

*The Seventh International Conference on Fluid Power Transmission and Control*  
*April 7-10,2009, Hangzhou, China*

# **ICFP2009**

# **Final program**



## **Organized by**

Institute of Mechatronic Control Engineering, Zhejiang University

## **Co-sponsored by**

The State Key Laboratory of Fluid Power Transmission and Control

Ministry of Education, China

National Natural Science Foundation of China

Chinese Mechanical Engineering Society

Chinese Fluid Power Transmission and Control Society

Zhejiang Provincial Natural Science Foundation of China

Y.C.TANG Disciplinary Development Fund, Zhejiang University

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# Welcome

Every four years, the International Conference on Fluid Power Transmission and Control (ICFP) is held in Zhejiang University. The Conference always offers an opportunity and provides a forum for old friends to meet again, for new friends to know each other and for all participants to exchange their new research results in the field of fluid power transmission and control. Today, the seventh succeeding conference (ICFP 2009) is held on time. It is my great pleasure to express my warm welcome and sincere appreciation to all authors, attendees and guests for their valuable contributions to the conference.



With its glorious history, fluid power transmission and control technology is still making more progress and getting newer achievements to satisfy the increase need of modern industry and society development. Therefore, the conference covers almost all of the most important and interesting research fields of fluid power transmission and control. I believe the conference will further push forward the development of fluid power transmission and control technology.

Hangzhou is one of the most beautiful cities in China. I hope all participants will enjoy their staying here.

Finally, I would like to thank the members of The International Program Committee, the Organization Committee of the Conference and everyone who has contributed to the success of the Conference.

A handwritten signature in black ink, appearing to be 'Yongxiang Lu'.

Prof. Dr.-Ing. Yongxiang Lu

Chair, ICFP 2009

Chair, the Academic Committee of the Stake Key Lab. of FPTC, Zhejiang University

President of the Chinese Academy of Sciences

## **International Program Committee**

- Chairman: Prof. Yongxiang Lu, Chinese Academy of Sciences, China
- Members: Prof. Baosen Sha, Hydraulics Pneumatics & Seals Association, China  
Prof. Guangshang Zeng, Chinese Academy of Engineering, China  
Prof. Guobiao Wang, National Natural Science Foundation of China  
Prof. Hongren Li, Harbin Institute of Technology, China  
Prof. Huayong Yang, Zhejiang University, China  
Prof. Hubertus Murrenhoff, RWTH Aachen University, Germany  
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Prof. Qingfeng Wang, Zhejiang University, China  
Prof. Richard Burton, University of Saskatchewan, Canada  
Prof. Shinichi Yokota, Tokyo Institute of Technology, Japan  
Prof. Siegfried Helduser, Technische Universität Dresden, Germany  
Prof. Ying Chen, Zhejiang University, China  
Prof. Yiqun Wang, Yanshan University, China  
Prof. Yuquan Zhu, Huazhong University of Science and Technology, China  
Prof. Zhanlin Wang, Beihang University, China  
Prof. Zuwen Wang, Dalian Maritime University, China

## **Organized by**

Institute of Mechatronic Control Engineering, Zhejiang University

## **Organization Committee**

- Chairman: Qingfeng Wang
- Co-chairman: Wei Li, Bingfeng Ju
- Members: Canjun Yang, Fan Ding, Guofang Gong, Guoliang Tao, Hua Zhou, Huayong Yang, Jianhua Wei, Kaichen Song, Linyi Gu, Minxiu Qiu, Shiqiang Zhu, Xiaodong Ruan, Xin Fu, Xuanyin Wang, Ying Chen, Yurun Fan, Zhangwei Chen

**General Secretary:** Wei Li, Bingfeng Ju

**Members of Secretariat:** Mingming Fu, Mengdong Lian

# ICFP2009 General Information

## Main Schedules

### *April 7-----*

- 08: 30 – 21: 00 Registration at Zhejiang Narada Grand Hotel
- 18: 00 – 21: 00 Cocktail Party ( Narada Grand Hotel )

### *April 8-----*

- 09: 00 – 09: 30 Opening Ceremony ( Grand Ballroom of Narada Grand Hotel )
- 09: 30 – 12: 20 Keynote Speeches ( Grand Ballroom of Narada Grand Hotel )
- 12: 30 – 13: 30 Lunch ( Narada Grand Hotel )
- 13: 30 – 17: 50 Parallel Sessions ( Narada Grand Hotel )
- 13: 30 – 17: 30 Visit to the State Key Lab of Fluid Power Transmission and Control, Zhejiang University\* ( recommended time )
- 18: 30 – 20: 30 Dinner ( Narada Grand Hotel )

