

The 2nd International Symposium on **Applied Silicon Chemistry**

October 24-25, 2013 KIST, Seoul, KOREA

New Si-Based Materials for High-Tech Industry: New Challenge and Innovation





Hosted by the Korean Silicon Society



























THE 2ND INTERNATIONAL SYMPOSIUM ON APPLIED SILICON CHEMISTRY

October 24-25, 2013

Korea Institute of Science and Technology, Seoul, Korea

Website: www.ksis.re.kr/isasc2

Hosted by the Korean Silicon Society



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October 24-25, 2013 | KIST, Seoul, KOREA

http://www.ksis.re.kr/isasc2



+ ISASC-2

Invitation

Dear Colleagues,

On behalf of the organizing committee of the 2nd International Symposium on Applied Silicon Chemistry (ISASC-2), I am very pleased to invite you to attend the ISASC-2, which will be held at Korea Institute of Science and Technology (KIST) from the 24th to the 25th of October, 2013.

The theme of this upcoming ISASC-2, "New Si-Based Materials for High-Tech Industry: New Challenge and Innovation" has been chosen to provide an opportunity to have an insight into the outlook for the future in the field of Applied Silicon Chemistry. Plenary lectures (PL) along with the theme, invited lectures (IL), and poster presentations in a variety of topics are being organized for the Symposium.

The symposium will also be an invaluable chance for participants to expand their network with professionals and distinguished invited lecturers from around the world.

We would be grateful, if you would kindly accept our invitation to attend the Symposium. We cordially invite you to ISASC-2, KIST, Korea in 2013.

Bok Ryul YooChairman
Organizing Committee of ISASC-2

Venue

The ISASC-2 will be held at following from October 24 to 25, 2013. Convention Hall, International Cooperation Bldg. Korea Institute of Science and Technology Hwarangno14-gil 5, Seongbuk-gu, Seoul 136-791, KOREA Homepage: http://www.kist.re.kr



Theme

New Si-Based Materials for High-Tech Industry: New Challenge and Innovation

Contact Information

Symposium Chair Dr. Bok Ryul Yoo Korea Institute of Science and Technology

E-mail: bryoo@kist.re.kr Phone: +82-2-958-5087 Fax: +82-2-958-5089

For general queries on ISASC-2: isasc@ksis.re.kr Conference homepage: http://www.ksis.re.kr/isasc2

Important Deadlines

Abstract Submission: Sept 17, 2013 (extended)
Early-Bird Registration: Sept. 30, 2013 (extended)

Booking for Social Programs*: Oct. 4, 2013 *Welcome Reception, Symposium Banquet, Excursion



+ Organizing Committee

Myong Euy Lee (Yonsei University) Honorary Chairman

Bok Ryul Yoo (KIST) Chairman of ISASC-2
Young Tae Park (Keimyung University)
Joon Soo Han (KIST)
Hyun-Dam Jeong (Chonnam National University)
Hyeon Mo Cho (Yonsei University)
Hyojong Yoo (Hallym University)
Mun Kyum Kim (YCAM)
Geun-Mook Choi (KCC)
Jin-soo Jang (HRS)
Jong Sam Lee (Huenvi)
Byoung Seob Lee (GL Chem)

+ Call for Abstracts

Abstract submission deadline is September 17, 2013 (extended)

The ISASC-2 Committee invites the submission of Oral (20 min) or Poster abstracts on the symposium theme. Abstracts will be presented in the form of Oral or Poster presentations during the symposium. The submission of an abstract implies your consent to publish it in the Abstract Book. The Abstract submission deadline is September 10, 2013. You must submit your abstract through e-mail (isasc@ksis.re.kr). Before you submit your abstract, please read the Guidelines of Abstract Submission.

Oral Presentation

20 minutes each. Due to time limitation, several presentations will be selected by the organizing committee.

Poster Presentation

Each poster will be numbered; all authors should be present at their poster location during the scheduled time of the poster session. All posters will remain on site for the duration of the conference.

Guidelines of Abstract Submission

- Please download Abstract Template and prepare as an abstract file for both oral and poster presentation. We recommend you convert your abstract file to a PDF format, and submit both of files (Word and PDF format).
- You must submit your abstract files through an e-mail (isasc@ksis.re.kr).
- Please state your preference for an oral or a poster presentation in the e-mail.
- The program committee reserves the right to accept or reject abstracts and to designate them for oral or poster presentation.
- The presenter whose submission is accepted must register as a participant by Sept. 30, 2013 (early-bird registration) or else the abstract will be withdrawn from the program.



