# The 3<sup>rd</sup> International Conference on Cutting-Edge Organic Chemistry in Asia under Asian Core Program (ICCEOA-3)

Hangzhou, China October 19-23, 2008

Organized by
Shanghai Institute of Organic Chemistry, CAS
and
Department of Chemistry, Zhejiang University

# **Organizing Committee**

Chairman Guo-Qiang Lin (Shanghai Institute of Organic Chemistry, CAS)
Secretary-General Zhu-Jun Yao (Shanghai Institute of Organic Chemistry, CAS)

Yan-Guang Wang (Zhejiang University)

Members Hong-Bin Zhai (Shanghai Institute of Organic Chemistry, CAS)

Ming-Hua Xu (Shanghai Institute of Materia Medica)
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Kui-Ling Ding (Shanghai Institute of Organic Chemistry, CAS)

Hao-Ran Li (Zhejiang University)
Ping Lu (Zhejiang University)
Zhen-Feng Xi (Peking University)

Mei-Xiang Wang (Institute of Chemistry)

# **Program Overview**

	Sunday	Monday	Tuesday	Wednesday	Thursday
	19 Oct	20 Oct	21 Oct	22 Oct	23 Oct
Morning		*Opening	*Invited lecture	*Invited lecture	Social program
		ceremony			
	Registration	*Invited lecture			
Afternoon		*Invited lecture	Social	*Invited lecture	Departure
	IUPAC		program		
	Workshop				
Evening	Welcome	Poster session	*Invited lecture	*Closing	
	reception			Banquet	

# Venue

The venue for this conference is Liu Ying Hotel, Hangzhou.

# Hangzhou

Headed as one of the most romantic cities in China, Hangzhou is ripe with historic and sensual sites to enchant the amorous and curious who make their way here. Just over 200Km southwest of Shanghai, Hangzhou requires only a short jaunt to scratch the surface its charming pagodas, the timeless West Lake and modern amenities. Hangzhou is a city famous for its beauty and heritage. The capital of Wu and Yue kingdoms of Five Dynasties during the 10th century and capital of Southern Song Dynasty during the 12 - 13th Century, Hangzhou has been part of China's rich tapestry for more than a millennium.

# Liuying hotel

Liuying hotel located in the heart of Hangzhou, once was Xie's private Garden in Jiangnan Style. It is at the opposite of "Three pools mirroring moon" and it is next to the park of orioles Singing in the willows.







#### **Scientific Program**

The scientific sessions will consider all advances in organic chemistry and the relevance for present and future applications. The conference will consist of 32-34 invited lectures (20 min + 5 min discussion). Posters will constitute an important part of the conference.

#### **Call for Papers**

All the participants will be selected and organized by the coordinators of member countries and regions. Participants wishing to present papers should submit a **one-page abstract (template attached)**. The abstracts will be collected by the

coordinators or their assistants, and the packed abstracts should be received via e-mail as an attachment to the ICCEOA-3 Secretariat in China before **August 31**, **2008**.

#### **ICCEOA-3 Secretariats**

Prof. Hong-Bin Zhai Prof. Ming-Hua Xu

Secretary General Assistant Secretary General Assistant

Shanghai Institute of Organic Chemistry Shanghai Institute of Materia Medica

Tel: 86-21-54925163 E-mail: xumh@mail.shcnc.ac.cn

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# Registration

Registration fee is delivered in cash in the amount of US\$500 at registration site on October 19, 2008. It includes lodging and boarding, tea breaks, a welcome reception and conference banquet, a symposium sightseeing.

# **Social Program**

#### Sunday, October 19, 2008

# Welcome Reception at Liu Ying Hotel Hangzhou

18:00-21:00 (6:00 pm-9:00 pm)

Admission is free for all registered participants and accompanying persons.

#### Wednesday, October 22, 2008

#### **Banquet**

19:00-22:00 (7:00 pm-10:00 pm)

Admission is free for all registered participants and accompanying persons.

# Tuesday afternoon (October 21) 14:00 pm – 18:00 pm;

Thursday morning (October 23), 8:00 am - 12:00 pm

#### **Excursion**

No scientific program is scheduled on the above times, therefore all participants and accompanying persons are welcome to join the city tours.