### *April 9 -----*

- 09: 00 – 12: 20 Plenary Speeches ( Grand Ballroom of Narada Grand Hotel )
- 12: 30 – 13: 30 Lunch ( Narada Grand Hotel )
- 13: 30 – 17: 50 Parallel Sessions ( Narada Grand Hotel )
- 13: 30 – 17: 30 Visit to the State Key Lab of Fluid Power Transmission and Control, Zhejiang University\* ( recommended time )
- 18: 30 – 20: 30 Conference Banquet ( Narada Grand Hotel )  
Chinese Traditional Performance

### *April 10 -----*

- 09: 30 – 11: 30 Visit to the State Key Lab of Fluid Power Transmission and Control, Zhejiang University\* ( recommended time )
- 08: 30 – afternoon Tour to Xixi National Wetland Park

\* Shuttle buses will be arranged by the organizer to pick up the participants from conference venue to the State Key Lab of Fluid Power Transmission and Control every 20 minutes.

## Transportation

Shuttle buses will be arranged by the organizer to pick up the participants from Shanghai airport and Hangzhou airport /railway station to the hotels. **From April 6<sup>th</sup> to April 8<sup>th</sup>**, the participants can meet the leading persons right at the exit of the Shanghai airport, Hangzhou airport and Hangzhou railway station. During the conference, shuttle bus service provided by the organizer will be arranged between the hotels and the conference venue.

**The organizer will pick up the participants at the airports or the railway stations according to the following schedule:**

April 6 <sup>th</sup>	12:00 – 21:00 (Beijing Time)
April 7 <sup>th</sup>	08:00 – 21:00 (Beijing Time)
April 8 <sup>th</sup>	08:00 – 12:00 (Beijing Time)

## Registration and Payment

Registration Desk will be situated in lobby of Zhejiang Narada Grand Hotel. **This is the only registration site** and the guests in other hotels will be sent by shuttle buses after finishing registration. All attendees are requested to register in order to get all the materials/services of the conference. All payment could be made by cash or credit cards. Invoice will be made out for the registrants at the registration desk if needed.

Zhejiang Narada Grand Address: No.122 Shuguang Road, Hangzhou, China  
Mobile No. for domestic participants: (0)15868452148 (Mr. Mingming Fu)  
Mobile No. for overseas participants: (0)15088630180 (Ms. Mengdong Lian)

## Papers and Proceedings

More than 200 papers from 19 countries or areas are published on the conference proceedings. Each registrant will receive the proceedings, the price of which is included in the registration fee. Additional proceedings may be purchased for US\$ 80 or RMB 500 (including mail cost).

## Presentation

Lectures are expected to be given according to the order in the final program. The time for each invited speech is 30 minutes. And for each session presentation, it is 20 minutes including the time for Q&A. The organizer will provide digital projectors and Laptop computer (with MS Windows 98, 2000, XP and Powerpoint) for paper addressing. Participants' personal computers can also be used.

**Conference Language** English

## Important Declarations

Neither the Conference Organizers nor the Zhejiang University accepts liability for personal injuries sustained, or for loss of, or damage to, property belonging to participants and their accompanying persons, either during or as a result of the Conference. Please check the validity of your own insurance.

# April 8, Wednesday

## 09: 00 – 09: 30 Opening Ceremony (Grand Ballroom of Narada Grand Hotel)

Introduction	Prof. Huayong Yang
Welcome	President of Zhejiang University
Opening Address	Prof. Yongxiang Lu, Chairman of the Conference
Featured Speakers	Prof. Wolfgang Backé President of Chinese Mechanical Engineering Society President of Chinese Fluid Power Transmission and Control Society