+ Program

Program at a Glance

Wed. Oct. 23	Thur. Oct. 24	Fri. Oct. 25	Sat. Oct. 26
Plenary Lecture	09:00-09:50 Registration		
Invited Lecture Oral Presentation	09:50-10:10 Opening	09:30-10:20 Prof. West	
	10:10-11:00 Dr. Weidner	10:20-10:40 Prof. Yoo	
	11:00-11:35 Prof. Kim	10:40-11:00 Break 11:00-11:35 Prof. Unno	
	11:35-11:55 Prof. Kang	11:35-12:10 Dr. Kim	
	11:55-13:20 Lunch	12:10-13:20 Lunch	
	13:20-13:55 Dr. Itoh	13:20-13:50 KSiS Meeting	
	13:55-14:30 Dr. Jang	13:50-14:25 Dr. Imai	Excursion
	14:30-14:45 Break	14:25-15:00 Prof. Wu	
	14:45-15:20 Prof. Xu	15:00-15:35 Prof. Jeong	
	15:20-15:55 Prof. Cho	15:35-15:55 Break	
	16:00-18:00 Poster	15:55-16:30 Prof. Feng	
		16:30-17:05 Dr. Lee	
		17:05-17:25 Closing	
18:00-20:00 Reception		18:00-20:00 Banquet	



Scientific Program

Thursday Oct	
	Opening Ceremony
10:10-11:00	(PL1) Dr. Richard Weidner (Wacker Chemie, Germany)
	Reinforcement of Alpha-Silane Terminated Polyethers
11:00-11:35	(IL1) Prof. Dongpyo Kim (Pohang Univ. of Science and Technology, Korea)
	Utilization of Silicon Based Material for Microfluidic Applications
11:35-11:55	(OP1) Prof. Sang Ook Kang (Korea University)
	Silicon Based Inorganic/Organic Hybrid Materials for Highly Efficient Deep Blue
	Phosphorescent OLEDs
11:55-13:20	Lunch
13:20-13:55	(IL2) Dr. Maki Itoh (Dow Corning, Japan)
	Silicone Encapsulants for High Brightness LED
13:55-14:30	(IL3) Dr. Stanley Jang (MPM, Korea)
	Silicone Liquid Optically Clear Adhesive (LOCA) for
	High End Automotive Touch Screen Displays
14:30-14:45	Coffee Break
	(IL4) Prof. Caihong Xu (Chinese Academy of Sci., China)
	New Si-N Unit-containing Polymers and Their Application
15:20-15:55	
	Si-based Anode Materials for Li-ion Batteries
15:55-16:00	
	Poster Session
10.00 10.00	T OSCOT DESIGNATION
Friday Oct. 25	5 2013
-	(PL2) Prof. Robert West (Univ. of Wisconsin, U.S.A.)
07.30 10.20	Organosilicon Electrolytes for Lithium Ion Batteries
10:20-10:40	(OP2) Prof. Hyojong Yoo (Hallym University)
10.20-10.40	Spherical Nanoparticles with a Silica Shell and Gold Nanodots Assembly as the Core
10:40 11:00	Coffee Break
11:00-11:35	"
11.00-11.33	Functional Materials from Silanols
11.35 12.10	(IL7) Dr. Hyunwoo Kim (KCC, Korea)
11.33-12.10	Structure and Electronic Properties of Silicon-Lithium by the First Principle Method
12:10-13:20	·
	Korean Silicon Society Meeting (IL8) Dr. Takafumi Imai (MPM, Japan)
15:30-14:23	· · · · · · · · · · · · · · · · · · ·
14.25 15.00	Current Silicone Industry and Potentiality of Organosilicon Materials
14:23-13:00	(IL9) Prof. Chuan Wu (Hangzhou Normal Univ., China)
	Phenyl-Modified MQ and MTQ Silicone Resins:
15.00.15.25	Preparation, Structure Characterization and Thermal Performance
15:00-15:35	(IL10) Prof. Hyun-Dam Jeong (Chonnam National Univ., Korea)
15 25 15 55	Silicon Quantum Dot Solids and Polymers
	Coffee Break
15:55-16:30	(IL11) Prof. Shengyu Feng (Shandong Univ., China)
	Luminescent Organosilicon Materials:
4.00.17.5	Synthesis, AIE Properties, Color-Tuning, and Their Applications
16:30-17:05	(IL12) Dr. Dae Ho Lee (Korea Electrotechnology Research Institute, Korea)
	Si-based Organic and Inorganic Materials in Multi-scale Epoxy Nano/Micro-composites
17:05-17:25	Poster Awards & Closing Remark



