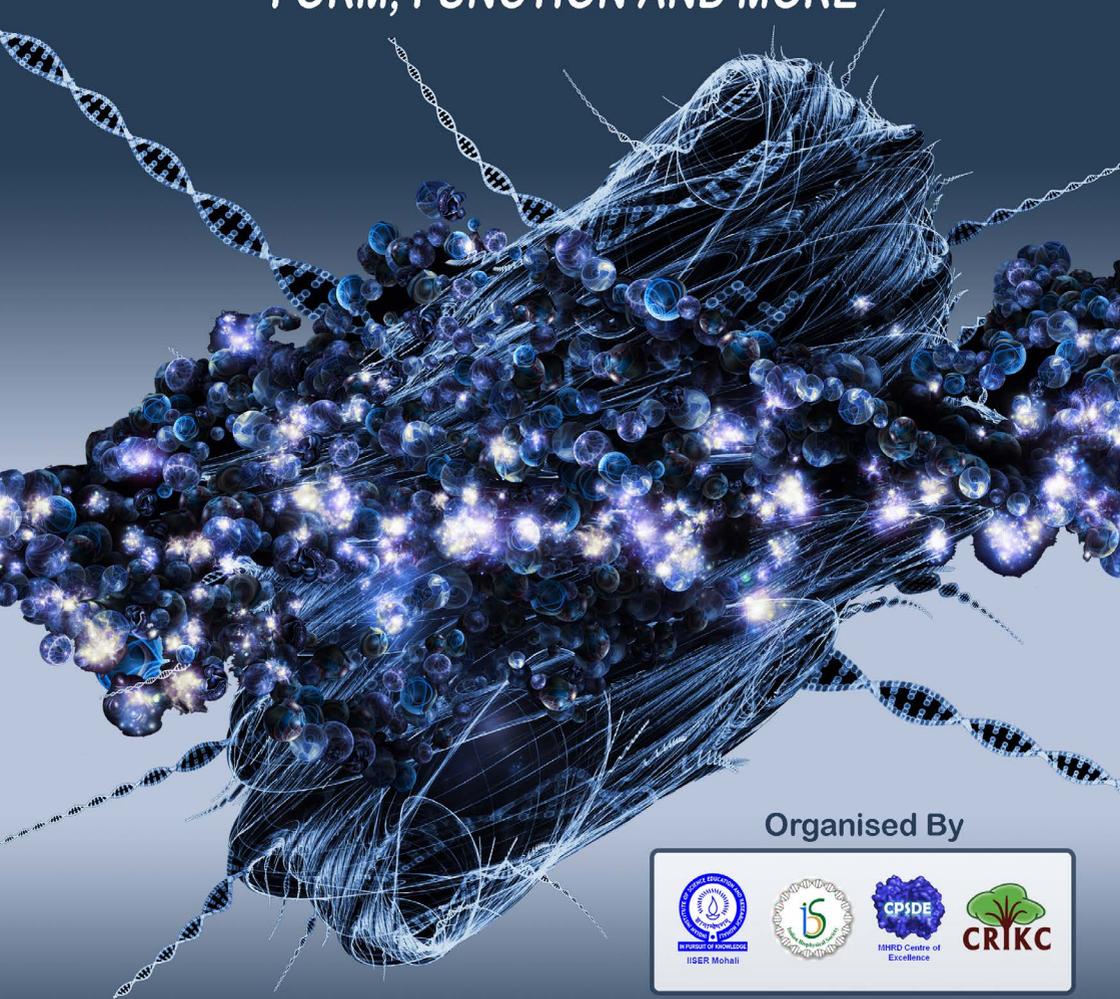


**IBS**  
**2017**

Annual Symposium of the  
**INDIAN BIOPHYSICAL SOCIETY**

IISER MOHALI • 22 March (Pre-Symposium Lecture Series)  
23-25 March (Main Symposium)

**BIOPHYSICS OF MOLECULES, CELLS AND ORGANS:  
FORM, FUNCTION AND MORE**



Organised By





## INDIAN BIOPHYSICAL SOCIETY (IBS)

The Indian Biophysical Society (IBS) was founded in 1965. It has over a thousand members. The interdisciplinary nature of the society attracts scientists from various sub-disciplines of Biology, Physics, Chemistry and Materials Science (including nanoscience and nanotechnology) as well as allied disciplines such as Biotechnology, Bioinformatics, Medicine and Biomedical Engineering.

The main activities of the IBS are the Annual Symposium, meetings of its local chapters, and participation in international bodies and meetings relating to biophysics.

## INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH (IISER)

IISER Mohali is just over nine years old at the time of writing, having been established in 2007. It is one of the favourite destinations for students seeking to study science, and for researchers seeking an exciting academic environment in which to carry out scientific studies in the Physical, Chemical, Biological, Mathematical, and Earth and Environmental Sciences, as well as in humanities and social sciences.