## 09: 30 – 12: 20 Keynote Speeches ( Grand Ballroom of Narada Grand Hotel )

<b>Phase 1 --- Chairmen: Prof. Siegfried Helduser (Germany), Prof. Ying Chen (China)</b>	
09: 30 – 10: 00	<b>What advantages does pneumatic have as a method of automation?</b> <i>Wolfgang Backé, Germany</i>
10: 00 – 10: 30	<b>New challenges, new chances, new contributions--a look forward to the future of Fluid Power Technology</b> <i>Yongxiang Lu, Conference Chairman, China</i>
10: 30 – 11: 00	<b>New approach for improving performance of water hydraulic and hydraulic system</b> <i>Ato Kitagawa, Japan</i>
11: 00 – 11: 20	<b>Coffee Break</b>
<b>Phase 2 --- Chairmen: Prof. Monika Ivantysynova (USA), Prof. Zuwen Wang (China)</b>	
11: 20 – 11: 50	<b>Improving efficiency of hydrostatic drives</b> <i>Hubertus Murrenhoff, Germany</i>
11: 50 – 12: 20	<b>Highly dynamic servohydraulic motion control</b> <i>Andrew Plummer, United Kingdom</i>

## 12: 30 – 13: 30 Lunch (Window Pavilion Café in Narada Grand Hotel)

## 13: 30 – 17: 50 Parallel Sessions (Narada Grand Hotel )

### Session A: Innovation in Hydraulic Components and Systems (Harvest Room, 3/F)

#### Phase 1 --- Chairmen: Prof. Richard Burton, Prof. Long Quan

Time	Page	Title, Speaker, Affiliation
13: 30 – 13: 50	27	<b>Design of position-controlled linear actuator systems using hydraulic drive design assistant (HyDDAs)</b> <i>Kristof Schlemmer</i> <i>RWTH Aachen University, Germany</i>
13: 50 – 14: 10	113	<b>Modeling and the energy balance analysis of a hydraulic free piston engine with monopropellant-power</b> <i>Hao-ling Ren</i>

*Zhejiang University, China*

14: 10 – 14: 30 40 **Development of methodologies and software for engineering, simulation and optimization of oil-hydraulic cylinders of large measurements and strengths**

**Radovan Petrovic**

*University of Kragujevac, Serbia*

14: 30 – 14: 50 163 **Simulation and experimental research on dynamic characteristics of electromagnetic overflow cartridge valve**

**Fugang Zhai**

*Yanshan University, China*

14: 50 – 15: 10 55 **Energy-recovering hydraulic drive**

**Konrad Steindorff**

*University of Braunschweig, Germany*

15: 10 – 15: 30 158 **Simulation and analysis of a voice coil motor direct drive valve (VCM-DDV) based on a co-simulation environment by AMESim and simulink**

**Shuai Wu**

*Beihang University, China*

15: 30 – 15: 50

**Coffee Break**

**Phase 2 --- Chairmen: Prof. Chih-Keng Chen, Prof. Zongxia Jiao**

15: 50 – 16: 10 122 **Narrow-band fluid borne noise attenuation using time-domain online control algorithms in a simple hydraulic system**

**Lin Wang**

*University of Bath, United Kingdom*

16: 10 – 16: 30 59 **Experimental analysis of flow through external spur gear pumps**

**Andrea Vacca**

*University of Parma, Italy*

16: 30 – 16: 50 **How to reduce filtration costs of complex hydraulic systems**

**Christophe Peuchot**

*Institute of Filtration and Techniques of Separation, France*

16: 50 – 17: 10 106 **Modeling and analysis of a high precision gravity-loaded electro-hydraulic actuator system**

**Yang Lin**

*University of Saskatchewan, Canada*

17: 10 – 17: 30 136 **QFT robust control of direct drive electro-hydraulic servo rotary vane steering gear**

**Wenhai Su**

*Harbin Institute of Technology, China*

17: 30 – 17: 50 87 **Influence of hardness and particle load on leakage of hydraulic seat valves**

**Matthias Schmidt**

*RWTH Aachen University, Germany*

**Session B: Simulation (Simulation Technology, FEM, CFD, etc.) & Condition Monitoring and Fault Diagnosis (Diplomat Board Room, 4/F)**

