# Organizing Committee

Xiaoshu Cai University of Shanghai for Science and Technology Hongxun Chen China Waterborne Transport Research Institute Jianfeng Chen Beijing University of Chemical Technology

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Institute of Process Engineering, CAS Wei Wang Yanmin Wang South China University of Technology

Fei Wei Tsinghua University

Xi'an University of Architecture and Technology Delong Xu Peng Yan Chinese Academy of Meteorological Sciences

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Fugen Zhang Omec Instruments Ltd.

Lide Zhang Institute of Solid State Physics, CAS Renjian Zhang Institute of Atmospheric Physics, CAS

Zhong Zhang National Center for Nanoscience and Technology

Yuemin Zhao China University of Mining and Technology Shuilin Zhena China University of Mining and Technology

Secretary (general issues): Wei Ge Secretary (logistics): Yunru Bai Secretary (themes): Yongsheng Han

Secretary (documents):

Junwu Wang Xinhua Liu

Xue Bai

Limin Wang

## Venue

Beijing International Convention Center (BICC) No. 8 Beichen Dong Road, Chaoyang District, Beijing 100101, P. R. China









BICC is located in Asian Games Village, a flourishing area of Beijing which has a collection of conference centers, offices, shopping centers and entertainment venues. It is 20 kilometers from Beijing Capital International Airport and 9 kilometers from the city center. It is also very close to the Olympic Games central area, such as The Bird's Nest and The Water Cube.

BICC is a 5 star tourist service unit with 48 different conference rooms. Opened in 1990, the convention center has served almost 1,000 different international and domestic conventions, exhibitions and meetings each year. The exhibition hall is 5,000 square meters large. It is next to North Star Continental Grand Hotel, a 4 star hotel with 538 guest rooms and 5 different styles of restaurants.

	Early bird	Regular	On-site
Individual	USD 600	USD 650	USD 700
Student	USD 400	USD 450	USD 500
Group (≥5)	USD 550	USD 600	USD 650

\* the registration fee includes conference reception, lunches and tea breaks (May 19 through 22). Conference dinner is charged separately at 100 USD per person. For more details on transactions and refunding policies, please visit the congress website.

### Accommodation

A list of the contracted hotels offering discounted rates for WCPT7 participants can be found at the congress website, together with the booking and payment details.

# Exhibition

Exhibitors from industrial and academic organizations are welcome and the details for participation can be found at the congress website.

# **First Announcement & Call for Papers**



7th World Congress on Particle Technology (WCPT7) Beijing, P. R. China May 19-22, 2014

# Congress Chairman

Prof. Dr. Jinghai Li Institute of Process Engineering Chinese Academy of Sciences China

# Congress Co-Chairmen

Prof. Dr. Junji Cao Prof. Dr. Yunfa Chen Prof. Dr. Yulong Ding Prof. Dr. Qingshan Zhu Chinese Academy of Sciences China

Chinese Society of Particuology Beijing 100190, China Tel: +86-10-8262 9146 E-mail: wcpt7@home.ipe.ac.cn Website: www.wcpt7.org

# Supporters

### Contact Information

Wei Ge. Yunru Bai



The Society of Powder Technology, Japan

The Association of Powder Process Industry and Engineering, Japan



Australasian Particle Technology Society



China National Petroleum Corporation



China Petrochemical Corporation



Chinese Academy of Sciences



National Natural Science Foundation of China

Other societies in Asia (to be confirmed)

You are also welcome to the 11th International Conference on Fluidized Bed Technology (www.cfb11.org), May 14-17, 2014, Beijing.

## Themes & Topics

### 1. Particle and Particle System Characterization

- a) Fundamentals
- b) Instrumentation
- c) Particle size and shape characterization
- d) Measurements of structure and chemical composition of single particles
- e) Measurements of particle velocity and concentration fields
- f) Rheological characterization of suspensions
- g) Measurements of interparticle forces
- h) Measurements of dynamic particle structuring in shear flows
- i) Particle system monitoring and control
- i) Standards

# 2.Particle Design: Formulation and Processing

- a) Particle formulation and modification
- b) Colloids, crystallization and precipitation
- c) Modification and dispersion of particles
- d) Granulation, compaction, tabletting and encapsulation
- e) Nanoparticles and nanocomposite materials synthesis, handling and application
- f) Particle synthesis via self assembly or microfludics
- g) New products, devices and technologies

## 3.Particle-Fluid System

- a) Fundamentals
- b) Fluidization and fluid beds
- c) Pneumatic and hydraulic conveying
- d) Solid-gas and solid-liquid separation
- e) Process scaling-up, optimization and control
- f) Fluid/particle systems in bio, food, material, polymer and pharmaceutical processing
- g) Fluid/particle reactions in energy and environmental systems

