

# WORKSHOP-SYMPORIUM

## Mathematics in Drug Discovery

25-29 September 2010

Venue: YASHADA, Rajbhavan Complex, Baner Road, Pune 411007

Mathematical and computational techniques are used extensively in drug discovery research. They are mostly hidden within software packages and the end-user is barely aware of it. This residential workshop and symposium in the DST-IISc Year of Mathematical Biology aims to educate participants about the fundamental mathematical principles and techniques used at various stages of the drug discovery process, and to give a glimpse of ongoing research activities in these areas. It is targeted at final year Masters degree students, doctoral students, postdoctoral fellows, and young researchers from both

physical and life sciences backgrounds who are interested in the field of drug discovery. This activity is funded by the Department of Science and Technology and jointly organized by the DST Centre for Mathematical Biology at IISc, the IISc Mathematics Initiative, Piramal Life Sciences Ltd and NCL-Pune.

**Request for participation:**  
Applications are invited from interested research students and researchers to participate in the workshop. Limited financial support is available. Local participants are also required to formally apply.

Application forms can be filled online from our website  
<http://math.iisc.ernet.in/~imi/mathbiorequestforparticipation.php> or downloaded and submitted by either e-mail or post to:

The Secretariat  
IISc Mathematics Initiative  
Department of Mathematics  
Indian Institute of Science  
Bangalore 560 012  
Ph: +91-80-22933217, 22933218  
Fax: +91-80-23605390  
E-mail: imi@math.iisc.ernet.in

**LAST DATE: 15 Aug 2010**

### TOPICS INCLUDE

- Mathematics in small molecule chemistry**
- Modeling protein 3D structure**
- Protein flexibility**
- Docking**
- PK-PD modeling**
- ...and more!**

There will be a few symposium-style talks by researchers on original theoretical work done by them and case studies of applications covered in the Workshop.

### ORGANISERS

- Chandrika B-Rao  
(Piramal Life Sciences Ltd, Mumbai)
- Chetan Gadgil  
(National Chemical Laboratory, Pune)

### KEY SPEAKERS/INSTRUCTORS

- Prof B Jayaraman, IIT, Delhi
- Prof K Suguna, IISc
- Prof PV Bharatam, NIPER, Mohali
- Dr Sudhir Kulkarni, vLife
- Dr RV Hosur, TIFR, Mumbai
- Dr Madhavi Sastry, Schrodinger, DESIS
- Prof Evans Coutinho, BCP
- Dr Achintya Das, Strand LifeSciences
- Prof Saraswati Vishweshwara, IISc
- Prof S Gadre, University of Pune
- Prof D Velmurugan, University of Madras
- Prof PV Balaji, IIT, Bombay
- Prof Krishna Iyer, BCP
- Dr Rajiv Sharma, PSL
- Dr Prasanna Dattatreya, Dr Reddy's Lab
- Prof Rajani R Joshi, IIT, Bombay
- Dr CG Suresh, NCL
- Dr V Subramanian, CLRI, Chennai

For enquiries regarding local arrangements, contact: [mddws2010@gmail.com](mailto:mddws2010@gmail.com)