**Phase 1 --- Chairmen: Prof. Heikki Handroos, Prof. Shiu-Wu Chau**

**Time Page Title, Speaker, Affiliation**

- 13: 30 – 13: 50 700 **CFD parametrization for macroscopic model parameters calculation**  
Eric Bideaux  
*Institut National des Sciences Appliquées de Lyon, France*
- 13: 50 – 14: 10 711 **Comparison of numerical effectiveness of three methods for modelling 2-way flow control valves**  
Rafael Åman  
*Lappeenranta University of Technology, Finland*
- 14: 10 – 14: 30 842 **The transfer matrix methodology on transient thermodynamic analysis of fluid power systems**  
Qiujun Xing  
*Beihang University, China*
- 14: 30 – 14: 50 764 **Numerical computation and analysis of temperature field of hydraulic motor pump**  
Dajie Zhang  
*Yanshan University, China*
- 14: 50 – 15: 10 823 **Study of water hammer in transient flow**  
Fathelrhman Omer  
*Huazhong University of Science and Technology, China*
- 15: 10 – 15: 30 738 **Hydrodynamics of horizontal axis marine current turbines**  
Xiaopeng Xin  
*Zhejiang University, China*
- 15: 30 – 15: 50 **Coffee Break**
- Phase 2 --- Chairmen: Prof. Yasuhiro Hayakawa, Prof. Canjun Yang**
- 15: 50 – 16: 10 936 **Simulation of dewetting process on micropillar array**  
Shiu-Wu Chau  
*National Taiwan University of Sci. and Tech., Taiwan, China*
- 16: 10 – 16: 30 783 **Reliability analysis of a model for servo hydraulic system by utilizing Markov chain Monte Carlo method**  
Junhong Liu  
*Lappeenranta University of Technology, Finland*
- 16: 30 – 16: 50 705 **Comparative study of modern shock capturing schemes**  
Mukkarum Husain  
*Beihang University, China*
- 16: 50 – 17: 10 734 **Flow simulation of running-in aerostatic spherical bearing with inherent compensation and large wrap angle**  
Wenqi Ma  
*Dalian Maritime University, China*
- 17: 10 – 17: 30 856 **Energy saving neural network (NN) controlled flow-coupled hydraulic hybrid tricycle (HHT)**  
Celestine Okoye  
*Nnamdi Azikiwe University, Nigeria*
- 17: 30 – 17: 50 819 **Study of leakage and friction of combined seal in hydraulic servo-actuator via finite element and numerical approximation method**  
Xiao Cui

**Session C: Mechatronics and Automation (Cinema Five, 2/F)**

**Phase 1 --- Chairmen: Prof. Tapio Virvalo, Prof. Xiangdong Kong**

<b>Time</b>	<b>Page</b>	<b>Title, Speaker, Affiliation</b>
13: 30 – 13: 50	284	<b>A force control of electro-hydraulic load simulator using online tuning fuzzy PID based a robust extend Kalman filter</b> <i>Dinh Quang Truong</i> <i>University of Ulsan, Korea</i>
13: 50 – 14: 10	342	<b>Force equalization in hybrid actuation systems</b> <i>Haitao Qi</i> <i>Beihang University, China</i>
14: 10 – 14: 30	447	<b>The hydraulic pitch-controlled technology of wind turbine</b> <i>Yonggang Lin</i> <i>Zhejiang University, China</i>
14: 30 – 14: 50	329	<b>Design of high precision and full digital AGC system in cold mill</b> <i>Gang Chen</i> <i>Yanshan University, China</i>
14: 50 – 15: 10	360	<b>Integrated mechatronic design of precision and energy saving electro-hydraulic systems</b> <i>Bin Yao</i> <i>Purdue University, USA</i>
15: 10 – 15: 30	390	<b>Novel anti-lock braking (ABS) modulator and controller for a motorcycle</b> <i>Chun-Kuei Huang</i> <i>National Cheng Kung University, Taiwan, China</i>

15: 30 – 15: 50 **Coffee Break**

**Phase 2 --- Chairmen: Prof. Yunhua Li, Prof. Bin Yao**

15: 50 – 16: 10	303	<b>Coordinate submersible station-keeping control simulation and experimental research</b> <i>Jianjun Long</i> <i>Guangdong University of Technology, China</i>
16: 10 – 16: 30	442	<b>The force control of a variable rotational speed pump-controlled system</b> <i>Mao-Hsiung Chiang</i> <i>National Taiwan University, Taiwan, China</i>
16: 30 – 16: 50	381	<b>Mathematical modeling and fuzzy logic controller design for a hydraulic steering system</b> <i>Lingyong Pan</i> <i>Huazhong University of Science and Technology, China</i>
16: 50 – 17: 10	399	<b>Research on control system of a wheeled robot for fire inspection based on autonomous vision navigation</b> <i>Hongyu Di</i> <i>Xi'an Jiaotong University</i>
17: 10 – 17: 30	385	<b>MR haptic device for virtual interface demonstration</b>

Weihua Li

*University of Wollongong, Australia*

17: 30 – 17: 50 316

**Design and internal model control approach for active towed motion compensation system**

Haibo Wang

*Zhejiang University, China*



*Beihang University, China*

14: 50 – 15: 10 507 **A new flight simulator driven by pneumatic artificial muscles**

