# 27th International Colloquium on the Dynamics of Explosions and Reactive Systems



July 28 - August 2, 2019, Peking University, Beijing, China

The International Colloquium on the Dynamics of Explosions and Reactive Systems (ICDERS) has been held every two years. The colloquium has been the premier international forum for the presentation of scientific contributions in the fields of explosions and unsteady combustion, where there is strong coupling between reaction and fluid mechanics. The 27th ICDERS will be hosted by Peking University, Beijing, China.

More information will come soon on the official conference website: http://www.ICDERS2019.pku.edu.cn/

## **Scientific Program**

Contributed presentations, in oral and poster sessions, plenary and special sessions will take place during the week-long Colloquium. It is ICDERS policy to encourage intensive discussions on basic and applied research of fundamental and timely topics. Authors of papers presented at this meeting are encouraged to submit full-length versions to one of these journals: *Combustion Science and Technology, Combustion Theory and Modeling*, and *Shock Waves*.

Submitted manuscripts will be peer reviewed according to individual journal standards but will be identified as ICDERS work individually or as part of a special issue.

## Submissions are encouraged on, but not limited to, the following topics:

- Detonation dynamics, structure, initiation and limits
- Dynamics of deflagration waves
- Dynamics of premixed and non-premixed flames
- Gas and dust explosions
- Diagnostics for reactive systems
- Numerical methods for reacting flows
- Nonlinear analysis and reactive analogues
- Ignition phenomena
- Reactive dynamics of energetic materials
- Multiphase reactive dynamics

- Relaxation phenomena in shock waves
- Propulsion applications of detonations and highspeed flames
- Turbulence in compressible reacting flows
- Chemical reaction kinetics and reaction dynamics
- Reaction wave instabilities and quenching
- Astrophysical deflagrations and detonations
- Safety relevant ignition processes
- Fire dynamics
- Industrial safety applications

## **Calendar of Events – Important Dates**

- Paper (around 4 pages) Submission Deadline: January 5, 2019
- Notification of Acceptance: Week of March 30, 2019
- Work-In Progress Poster Submission: April 6, 2019
- Work-In Progress Poster Notification: May 4, 2019
- Early Registration Deadline: May 31, 2019
- Conference Begins: July 28, 2019
- Conference Ends: August 2, 2019

The template and instruction on paper (extended abstract) can be found on the conference website:

http://www.icders2019.pku.edu.cn/papersubmissions/extended/index.htm

The website for paper submission is: https://icders.confmaster.net/user/accounts/login/

### **Program Committee:**

G. Ciccarelli (Chair), Jiro Kasahara and Eric Peterson (Co-Chairs), Others (TBD)

#### **Host Committee:**

J.-P. Wang (Chair), Z. Chen (Secretary-General), Y. Yang, Others (TBD)

### **Contact Information:**

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