+ Social Activities

The following social programs have been designed to provide participants with a chance for quality relaxation and entertainment during the Symposium. For making successful events, please book your seat before Oct. 4, 2013 via isasc@ksis.re.kr.

Welcome Reception October 23 PM 6:00

All registered participants are cordially invited. Place: Holiday Inn Seongbuk 2nd Fl. Orchid Hall

Price: Free for all participants and accompanying persons (Pre-booking

required).

Symposium Banquet October 25 PM 6:00

Place: Holiday Inn Seongbuk B2 Iris Hall

Price: Free for active participants and accompanying persons (Pre-

booking required). KRW 30,000 for students.

Free buses will be offered from KIST to the Banquet place.





Excursion October 26 (Saturday) AM 9:00 - PM 9:00

Bukaksan (Seoul Fortress Walking Course) - Lunch - Gyeongbokgung (Royal Palace & Museum) - Namsan

Seoul Tower - Dinner Price: KRW 50,000

In case of rain, the tour course can be changed.









+ Registration

Early-Bird registration deadline is extended to September 30, 2013

Category	Before Sept. 30, 2013	After Oct. 1, 2013
Active participant ¹	KRW 300,000	KRW 350,000
Student/Postdoc. ²	KRW 100,000	KRW 120,000
Accompanying person ³	KRW 50,000	KRW 70,000

- 1. Active participant registration fee includes conference materials, coffee breaks, lunches, a welcome reception, and a banquet.
- 2. Student participant registration fee includes conference materials, coffee breaks, lunches, and a welcome reception. (Extra fee required for a banquet: 30,000 won)
- 3. Accompanying person registration fee includes conference materials, coffee breaks, lunches, a welcome reception, and a banquet.

+ Accommodations

For foreign participants, organizing committee can arrange accommodations when booking request is received. For booking request, please send an e-mail to bryoo@kist.re.kr with stay duration and preferred room type.

Domestic participants should make their own hotel reservation personally.

Recommended Accommodations nearby KIST (Early booking is recommended!) Guest House of KIST

Inside of KIST campus, 15 min by walk

Limited number of rooms are available for foreign participants during the Symposium period. Fully Booked

Holiday Inn Seongbuk http://www.holiday.co.kr/

1.7 km from KIST (7 min by Taxi; fare about 2,500 won)

Hotel for invited lecturers. Five-star business hotel.

Discounted Room Rate for Deluxe Double: 120,000 won (+ extra 10% service charge and 10% tax)

Golden Forest Residence http://gfresidence.co.kr/

5.4 km from KIST (15 min by Taxi; fare about 5,500 won)

Residence type rooms which are also furnished with washing machine and kitchen facilities.

Discounted Room Rates: 75,000 won for Std. Double or Twin; 90,000 won for Deluxe Twin (Double + Single) or Golden Double; All rates include service charge and tax; extra 5,000 won/person for American breakfast.

Toyoko Inn Seoul Dongdaemun http://www.toyoko-inn.com/e_hotel/00208/index.html

7.5 km from KIST (20 min by Taxi; fare about 7,000 won)

A branch of Japanese business hotel chain. Close to the Dongdamun Shopping Town.

No discounted rate available. Please refer homepage for room rates.

When moving from Holiday Inn, Golden Forest Residence, or Toyoko Inn to Symposium hall by taxi, getting off at the middle gate will be faster than the north gate of KIST.

KIST also has negotiated special rates at the following hotels: The Shilla, Grand Hyatt, Seoul Palace, Koreana, Seoul Royal, Kukdo, Lotte City, Ramada Seoul, East Gate Tower, Victoria.

*Please contact organizing committee for booking.



+ Sponsors

The 2nd International Symposium on Applied Silicon Chemistry is supported by the following.