**Bishi Ren**

*Shanghai Jiao Tong University, China*

15: 10 – 15: 30 587 **Research on vortex cup with annular flat skirt**

**Xin Li**

*Tokyo Institute of Technology, Japan*

15: 30 – 15: 50

**Coffee Break**

**Phase 2 --- Chairmen: Prof. Radovan Petrovic, Prof. Guoliang Tao**

15: 50 – 16: 10 574 **Research on hysteresis characteristics of an automotive air spring**

**Hao Liu**

*Keimyung University, Korea*

16: 10 – 16: 30 608 **Study on the characteristics of air driven gas booster based on experiments**

**Xu Wang**

*Dalian Maritime University, China*

16: 30 – 16: 50 596 **Study on a high performance insole with human compatibility**

**Yasuhiro Hayakawa**

*Nara National College of Technology, Japan*

16: 50 – 17: 10 525 **Influence of hybrid pump on pressure and vacuum continuous control system**

**Jinyun Li**

*Huazhong University of Science and Technology, China*

17: 10 – 17: 30 516 **Experimental investigation on the vacuum generated by cylinder exhaust system**

**Ling Zhao**

*Beijing Institute of Technology, China*

17: 30 – 17: 50 561 **Positioning of a spring-loaded pneumatic cylinder with a pressure controller**

**Esa Mäkinen**

*Tampere University of Technology, Finland*

**Session E: Fluid Power for Mobile Machinery & Tribology and New Materials in Fluid Power Machinery (Diplomat Board Room, 4/F)**

**Phase 1 --- Chairmen: Prof. Christophe Peuchot, Prof. Jianhua Wei**

**Time Page Title, Speaker, Affiliation**

13: 30 – 13: 50 201 **Control concept for an advanced load-sensing system**

**Björn Grösbrink**

*University of Braunschweig, Germany*

13: 50 – 14: 10 205 **Development of energy saving hybrid excavator using hybrid actuator**

**Kyoung Kwan Ahn**

*University of Ulsan, Korea*

14: 10 – 14: 30 279 **The research on the dynamic characteristic of the hydrothermal fluid sampler**

**Yanqing Xie**

*Zhejiang University, China*

- 14: 30 – 14: 50 210 **Dynamic characteristics analysis for steering cylinder and pipeline**  
Jinjun Liao  
*Huazhong University of Science and Technology, China*
- 14: 50 – 15: 10 238 **Hardware-in-the-loop experiments of vehicle stability control system via a hydraulic model**  
Chih-Keng Chen  
*Dayeh University, Taiwan, China*
- 15: 10 – 15: 30 686 **Research on the adaption of injection systems to new fuels from biomass**  
Alexander Wohlers  
*RWTH Aachen University, Germany*
- 15: 30 – 15: 50 **Coffee Break**
- Phase 2 --- Chairmen: Prof. Jyh-Chyang Renn, Prof. Guangzheng Peng**
- 15: 50 – 16: 10 224 **Energy saving system utilizing LQ-technique design**  
Björn Eriksson  
*Linköping University, Sweden*
- 16: 10 – 16: 30 729 **Dynamic simulation of hydrostatic propel systems**  
Yong Li  
*Sauer-Danfoss, China*
- 16: 30 – 16: 50 220 **Electro-hydraulic steering control systems for heavy duty of intelligent construction machinery**  
Yunhua Li  
*Beihang University, China*
- 16: 50 – 17: 10 214 **Electro-hydraulic control systems for mobile machinery with low energy consumption**  
Robert Finzel  
*Technische Universität Dresden, Germany*
- 17: 10 – 17: 30 276 **Study on stabilized pressure characteristics of different type of the electromagnetic overflow cartridge valve**  
Jing Yao  
*Yanshan University, China*
- 17: 30 – 17: 50 243 **Hydraulic clutch control systems of power-shift transmission for a tractor**  
Jae-Cheon Lee  
*Keimyung University, Korea*

**Session F: New Industrial Applications of Fluid Power & Water Hydraulics & Environmental Problems and Solutions (Energy-Efficiency, Pollution & Emission Control, Environmental Acceptability & Safety of Fluid Power Systems, etc.) Bio- & Micro- Fluidic Systems (Cinema Five, 2/F)**