#### West Lake:

An old Chinese saying declares, "There is heaven above, Suzhou and Hangzhou below." Centuries later, Marco Polo called Hangzhou the most enchanting city in the world. This is most evident in the West Lake area--the effective, if not

geographic, center of Hangzhou. Hills embrace the lake on three sides; the city proper lies to the east. Traditionally, there are ten best-known scenic spots on the West Lake: Spring Dawn on the Su Causeway, Orioles Singing in the Willows, Viewing Fish at the Flower Pond, Winery Yard and Lotus Pool, Evening Bell Ringing at the Nanping Hill, Autumn Moon over the Calm Lake, Leifeng Pagoda in Evening Glow, Three Pools Mirroring the Moon, Lingering Snow on the Broken Bridge, Twin Peaks Piercing the Clouds.





# LinYing Temple:

The Temple of Inspired Seclusion, known as Linying Temple in Chinese, is one the most famous ancient Buddhist temples in China. It was first built by an Indian monk in 326AD during the Eastern Jin Dynasty (317 - 420AD) and was last restored in the Qing Dynasty (1644 - 1911). In its heyday, the temple had nine towers, I8 pavilion and 75 halls, and housed as many as 3,000 monks. Like most of the other landmarks in this city, the temple had gone through numerous destruction and reconstruction cycles.





#### Xihu Tiandi:

It is a leisure destination embracing the deep history and culture of the city of Hangzhou. Its design theme captures the unique gardens and historical architecture of this scenic place. Merging nature's beauty with modern living elements, Xihu Tiandi has brought together life's rich offerings to create a public space that enhances the quality of life. From shops to restaurants to hosts of cultural activities, Xihu Tiandi is set to further boost Hangzhou's reputation as one of China's more desirous cities to visit.



# Language

The official language for the conference is English. No simultaneous translation will be provided.

### **Entry into China**

Participants are required to have both a valid passport and a visa to enter China. You are advised to determine your own requirements. The visa can be obtained at a local or nearby Diplomatic Mission of the People's Republic of China. For further information, please consult the above mentioned Chinese Diplomatic Mission in your country.

Further Information, please contact: Ms. Bing Yu, Tel: (86-21) 5492-5210; Fax: (86-21) 6416-6128; E-mail: <a href="mailto:yubing@mail.sioc.ac.cn">yubing@mail.sioc.ac.cn</a>

#### **Invitation Letter**

Upon request, the Conference Chair will be happy to forward a personal invitation and an official form for visa application. It should be understood that the invitation does not imply any financial or other obligation on the part of the organizers of ICCEOA-3. Please address your request to the **ICCEOA-3 Secretariat**.

# **Accommodation**

Liuying Hotel (conference site) and Wuyang Holiday Hotel (10 min walk to the conference site) are considered as the hotels for this conference.

If the participant' schedule is fixed, please complete the following form and send it before **September 30, 2008** to:

Ms. Bing Yu Secretary

Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences

354 Fenglin Road, Shanghai 200032, P. R. China

Tel: (86-21)5492-5210; Fax: (86-21)6416-6128

E-mail: <a href="mailto:yubing@mail.sioc.ac.cn">yubing@mail.sioc.ac.cn</a>

#### **HOTEL RESERVATION FORM**

3 <sup>rd</sup> International Conference on Cutting-Edge Organic Chemistry										
in Asia under Asian Core Program (October 19-24, 2008)										
Full Name (first Name, Middle Initials, Last Name):										
Title: □ Prof. □ Dr.	□ Mr. □ N	ls Sex:	□Male	□Female						
Affiliation:					<del></del>					
Country:		_; Tel:			;					
Fax:										
E-mail Address:										
I shall be accompanied by:	□ My spou	se □ My	□ My children (Number: ַ		)					
Date of Arrival:	, 2008; Date of Departure:, 2008.			008.						

#### Insurance

Participants are advised to arrange whatever insurance they consider necessary. No responsibility can be assumed by the organizers of the ICCEOS-3 for personal accidents, injury, sickness, theft or property damage suffered by participants during the conference or any affiliated events.

#### Climate

In autumn, the temperature in Hangzhou is pleasant and balmy and the sky a delightful color of amber, the average temperature is about 20 degrees centigrade. The conference site, hotels, taxis, shuttle buses, shops and restaurants are well air-conditioned. Occasional light rain should be expected.

# Currency

The RMB Yuan is the only legal tender in China. Foreign currency exchange is available at the airport, Bank of China and Hotels.

