

# Call for Papers



## 5th International Conference on Population Balance Modeling

11 - 13 September 2013

at

Indian Institute of Science, Bangalore, INDIA

organized by

Department of Chemical Engineering, IISc, Bangalore

and

Supercomputer Education & Research Centre, IISc,  
Bangalore



## Invitation to PBM 2013

The great success of the preceding conferences on Population Balance Modeling (2000, 2004, 2007, and 2010) has stimulated the continuation of this conference series. The high quality of the conference contributions is documented in four special issues of Chemical Engineering Science [57(12), 2002; 61(1), 2006; 63(2), 2009; 76(1), 2012]. One major reason for the popularity of population balance modeling is its applicability to a great variety of operations in process engineering. Mining, wastewater treatment, nanoparticle synthesis, formation and stability of emulsions, and crystallization are just a few examples. This variety tends to keep researchers active in population balance modeling confined to their respective scientific communities. The primary goal of this conference is to promote interaction among researchers active in different disciplines but using the framework of population balance modeling in a central way. Using the common framework as the rallying point, this conference allows exchange of ideas across traditional boundaries to identify common problems and solution approaches. The 5th International Conference on Population Balance Modeling (PBM) aims to bring together the leading researchers and practitioners with wide ranging background, so as to assess the current status of the field, and to bring out the future challenges for population balance modeling.

We look forward to welcoming you in Bangalore (Bengaluru).

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Indian Institute of Science  
Bangalore, INDIA

Rohit Ramachandran  
Department of Chemical & Biochemical Engineering  
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## About Bangalore



PBM2013 will be hosted at Bangalore, the capital of the State of Karnataka in INDIA. Bangalore is a fast growing metropolitan area on southern India's Deccan Plateau, situated at about 1000 meters above the sea level. Bangalore is known for its public sector industry and widely acclaimed academic and research institutions. In the recent past, Bangalore (renamed as Bengaluru) has also emerged as the Silicon Valley of India. Bangalore enjoys moderate weather throughout the year. The temperature in the month of September stays at a maximum of around 30 C and a minimum of 20 C. The

city enjoys a mixed culture. Its inhabitants belong to various geographical regions and faiths practiced in the country. Due to the excellent rail and air connectivity and moderate temperatures, Bangalore also serves as a gateway for the visitors interested in wildlife and bird sanctuaries, hill stations and nature camps, and a large number of places of historical and architectural interest such as Mysore, Madurai, Helebidu, Badami, Bidar, and Hampi. The information available on the web covers Bangalore city, places around it, and the State of Karnataka quite well.



## The Indian Institute of Science



The Indian Institute of Science (IISc) was conceived in the final years of the 19th century as a Research Institute or University of Research by Jamsetji Nusserwanji Tata, also the founder of a number of other academic and non-academic institutions, including the Tata group of Industries. A strong tradition of academic research and an ambiance that favors scholarly activity have contributed to the emergence of the Institute as an attractive and a much sought after place in the country for students and faculty. Over the years, as the Institute has grown, new and

interdisciplinary areas of research have been established, many of them for the first time in the country. The Institute's departments in fields ranging from earth sciences to aerospace engineering have served to nucleate research and development in both the public and private sectors. The Institute completed a century of existence in 2009.

### Scientific Committee

Sanjeev Kumar / Indian Institute of Science, Bangalore (Head)

Rohit Ramachandran / Rutgers, USA (Co-Head)

Heiko Briesen / TU Munchen, Germany

Doraiswami Ramkrishna / Purdue University, USA

Paulo Lage / UFRJ, Brazil

Daniele Marchisio / Politecnico of Torino, Italy

Ingmar Nopens / Universiteit Gent, Belgium

Marcus Kraft / University of Cambridge U.K

Achim Kienle / Max Planck Institute, Germany

Hugo Jakobsen / Norwegian University of Science and Technology, Norway

Zoltan Nagy / Loughborough University, U.K

Themis Matsoukas / Pennsylvania State University, USA

Zhenghong Luo / Xiamen University China

Alberto Cincotti / The University of Cagliari, Italy

## Conference Format

The conference will include invited lectures, oral presentations and posters in non-parallel sessions. Posters will be accessible throughout the whole conference and can be discussed during the coffee breaks.

## Main Topics

The central topic of the conference will be multidimensionality and expansion of the population balance framework to new domains. Thus, papers addressing multidimensional aspects both experimentally and theoretically and new applications of population balances are especially welcome. Paper submission is encouraged but not limited to the following topics:

- Formulation, identification, and simulation of multidimensional PB Models
- Novel applications of PB Models (e.g. biological systems)
- Optimization and control using PB Models
- Multidimensional measurements
- Development/identification of appropriate kernels
- Industrial applications of PB Models

## Abstracts and Manuscripts

Participants interested in presenting a paper are invited to submit an **extended abstract** by **January 20, 2013** via the online submission system available on the conference website:

*<http://pbm2013.serc.iisc.ernet.in>*

Authors of accepted abstracts will be asked to submit a full paper. At least one of the authors should present the paper at the conference. All accepted papers will be published in the conference proceedings (one registration required).

## Conference Deadlines

Submission of extended abstracts	<b>January 20, 2013</b>
Letter of acceptance	March 31, 2013
Submission of full manuscripts	July 31, 2013
Early registration	May 31, 2013
PBM2013	September 11-13, 2013

## Registration Fees

Student	350 USD
Student (early registration)	300 USD
Full	400 USD
Full (early registration)	350 USD

## Organizing committee

Sashikumaar Ganesan / Indian Institute of Science, India

Sanjeev Kumar / Indian Institute of Science, India

Sivaramkrishna Perala / Indian Institute of Science, India

Bhanu Teja / Indian Institute of Science, India

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## Contact Details

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- Organizational Issues

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