**Phase 1 --- Chairmen: Prof. Esa Mäkinen, Prof. Jihai Jiang**

- | Time            | Page | Title, Speaker, Affiliation  |
|-----------------|------|--|
| 13: 30 – 13: 50 | 620  | <b>A new hydraulic tube bending machine and in-process measurements</b><br>Hiroyuki Goto |

- 13: 50 – 14: 10 480 **Modelling of a water hydraulic vane actuator**  
*Ali Muhammad*  
*Tampere University of Technology, Finland*
- 14: 10 – 14: 30 637 **Integrated hydraulic propulsion of ship**  
*Yulong Ji*  
*Dalian Maritime University, China*
- 14: 30 – 14: 50 50 **Comparing controllers in water hydraulic cylinder motion control**  
*Tapio Virvalo*  
*Tampere University of Technology, Finland*
- 14: 50 – 15: 10 927 **Dynamic characteristics of a microfluidic control system based on valve-less piezoelectric micro-pumps**  
*Xiaoming Chen*  
*Harbin Institute of Technology, China*
- 15: 10 – 15: 30 778 **Progress of research on pipeline dynamic characteristics and influence to hydraulic control system**  
*Yang Yang*  
*Yanshan University, China*
- 15: 30 – 15: 50 **Coffee Break**
- Phase 2 --- Chairmen: Prof. Eric Bideaux, Prof. Hua Zhou**
- 15: 50 – 16: 10 471 **Development on the power pack of an underwater tool system driven by seawater hydraulics**  
*Yinshui Liu*  
*Huazhong University of Science and Technology, China*
- 16: 10 – 16: 30 911 **Prediction and optimisation of audible noise from fluid power machines**  
*Liselott Ericson*  
*Linköping University, Sweden*
- 16: 30 – 16: 50 498 **On torque of swash-plate-type water hydraulic axial piston motor**  
*Zhiwei Hu*  
*Huazhong University of Science and Technology, China*
- 16: 50 – 17: 10 485 **Modelling, simulation and control of a water hydraulic manipulator**  
*Likui Zhai*  
*Tampere University of Technology, Finland*
- 17: 10 – 17: 30 917 **Research on characteristics of hydraulic servovalve under vibration environment**  
*Changming Li*  
*Tongji University, China*
- 17: 30 – 17: 50 931 **Micro etching method inside microchannels**  
*Yi Zheng*  
*Zhejiang University, China*

## Conference Office

Room 408, Institute of Mechatronic Control Engineering, Zhejiang University

Tel: +86-571-8795-1940

Fax: +86-571-8795-1941

Email: [icfp2009@zju.edu.cn](mailto:icfp2009@zju.edu.cn)

Website: <http://sklofp.zju.edu.cn/icfp2009/>

Mobile No. for domestic participants: (0)15868452148 (Mr. Mingming Fu)

Mobile No. for overseas participants: (0)15088630180 (Ms. Mengdong Lian)

Zhejiang Narada Grand Hotel Address: No.122 Shuguang Road, Hangzhou, China

Shangri-la Hotel Address: No.78 Beishan Road, Hangzhou, China

Lily Hotel Address: No.45 Shuguang Road, Hangzhou, China

Yuquan Hotel Address: No.138 Yugu Road, Hangzhou, China

## Technical Visiting

The Institute of Mechatronic Control Engineering and The State Key Laboratory of Fluid Power Transmission and Control cordially welcome all the attendees' visit through the duration of the conference.

## Post Conference Programs

- Free Tour to Xixi National Wetland Park.
- Some visiting /shopping activities are arranged for the accompany persons during the conference. The detailed schedule can be obtained on registration desk.

If you are interested in continuing your visit in China after April 10<sup>th</sup>, please visit <http://english.ctrip.com/> and <http://www.elong.net/> for more information. And you can consult the travel agency at the registration desk.

## Other Social Programs

- Cocktail Party (Opened to all participants and accompany persons )
- Welcome Reception (Opened to all participants and accompany persons )
- Traditional Chinese Performance

## Secretariat

Assistants: Mr. Mingming Fu, Ms. Mengdong Lian

Room 408, Institute of Mechatronic Control Engineering, Zhejiang University

Tel: +86-571-8795-1940

Fax: +86-571-8795-1941

Email: [icfp2009@zju.edu.cn](mailto:icfp2009@zju.edu.cn)

Website: <http://sklofp.zju.edu.cn/icfp2009/>

\*For more information, please refer to the brochure distributed at the registration desk.

## Maps