## 4. Particulate System and Bulk Solids Technology

- a) Mechanics of particulate media
- b) Dynamics of granular flow experiments and modeling
- c) Classification, dispersion and filtration of particles
- d) Comminution, attrition and agglomeration in granular flows
- e) Mixing, blending and segregation
- f) Drying and dewatering
- g) Dust explosion and process safety in powder handling
- h) Process and equipment control, design and scaling-up
- i) Dynamics of non-fluidized gas-particle flow
- i) Stresses and arching in hoppers and bunkers

#### 5.Aerosols

- a) Fundamentals, measurement and characterization
- b) Aerosol formation, transport and deposition
- c) Aerosol application in medicine and industry
- d) Particles in atmospheric science and meteorology
- e) Source of aeolian sand transport
- f) Impact of aerosols on environment, health and climate
- g) Formation, impact and control of PM2.5

### 6.Modeling and Simulation

- a) Computational fluid dynamics
- b) Lattice Boltzmann method c) Discrete element method
- d) Molecular dynamics
- e) Population balance models
- f) Flow sheet modeling
- g) Multi-scale modeling and computation
- h) Supercomputing

### 7. Special Topics

- a) Particles in geology, soil mechanics and rock mechanics
- b) Particles in soil science and hydrology: soil erosion
- c) Particles in pharmaceutical industry and medicine
- d) Carbon-based particulate material
- e) Particle technology in biology
- f) 3D printing
- g) Particle technology in power engineering
- h) Particulate solid wastes
- i) Particle technology in energy science and engineering
- i) Memorial sessions for founders in the field

# WCPT7 at a glance

- Over 1000 expected participants from more than 40 countries all over the world:
- · WAPT (The World Assembly for Particle Technology) will meet during the congress for strengthening and expanding the organization;
- A balanced presence of academic and industrial participants and platforms for extensive and in-depth interactions between them:
- \* A systematic selection of topics covering the full spectrum of particle technology, aiming to catalyze interdisciplinary discussions and emerging of new research directions and technologies;
- · Special sessions honoring world leaders in particle technology;
- Accompanying exhibitions from both industries and academic institutions, and excursions to Chinese universities, research institutes and industrial companies:
- · Accepted full paper will be published in Procedia Engineering of Elsevier, which will hopefully be indexed by CPCI (Conference Proceedings Citation Index).

## Plenary Speakers

Liang-Shih Fan, Ohio State University, USA Chemical looping technology - a particle technology perspective.

Yadong Li, Tsinghua University, China Metal nanoparticle catalysis.

Anton Middelberg, University of Queensland, Australia Particles and biology: opportunities and challenges.

Mario Molina, Centro Mario Molina, Mexico

Aerosols and climate change: science and policy. Pradip, Tata Research Development and Design Centre, India

Jonathan Seville, University of Surrey, UK Particle-particle contacts and their influence on system behavior.

IT enabled platform for the design and optimization of mineral processing circuits.

David A. Weitz, Harvard University, USA New routes to particle synthesis.

(more to be confirmed)

### Scientific Committee

Rose Amal	The University of New South Wales	Australia
Guohua Chen	Hong Kong University of Science	China (HK)
	and Technology	
Kim Dam-Johansen	Technical University of Denmark	Denmark
Liang-Shih Fan	Ohio State University	USA
Masayoshi Fuji	Nagoya Institute of Technology	Japan
Mojtaba Ghadiri	University of Leeds	UK
John Grace	University of British Columbia	Canada
Stefan Heinrich	Hamburg University of Technology	Germany
Hiroyuki Kage	Kyushu Institute of Technology	Japan
Haim Kalman	Ben-Gurion University of the Negev	Israel
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	Bombay	
Hongming Lin	Taiwan University	China (Taiwan)
Guy Marin	Ghent University	Belgium
Gabriel Meesters	Delft University of Technology	Netherlands
Wolfgang Peukert	University of Erlangen	Germany
Massimo Poletto	University of Salerno	Italy
Pradip	Tata Research Development and	India
	Design Centre	
Sotiris Pratsinis	Swiss Federal Institute of Technology	Switzerland
	Zurich	
Judy Raper	University of Wollongong	Australia
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	Zurich	
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Toshitsugu Tanaka	Osaka University	Japan
Wan Ramli Wan Daud	University Kebangsaan Malaysia	Malaysia
Chi-Hwa Wang	National University of Singapore	Singapore
Joachim Werther	Hamburg University of Technology	Germany
Richard Williams	University of Birmingham	UK
Aibing Yu	The University of New South Wales	Australia

(more to be confirmed)

### Deadlines

Abstracts due: October 31, 2013 Abstracts acceptance due: December 31, 2013 Pre-registration (online): February 28, 2014 March 31, 2014 Full paper due: May 18, 2014 On-site registration:



