and its infrastructure (which must be capable of seating 350 delegates in Plenary sessions and provide for multiple parallel sessions, poster sessions, and a commercial exhibition)**

The Gyeongju Hwabaek International Convention Center (HICO) has more than 31,336 square meters of versatile. For more information, please refer below.

- Meeting space: 1 convention hall (3,421 m<sup>2</sup>), 12 meeting rooms (1,556 m<sup>2</sup>)
- Maximum number of individual meeting rooms: 15
- Exhibit space: 1 exhibition hall (2,273 m<sup>2</sup>)
- Subsidiary facilities: Simultaneous interpretation rooms, Restaurant, Catering kitchen, Business center.
- Parking: 520 vehicles at one time
- Capacity Largest room: Convention hall (3,421 m<sup>2</sup>)
- Theater-type: 3,500 persons Classroom-type: 1,800 persons Banquet-type: 1,600 persons
- Exhibition hall: 115 booth (3 m × 3 m booth)

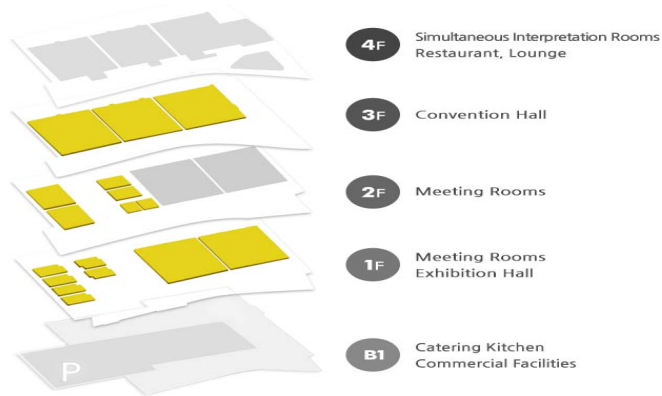
**12. A representative picture of, or a link to the website for, the venue**

HICO website: <http://www.hicocity.kr/>

**Hwabaek** was the name of the council of aristocrats who ruled Korea for 1,000 years (57 BC–935 AD). They met here to decide what was good for all.



*Floor Plans*



**13. Details of the convenience of delegate travel to and from the venue**

Gyeongju is conveniently linked to three airports: two international and one domestic.



- Singyeongju Express Train Station (KTX): 20km, 30 minutes
- Gyeongju Train Station: 9km, 15 minutes
- Gyeongju Express Bus Terminal: 10km, 17 minutes
- Gyeongju Highway IC: 13km, 20 minutes
- Gimhae International Airport: 90km, 90 minutes
- Daegu International Airport: 75km, 66 minutes
- Ulsan Airport: 30km, 60 minutes



#### **14. Details of the capacity, cost and distance of delegate accommodation (a range of accommodation is preferred)**

Bomun Lake Resort complex of Gyeongju City:

- Total: 21 hotels, 4,245 rooms
- 3 km radius from HICO: 14 hotels, 1,071 rooms
- From 3 km to 10 km radius from HICO: 5 hotels, 1,531 rooms
- From 10 km to 30 km radius from HICO: 2 hotels, 196 rooms

#### **15. Details of support for students, young scientists, and scientists from under-privileged countries**

We are very sure to get enough funds for supporting students, young scientists, and scientists from under-privileged countries. We will approach Korean funding agencies for support including the Ministry of Science, ICT and Future Planning, Pohang Accelerator Laboratory, Korea Atomic Energy Research Institute HANARO, KOSUA, KNBUA, POSTECH, and UNIST. Also we will find some financial supports from Korean industries.

#### **16. Details of the likely climatic conditions at the venue on those dates**

In general, from September through November, the mild days of fall make it the most pleasant time of the year in Korea. The temperature varies greatly from day to night (typically high: 26 °C, low: 12 °C). The mountains, when blanketed with vivid golden and red autumn leaves under the clear blue sky, are breathtaking.



#### **17. Details of local tourist attractions and possible extra-curricular social engagements**

##### **UNESCO World Heritages**

UNESCO World Heritage refers to both cultural and natural heritage sites registered on the World Heritage List. In November 1972, UNESCO adopted the “Convention Concerning the Protection of the World Cultural and Natural Heritage” in the General Conference during its seventeenth session. Under the Convention, the World Heritage committee established a World Heritage List that includes cultural and natural heritage with outstanding value whose conservation is recognized to be in the interest of all humanity.

There are three cultural heritage sites in the city of Gyeongju. In 1995, Seokguram Grotto and

Bulguksa Temple were assigned as World Heritage Sites. In 2000, a large part of Gyeongju was chosen as the “Gyeongju Historic Areas,” and, in 2010, Yangdong Village became the third heritage site in the Gyeongju area. As of July 2014, Korea has ten cultural heritage sites and one natural heritage site.

### **Seokguram Grotto**



A Buddhist temple constructed from natural rocks of granite, Seokguram Grotto brings together Art, Religion and Architecture and creates a special place that is both thrilling and restful.

*Designated as World Cultural Heritage Site in 1995*

### **Bulguksa Temple**



The Bulguksa Temple contains fascinating architecture that is not easily seen anywhere else in Asia! The temple was constructed in a way to illustrate Buddhist doctrines and it is still intriguing to visitors today.

*Designated as World Cultural Heritage Site in 1995*

### **Gyeongju Historic Areas**



A large part of Gyeongju was registered on UNESCO’s World Heritage list on November 2000 as the “Gyeongju Historic Areas.” Over 50 relics are divided into five major sections: Namsan, Wolseong, Daereungwon, Hwangnyongsa and Sanseong.

*Designated as World Cultural Heritage Site in 2000*

### **Yangdong Village**

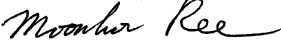


In Yangdong Village, descendants of ancient Korean clans and royalty still practice the Confucian way of life. The village was designed to be suitable for the Korean climate and follow Confucian ideas. Houses face the water with their backs to the mountains.

*Designated as World Cultural Heritage Site in 2010*

Again, the great efforts of the chair and members of the SAS IUCr are appreciated very much.

Sincerely,

  
Moonhor Ree