

Report on the BICTAM in 2008

**BICTAM Symposia in 2009** 

BICTAM Website: http://www.bictam.org.cn

Beijing International Center for Theoretical and Applied Mechanics N-2009-1 June 2009

## Report on the BICTAM in 2008

During 2008 the secretariat of our Center has been established at the Institute of Mechanics, Chinese Academy of Sciences, supported by the CSTAM, which can provide a platform to facilitate academic exchanges. The Center's program was announced in May 2008, which included two symposia and two summer courses in 2008, two symposia in 2009, and one workshop in 2010. The short report on the Center in 2008 includes the following items:

### Item1: Summer Schools and Symposia

The program of courses and symposia, planned for the Center for 2008, took place on schedule. In 2008 there were two Summer Schools, which were both attended well. One school was organized by Xiangtan University; the other was sponsored by Peking University. Additionally, there was two symposia in 2008, which included the fields of Computational Mechanics of Materials, Biomechanics and related sciences.

#### Summer School on Surfaces and Interfaces in Solid Matters

Place Peking University, Beijing, China

Date July 8-17, 2008

Organized by Professor J. X. Wang, Peking University

Topics Atomic-scale geometry

Structure-energy relations

Thermodynamics

Electronic structure etc.

Lecturer Professor PD Dr. Jörg Weißmüller (Karlsruhe Institute of

Technology, Germany)

Attendees 30 Post-graduate students

### Summer School on Multi-field Coupling Theory and Smart Materials

Place Xiangtan University, Hunan Province, China

Date August 6-22, 2008

Organized by Professor Y. C. Zhou, Xiangtan University

Topics Multi-scale Mechanics

Ferroelectric/Ferromagnetic Materials and Multi-field

**Coupling Theory** 

Mechanics of Special Materials and Structures etc.

Attendees More than 100 graduate students

Symposium on Computational Mechanics of Materials

Place Beijing Institute of University, Beijing, China

Date October 7-9, 2008

Organized by Professor Huang Yuan, Engineering University of Wuppertal

Gaußstr, Germany

Professor Gengkai Hu, Beijing Institute of University Professor Changle Xiang, Beijing Institute of University

Topics Nano, micro and micromechanical modeling

Nonlocal damage modeling Damage and fracture etc.

Attendees 71 delegates from China, Germany, France, Czech and UK

Symposium on Mechanics and Biomimetics of Biomaterials & Animal

Locomotion

Place Sanya, Hainan Province, China

Date December 9-11, 2008

Organized by Professor X. Q. Feng, Tsinghua University, China

Professor M. Sun, Beijing University of Aeronautics and

Astronautics, China

Topics Structures and Properties of natural materials

Behaviors of swimming, flying and running of animals etc.

Attendees More than 50 delegates from China, Germany, Japan, USA

and UK

Mini-Course on the Principles of Plasma Discharges

Place BICTAM Office, Beijing, China

Date October 16-17, 2008

Organized by Professor Y. K. Pu, Tsinghua University, China

Topics Summary of Plasma Fundamentals

Summary of Discharge Fundamentals Analysis of Discharge Equilibrium

Inductive RF Discharges

Lecturer Professor Michael A. Lieberman, University of

California-Berkeley, USA

Attendees 30 graduate students

#### The South China Sea Tsunami workshop

Place The Shanghai Jiaotong University, Shanghai, China

Date December 1-3, 2008

Organized by Professor Hua Liu, Shanghai Jiaotong University, China Topics Potential seismic risk under the sea of the Manila Trench

Mechanism of the tsunami disaster

The key technology of the development of an early warning

system etc.

Attendees 35 delegates from China, Vietnam, Singapore, Malaysia,

Philippine and other countries and areas

#### Item2: BICTAM website

The BICTAM website, http://www.bictam.org.cn, continues to run smoothly. Due to the beginning of the activities of the Center, the quantity of information on the website is still growing. Any suggestions for the Center's website you may wish to make would be welcome.

## Item3: Secretariat facilities

The Secretariat had been established in December 2007, which is located in the Institute of Mechanics, CAS in Beijing, China. The facilities of the Secretariat include six offices for visiting scientists, a classroom holding 22 persons, a meeting room seating 40 persons and an administrative office with the basic office equipment and fast network connection. Until now more than 10 scientists from UK, USA, Germany, Australia, India, France and Taiwan, China had made short visits at the Secretariat of the Center.

Table List of Visiting Guests (December, 2007 – June, 2009)

Title	Name	Institution	Research Fields
Professor	Y T Cheng	University of	Material Engineering
		Kentucky, USA	
Professor	Parviz Moin	Stanford University,	Mechanical
		USA	Engineering
Professor	Lianping Wang	University of	Fluid Mechanics
		Delaware, USA	
Dr.	A, Calvin Lui	Rose-Hulman Institute	Mechanical
		of Technology, US	Engineering

Professor	Fuqian Yang	University of	Chemistry & Material
		Kentucky, USA	Engineering
Ms	Y. Xiong	France	Solid Mechanics
Graduate	Deepesh	Indian Institute of	Biochemistry
student	Agarwal	Technology, Delhi,	Engineering &
		India	Biotechnology
Professor	Lu Ting	New York University,	Applied Mathematics
		USA	
Senior	L. Tao	Griffith University,	Ocean Engineering
Lecturer		Australia	
Dr.	Bo Liu	University of	Mechanical
		California-Riverside,	Engineering
		USA	
Associate	J. Wang	Virginia Polytechnic	Plasma Engineering
Professor		Institute	
Professor	Joerg	Institute of	Material Physics
	Weissmuller	Nanotechnology,	
		Germany	
Professor	Z. Y. Yang	Institute of Applied	Computational
		Mechanics, Taiwan,	Aerodynamics
		China	
Professor	P. K. Yeung	Georgia Institute of	Fluid Mechanics
		Technology, USA	
Associate	Chan,	Hong Kong	Mechanics
Professor	Kwok-Tung	Polytechnic	
		University, UK	
Post-Doc	Christopher	UK	Micro Fluid
	Pipe		Mechanics

## **BICTAM Symposia in 2009**

The coming symposia will both be held in October sponsored by the Center this year.

# Symposium on **Multi Phase Flow in Atmospheric Boundary Layer: Wind Erosion, Dust Storms**

Dates: October 16-18, 2009

Venue: Lanzhou University, Gansu Province, China

Organized by: Professor Xiaojing Zheng (Lanzhou University, China)
Brief introduction: go to http://www.bictam.org.cn/show.asp?id=433

# Symposium on Meshfree/Meshless, Particle and Generalized/Extended Finite Element Methods

Dates: October 12-16, 2009

Venue: Nanjing, Jiangsu Province, China

Organized by: Professor Mingwu Yuan (Peking University, China)

Website: http://em.hhu.edu.cn/ismpefem/index.asp

As planned in the program of BICTAM for 2008-2010, the Center could provide some financial support to students in Asia and the Pacific participating in the activities. If you wish to recommend a student or researcher for some symposium please contact Prof. Xiaojing Zheng (xjzheng@lzu.edu.cn) and Prof. Mingwu Yuan (yuanmw@pku.edu.cn).