#### First Circular for

# International Crystallization Workshop

4<sup>th</sup> July, 2008 Room 117, Innovation Hall Korea University Seoul, Korea

Organized by

Research Group of Crystallization Technology

#### Sponsored by

BK21 (Design of Nano Particles, Kyunghee University) BK21 (Department of Chemical and Biological Engineering, Korea University)

#### **Supported by**

Division of Separation Technology, Korean Institute of Chemical Engineers.



## Welcome

Dear Colleagues,

On behalf of Organizing and Scientific Committees and board of Korean Institute of Chemical Engineers, it is my great pleasure to announce the International Workshop on Crystallization held in Korea on July 4, 2008 with the purpose to encourage communication and cooperation among the experts, engineers and scholars in the related areas. The crystallization has been a typical unit operation for separation and materials processing and become recently reconsidered as an emerging technology as advanced industries move toward front edges. Fundamental understanding on the crystal nucleation is of great use for designs of nano and photonic crystals, and the molecular growth of the crystals always includes the principles of molecular recognition applicable to the molecular separation technology for fine chemicals. Also, the polymorphs of API are always a hot issue in the pharmaceutical industry. For past several decades, the chemical industries of Asian countries have rapidly been developed and broadly expanded from chemical products to bio-products and from bulk chemicals to fine chemicals. During this period, a number of Asian experts have greatly contributed on a new crystallization technology required by the expanding industries in their countries. Now, I, based on the consensus of necessity, am sure a time to organize a forum for the exchange of their experiences and knowledge to promote crystallization industry in Asia. I wish this workshop be the first step toward a great advance of crystallization

I wish this workshop be the first step toward a great advance of crystallization technology in Asia and would like to welcome you to join us.

Sincerely

Woo-Sik Kim, Professor Chief Organizer Kyunghee University



## **Committees**

#### **□**Chief Organizer

Woo-Sik Kim (Kyunghee University)

#### **☐** Organizing Committee

Daeryook Yang (Korea University) Sang Yong Kim (KITECH) Jong-Pal Hong (KNDT&I) Izumi Hirasawa (Waseda University)

#### **☐** Scientific Committee

Kwang-Soon Lee (Sogang University) Jeong Won Kang (Korea University) Jong-Hwi Lee (Jung Ang Univrsity) Hiroshi Ooshima (Osaka City University)

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### Workshop Guide – International Crystallization Workshop

# **Technical Program**

Date	Time	Schedule	
4 <sup>th</sup> July, 2008 (Friday)	08:30-09:00	Registration	
	09:00-09:30	Opening Remark	
	09:30-10:00	David Wei (Tianjin University, China): Crystal Growth and Polymorphic Transformation of Carbamazepine Crystallization	Chairman : Sang-Yong Kim
	10:00-10:30	Woo-Sik Kim (Kyunghee University, Korea): Application of Couette- Taylor Vortex Flow to Continuous Crystallizer: Drowning-out Crystallization and Phase Transformation of GMP	
	10:30-11:00	Jeong Won Kang (Korea University, Korea):Purification of n-Vinyl-Pyrrolidinone + 2-pyrrolidinone mixtures using plate-type melt crystallizer	
	11:00-11:30	Hiroshi Ooshima (Osaka City University, Japan) : Control of Crystal Size Distribution of Organic Compounds	
	11:30-12:00	Jong-Hwi Lee (Jung-Ang University, Korea) : Polymer-directed Crystallization of Drugs	
	12:00-13:30	Luncheon	
	13:30-14:00	Ka Ming Ng (Hong Kong Univ.of Science & Technology, HK): Crystallization Process Synthesis - From Solubility Data to a Chemical Plant	Chairman : Izumi Hirasawa
	14:00-14:30	Daeryook Yang (Korea University, Korea): Behavior of Metastable limit and its applications to optimal operation	
	14:30-15:00	Sang Yong Kim (KITECH, Korea) : Salting-out Crystallization of Synthetic Reactive Dyes	
	15:00-15:15	Coffee Break	
	15:15-15:45	Clifford Tai (National Taiwan University, Taiwan): Preparation of Ultrafine Particles using the High-Gravity Technique	Chairman: Daeryook Yang
	15:45-16:15	Ilwon Kim (Soongsil University, Korea): Polymorph-selective crystallization of calcium carbonate inspired by biomineralization	
	16:15-16:45	Izumi Hirasawa (Waseda University, Japan) : Creation of Nano Size Crystals through Reaction Crystallization in Restrained Environment	
	16:45-17:15	Huishi Guo (Kyunghee University, Korea /Shaoguan University, China): Development of Universal Method for Chiral Recognition by Quartz Crystal Microbalance.	
	17:15-17:30	Closing Remark	



# Registration

The registration fee, which includes the book of abstracts, session attendance, and refreshments, will be 100,000 Won (approximately 10,000 Yen and 100 USD) for all participants. On-site registration is only available at the workshop front desk.

## Accommodation

Rooms are available in the Korea University (guest house) and hotels in Seoul. Contact chief organizer (Prof. Woo-Sik Kim) or Professor Jeong Won Kang for early reservation.

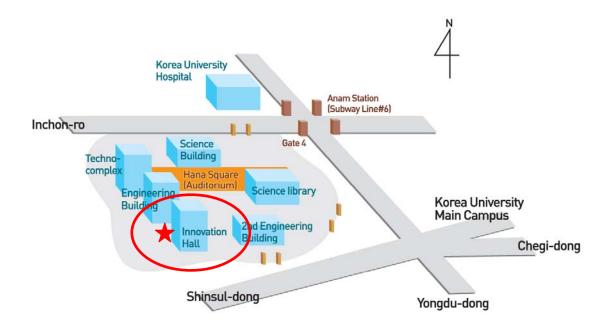
☐ Professor Woo-Sik Kim	(wskim@khu.ack.kr)
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<sup>☐</sup> Professsor Jeong Won Kang (<u>jwkang@korea.ac.kr</u>)

# Workshop Venue

The workshop will be held in <u>Room No 117, Innovation Hall</u> of Korea University. The Innovation Hall is located in south west side the Science and Engineering Campus, Korea University. The easiest way to the **Science and Engineering Campus** of Korea University is to take subway (Line Number 6) and get off at Anam Station. Exit at the Gate number 4 and follow the sign to Science and Engineering Campus of Korea University.





## **About Seoul**



Seoul is a city of infinite discoveries. The ancient capital of an ancient land, Seoul is a city where the traditional and the cutting-edge exist side-by-side in perfect harmony. It's a dynamic city that never sleeps, and the list of things to do is endless, from sampling the outstanding cuisine served in the city's excellent restaurants to climbing the rock faces that overlook the city. Come to Seoul, and learn why so many travelers fall in love with this fast-paced but relaxing city.

Despite being a teeming metropolis of over 11 million (and growing), Seoul is a remarkably safe city. Violent crime rates are exceedingly low compared to other major cities around the world. Generally speaking, you can walk around just about any part of town at any part of the day and not feel threatened in any way. Violent crimes targeting foreigners are extremely rare.

## **Climate**

July in Seoul is the hottest season of summer. The summer in Seoul is normally hot and humid. There may be lengthy rainy days. Thus it is recommended to prepare light suit and umbrella during the conference. Generally, the temperature vary from 20 to 35 °C in July.