- The Korean Silicon Society
- Research & Education Center for Advanced Silicon Material, Yonsei Univ.
- Korea Institute of Science and Technology
- Korea Research Association of Silicone Industry

Financial Support





DAMI POLYCHEM



KCC (Main sponsor)

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+ General Information

About the International Symposium on Applied Silicon Chemistry

ISASC-1 October 22-23, 2010 at Yonsei Univ., Wonju, Korea
"The 21st Century's Aspects of Applied Silicon Chemistry"
Symposium Chair: Myong Euy Lee (Yonsei Univ.)

Official Language

The official language of the Scientific Program is English. There will be no simultaneous translation during the Symposium.

Audio-Visual Equipment

Symposium hall will be equipped with the following:

- 1 large screen
- 2 LCD monitors connected to the presentation projector
- 1 laser pointer equipped with wireless presenter
- 1 projector
- 1 laptop computer for presenter
- 1 wireless microphone for presenter

Symposium Publication

The Final Program and Book of Abstracts will be available upon arrival at the Symposium.

Name Badges

Symposium registrants are required to wear their name badge at all times during the symposium in order to gain entry to the scientific sessions, restaurant, and social activities.

Lunches

On October 24 and 25, lunch will be served at main restaurant (Administration Bldg.) to all participants and accompanying persons.



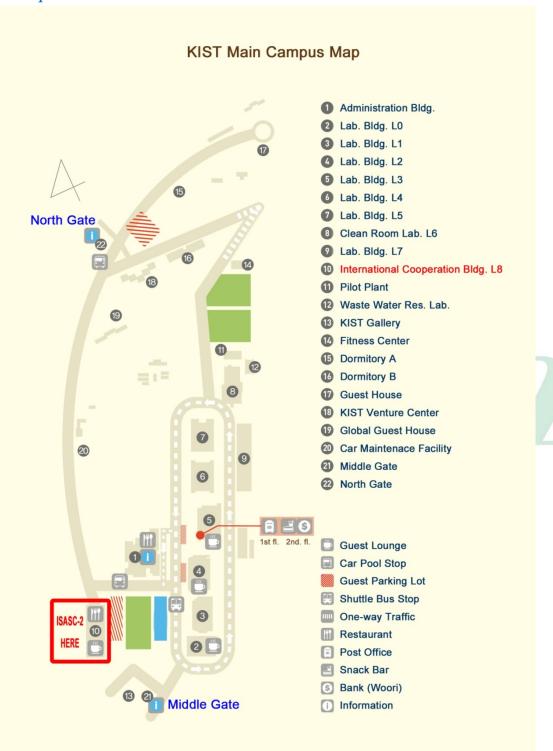
Internet Access

WiFi access for your personal devices is possible in the International Cooperation Bldg. A guest password will be provided on-site.

Urgent Messages

Use e-mail address isasc@ksis.re.kr for sending urgent messages during the Symposium. Organizer will pass the message to the designated participant.

KIST Campus Information



http://www.ksis.re.kr/isasc2



+ Transportation

Address and Telephone Number

Korea Institute of Science and Technology (KIST)

Hwarangno 14-gil 5

Seongbuk-gu, Seoul, 136-791, Republic of Korea Telephone: +82-2-958-5114 Fax: +82-2-958-5471

Address in Korean: (우: 136-791) 서울특별시 성북구 화랑로 14길 5 **Subway station** nearby KIST (north gate) is **Sangwolgok station Line No. 6**.



- ISASC-2 will be held at the Convention Hall, International Cooperation Bldg. of KIST.
- Walking Time: North gate to convention hall 15 min; Middle gate to convention hall 4 min; Main gate to middle gate 15 min.
- You can take off taxi at middle gate or north gate. Taxi cannot pass inside of KIST.
- You can drive into KIST and parking is allowed at guest parking lots. But the guest parking spaces are limited; we strongly recommend using public transportation.

Transportation to KIST from International Airport

- Incheon International Airport http://www.airport.kr/eng/
- Gimpo International Airport http://www.airport.co.kr/mbs/gimpoeng/
- Airport Railroad Express (AREX) http://english.arex.or.kr/jsp/eng/main.jsp
- Seoul Subway Map http://www.smrt.co.kr/program/cyberStation/main2.jsp?lang=e



Airport limousine buses leave regularly from the clearly marked stops outside the terminal building to designated stops in Seoul. Unfortunately, there is no route to get directly to KIST. Take the route number 6101, take off at Holiday Inn Seongbuk and take a taxi to KIST (Middle gate or North gate). The bus fare can be paid either in cash or with a credit card at the bus ticket booths. You can also pay the fare in cash when you get on the bus. Symposium hall is closer from the middle gate than the north gate of KIST..



