



Reaction Kinetics in Condensed Matter

Moscow Region State University, September 22-26, 2010

The **International Conference on Reaction Kinetics in Condensed Matter** will be the forum bringing together researchers from all countries, disciplines and applications to exchange new ideas, results and techniques in different facets of reaction kinetics in condensed matter.

Date: September 22 - 26, 2010



Venue: Biochemistry Department,
Moscow Region State University,
5-th campus, 24 Voloshinoy St.,
Mytishi, Moscow Region, Russia



Organised by International Research and Education Center on Diffusion under MRSU

Local Organizing Committee, Moscow Region State University

Sergey Traytak (Physics and Mathematics Department), **Chairman**

Victor Belyaev (Physics and Mathematics Department),

Tatiana Snisarenko (Biochemistry Department).

Scientific Committee

G. Angulo (Spain)

S. Chernyshenko (Ukraine)

G. Grampp (Austria),

J. Kärger (Germany),

S. Lee (Korea),

W. Price (Australia),

A. Shushin (Russia),

H. Taitelbaum (Israel),

M. Tachiya (Japan).

Invited Speakers (confirmed)

B. Bagchi (India),

A. Doktorov (Russia),

A. Ivanov (Russia),

K. Lindenberg (USA),

J. Miller (USA),

G. Oshanin (France).

Aim

Reaction Kinetics in Condensed Matter 2010 (RKCM'10) is the first of the new series of international conference in the field of kinetics of chemical reactions in condensed matter. **RKCM'10** will fill the void left by the disappearance of **Fast Reactions in Solution (FRIS)**, a discussion meeting of the Royal Society) and **Diffusion Assisted Reactions (DAR)** in conferences on general chemical kinetics and to adapt and broaden the subjects related to kinetics of chemical reactions. The main concern of the conference will be investigating chemical reactions from the physical point of view, revealing new physical mechanisms of chemical processes and elucidating physics behind the chemical event. Special attention will be given to bridge the enormous gap between the most advanced statistical mechanical theories and the latest experimental techniques in a wide variety of fields from reactions in amorphous solids (polymers for example, with an increasing potential for new technologies in energy conversion, light emitting devices, organic electronics etc.) chemical reactions in crowded biological media. It is interesting to note that most of these topics present indeed a common problematic, i.e. the current description of the rate of the chemical events when coupled to the reactants mobility or diffusion. Unfortunately, the lack of a common arena to gather theoreticians and experimentalists make the firsts unaware of the range of problems of the latter, and artificially hides to the latter the descriptive tools already developed by the firsts. So **RKCM'10** will devote to all aspects of experiments and theory of chemical kinetics in condensed matter: past and future, untested predictions, experiments required, unexplained experimental results etc. In order to find common scientific interests and speak common language the participants are strongly encouraged not only to present their own results but also to give an introduction into their subfield of RCKM. The conference shall foster and encourage world wide cooperation and communication in those fields. Moreover, **RKCM'10** will also place emphasis on getting students and young researchers involved in investigations of the problems within the scope of this conference.

Scope

The topics to be covered in **RKCM'10** are as follows:

- Normal and anomalous diffusion: reactions in spatially restricted systems, polymers and amorphous media, search processes
- Fast reactions in different media: electron transfer, energy transfer, fluorescence quenching
- Effects of external magnetic and electric fields on reaction kinetics
- Physical insights into fast reactions in biological media
- New experimental methods in chemical kinetics
- New spectroscopic techniques for kinetics in condensed matter
- Sterically specific reactions in bio and nano-systems

Schedule

At most, 3 sessions can be held each day. There will be no poster session as it will be open during the whole conference. 3 days would be needed for the conference. A full-day mid-conference excursion (Sept 25) will be arranged to visit Sergiyev Posad which grew up in the 15th century around one of the greatest of Russian monasteries, the Troitse-Sergiyeva (Trinity) Lavra established by St. Sergius of Radonezh.



Scale of the conference

To cover all the above topics we expect about 100 participants.

- ✓ No parallel sessions will be hold. Those no interested on the lectures should have the opportunity to discuss in the posters halls.
- ✓ Chairman's presentation of the topic. The chairman should be well acquainted with the topic of his session.
- ✓ Poster's introduction. 10 posters maximum, 2 minutes each.

Language

The conference language is English

Deadlines

16 July 2010 - Registration deadline for foreign participants from outside the European Union needing the visa support.

23 July 2010 – final submission deadline for abstracts. Registration deadline for EU residents.

26 July 2010 –The registration fee transfer deadline.

Fees

Regular participants 220 EUR

Postgraduate and postdoctoral participants 150 EUR

Undergraduate students 100 EUR

The fee covers:

- visa formalities,
- conference kit,
- printed and electronic conference materials,
- coffee-breaks,
- icebreaker welcome (Sept. 21, 2010).

Contact information:

Please contact the following e-mail if you have any question:

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Conference Website is <http://rkcm.mgou.info/>