#### **Business Hours**

Government and business offices are from 9:00 am to 5:00 pm., Monday to Friday. Department stores in Hangzhou are open from 10:00 am to 10:00 pm (7 days a week).

# **Electricity**

220 Volts 50 Hz throughout the country.

# **Access to Liuying Hotel and Wuyang Hotel**

Hangzhou International Airport is recommended. The Organizing Committee will arrange picking up at the Hangzhou International Airport. Please kindly inform the Organizing Committee of your arrival time and flight number via E-mail or Fax as soon as you have fixed your travel schedule. We will collect this information before September 30, 2008.

The Organizing Committee will arrange two shuttle buses to pick up participants choosing Shanghai as destination city on October 19. It takes 2 hours of drive from Shanghai to Hangzhou.

#### Sample of Abstract

See the next page

# Efficient syntheses of camptothecin-family alkaloids using mild cascade reactions triggered by bis(triphenyl)oxodiphosphonium trifluoromethanesulfonate

#### Zhu-Jun Yao,\* Hai-Bin Zhou, Guan-Sai Liu, Qing-Li Dong

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Camptothecin (CPT, 1) was isolated from the Chinese plant Camptotheca acumunata in 1966 by Wani and Wall. The primary cellular target of CPT is the covalent binary complex formed between DNA and topoisomerase I during DNA relaxation, and the stabilization of this complex by CPT is believed to lead to cell death. Many imaginative syntheses of camptothecin and its analogues have emerged from numerous research groups over the past decades. The summit of these occurred when two camptothecin analogues, topotecan (2a) and irinotecan (2b) were approved by the FDA to treat cancers in clinical. Thus, development of practical and efficient strategies for acquiring new CPT derivatives is of great value. However, to date, the chemical synthesis of camptothecin remains a challenge since most of the known syntheses are lengthy, of low overall efficiency, and of high cost as compared with natural sources. Retrosynthetic analysis reveales that concomitant construction of the indolizino[1,2-b]quinolin-9(11H)-one B and C

rings using an intramolecular Diels-Alder reaction could theoretically achieve the highest efficiency. Reported herein are our recent efforts on the development of this cascade sequence. Triggered by bis(triphenyl)oxodiphosphonium trifluorometh-anesulfonate under mild conditions, significant enhancements in overall yields were achieved. Using this methodology, concise total syntheses of camptothecin, 1 22-hydroxyacuminatine (3), luotonin A  $(4)^2$  and 14-aza-CPT  $(5)^3$ were accomplished. This mild, diverse and high-yield cascade methodology particularly advantageous for preparing analogues that would be difficult to derive from natural camptothecin. It also offers possibility of developing future alternative industrial supply of CPT by chemical synthesis.

Camptothecin (1: R<sup>1</sup>=R<sup>2</sup>=R<sup>3</sup>=H, X=C) Toptecan (**2a**: R<sup>1</sup>=CH<sub>2</sub>NMe<sub>2</sub>, R<sup>2</sup>=OH, R<sup>3</sup>=H, X=C) Irinotecan (**2b**: R<sup>1</sup>=H, R<sup>2</sup>=OCOPipPip, R<sup>3</sup>=Et, X=C) 14-Azacamptothecin (**5**: R<sup>1</sup>=R<sup>2</sup>=R<sup>3</sup>=H, X=N)

22-Hydroxyacuminatine (**3**, R=CH<sub>2</sub>OH, X=C) Luotonin A (**4**, R=H; X=N)

- 1. Zhou, H.-B.; Liu, G.-S.; Yao, Z.-J. Organic Letters 2007, 9, 2003-2006.
- 2. Zhou, H.-B.; Liu, G.-S.; Yao, Z.-J. J. Org. Chem. 2007, in press.
- 3. Liu, G.-S.; Dong, Q.-L; Zhou, H.-B.; Yao, Z.-J. unpublished results.



Zhu-Jun Yao (姚祝军), b 1968 in Zhejiang Province, China. Fudan University (BS 1990), SIOC (MS, 1992), SIOC (PhD 1995, Prof. Yu-Lin Wu), Postdoc. NCI/NIH (Dr. Terrence R. Burke, Jr. 1996-1999), Assis. Prof. SIOC (1995-1999), Assoc. Prof. SIOC (1999), Prof. SIOC (1999-present). Research filed: total synthesis of bioactive natural products, natural products-like chemistry, and chemical biology.