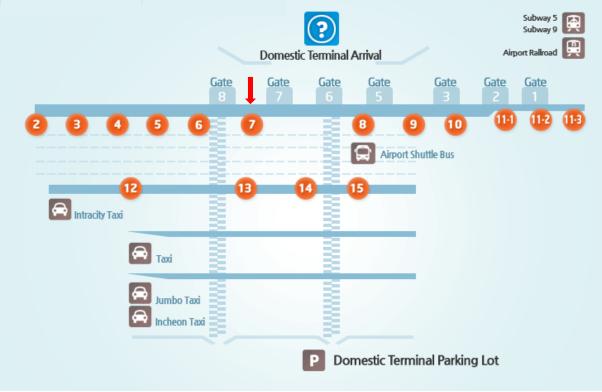
Route number 6101 (Incheon Airport -- Gimpo Airport -- Dobong, Seongbuk route)

- Platforms at Incheon Airport: 3B and 10A (You can take the bus at both stops.)
- Platform at Gimpo Airport: #7
- Intervals: 15~25 min.
- Fare: 14,000 won from Incheon Airport; 7,000 won from Gimpo Airport

Bus Stops of Incheon Airport Terminal (3B & 10A stop)



Bus stops of Gimpo Airport Terminal (#7 stop)





Route of Airport Limousine Bus No. 6101

http://www.calt.co.kr/common/common.do?jsp path=user/eng/trans/route 6101&menu id=trans 0202





Airport Railroad (AREX) + Subway

- Buy a ticket to Sangwolgok Station at the airport station. Tickets can be purchased at the ticketing machines or at the ticket office.
- Board the train and transfer to Subway Line No. 6 (bound to Bonghwasan) at Gongdeok Station.
- Get off at Sangwolgok (KIST) Station. Exit the subway station through Exit 4.
- Walk straight about 100 meters and turn left at the small street leading to KIST's north gate.
- Fare: 4,250 won from Incheon Airport and 1,550 won from Gimpo Airport.

By Taxi (Easiest option but expensive)

Taxis are conveniently located just outside the terminal building. Taxi fare operates on both of distance and time, and the passenger will also be responsible for the cost of highway tolls. There are several types of taxi, such as standard, deluxe, and call van. The cost will vary depending on traffic conditions and type of taxi, but generally runs about 70.000~90,000 won from Incheon airport to KIST. We recommend you get out of airport via Airport Railroad or Limousine, and then take a taxi in downtown of Seoul.

For the taxi driver:

(우: 136-791) 서울특별시 성북구 화랑로 14길 5

North gate: 월곡역과 상월곡역 사이 하월곡삼거리 우회전 » KIST 북문에서 내려주세요.

Middle gate: 홍릉 국방연구원과 산림과학원 사이 입구로 진입하여 KIST 중문에서 내려주세요.



+ Tour Information

Weather

- Typical weather of Seoul during the Symposium period is sunny with clear sky. And autumn foliage of Seoul area will be climax at that period.
- Average temperature of Seoul at October 24~25: 12.5 °C (High 17 °C, Low 8 °C; Care for daily temperature variation)

Seoul Tour Guide

http://www.visitseoul.net/

The Official Tour Guide to Everything Seoul by Seoul Metropolitan Government (English, Japanese, Chinese, and Mobile pages are available)

Youtube Seoul Metropolitan Channel (English)

http://www.youtube.com/visitseoul

Korea Tour Guide

http://www.visitkorea.or.kr/

The Official Tour Guide to Korea by Korea Tourism Organization (Foreign-language pages are available)

Recommended Tour Points Nearby to KIST (within 15 km)

- 1. National Museum of Korea
- 2. Gyeongbokgung (Royal palace & Museum)
- 3. Insadong (Traditional cultural village)
- 4. Buckchon (Traditional Korean house street)
- 5. Seoul Tower (Landmark of Seoul)
- 6. Bukaksan (Seoul fortress walking Course)
- 7. Dongdaemun (Shopping town)
- 8. Namdaemun (Traditional market)
- 9. Noryangjin Fish Market
- *Seoul City Tour Bus