The institute encourages research in each of the above disciplines, as well as research of interdisciplinary nature, and the faculty engage in teaching and research in equal measure. Currently, the institute has over a 1000 undergraduate students and over 350 graduate students, working towards BS-MS dual degrees, Integrated MS-Ph.D degrees and also Ph.D degrees.

## THE ANNUAL SYMPOSIUM OF THE INDIAN BIOPHYSICAL SOCIETY (IBS), 2017

During the upcoming symposium, we plan to have a pre-conference lecture series for students and faculty, on 22nd March, 2017, and the main symposium between 23rd and 25th March, 2017, with attendees choosing to register for the two events either independently or in combined fashion.

The main symposium is expected to be attended by up to 450 attendees, including approximately 150 faculty, and 300 research scholars from all over India, featuring ~30-35 talks by research scientists/faculty (not necessarily members of the society) as well as 10 short-talks by students, or postdocs (again not necessarily members of the society).

**The pre-conference lecture series** will focus on two topics "Characterization of Biomolecular Form and Function" and "Imaging and Manipulation of Molecules in Cells", with parallel talks going on in adjacent lecture halls, each with a seating capacity of 125. The talks will focus on the principles underlying instrumental biophysical analyses, and will be delivered by applications specialists from corporate entities participating in, and sponsoring, the event.





Whereas the one-day preconference lecture series will focus on the principles and practice of biophysical instrumentation and old and new methods of measurement and analyses, the talks in **the main symposium** will span the gamut of areas in Cellular, Organismal and Molecular Biophysics, hoping to expand and broaden the horizons of what Biophysics means to researchers, and to the members of the society, e.g., with attempts made to have special sessions on recent advances in subject areas such as biophotonics, super-resolution fluorescence imaging and bioelectrical signal processing by cells.

## **THE G N RAMACHANDRAN MEMORIAL LECTURE, 2017**

Professor G.N. Ramachandran (1922-2001) was India's most prominent, as well as most eminent, biophysicist. He is best known for having determined the three-dimensional structure of collagen and also for framing the famous Ramachandran map/diagram for protein structures. The lecture named after him is the highest honor of the Indian Biophysical Society, and past lectures have been given by Prof. Richard Ernst, Prof. Kurt Wuthrich, and Prof. Tom Blundell and C.M. Dobson, to name a few speakers from abroad, as well as by Prof. Vijayan (who worked with Dorothy Hodgkin), and Prof. C. Ramakrishnan, who authored the famous Ramachandran map paper with GN Ramachandran and Sasisekharan. This year's lecturer is yet to be finalized.

## **ABOUT THE CENTRE FOR PROTEIN SCIENCE, DESIGN AND ENGINEERING (CPSDE)**

The CPSDE involved in carrying out cutting-edge research and training in all aspects of protein science, design and engineering, with particular emphasis on studies that have implications for, and applications in, the health/disease-related and energy/biofuels-related biosciences. The centre is a Centre-of-Excellence in Frontier Areas of Science and Technology, funded by the Ministry of Human Resource Development, Government of India.

## **CHANDIGARH REGION INNOVATION AND KNOWLEDGE CLUSTER (CRIKC)**

The idea of having knowledge cluster/hub has its genesis in the 'Narayan Murthy Report' April 2012, commissioned by Planning Commission on corporate participation in 'higher education'. This also finds echoed in the 'Knowledge Commission Report' of GOI. Further, the idea of having alliances between institutions of higher education and research, in and around a given city, also finds reference in the 12th Plan Document of Government of India. The idea of having knowledge cluster/hub is also inclusive of the 'Meta-University' concept, being advocated by





MHRD, GOI in its RUSA document. Furthermore, 'Science, Technology and Innovative (STI) 2013 policy' of GOI also refers to clusters/hubs as tools for innovations. The Sam Pitroda report has also underlined the development of excellence in educational and research institutions facilitating innovation and knowledge cluster.

Keeping these broad ideas in mind, several rounds of meetings involving heads and/or their representatives have been held, involving institutions of higher education and research in and around Chandigarh. In one of the meetings held on 24th November 2012 at Panjab University, it was agreed to name the knowledge cluster/hub as Chandigarh Region Innovation and Knowledge Cluster (CRIKC). This idea has received support from the local MP, Shri Pawan Bansal, who has agreed to release funds to the tune of Rs. 1 crore out of MPLAD scheme to realize few steps towards its creation, the first installment of Rs. 37 Lakhs was received by Panjab University in March 2013.

## **ABOUT THE TRICITY**

The Tricity of Chandigarh-Mohali-Panchkula interface seamlessly with each other on the map. They represent one Union Territory of India (Chandigarh) and two states of the Indian Union (Punjab and Haryana). Between them, they host about 20 research and educational institutions, run by seven different ministries of the Union Government. These institutions comprise a new loose-grouping known as the Chandigarh Region Innovation and Knowledge Cluster (CRIKC). The high density of research institutions rivals that found in the cities of Delhi, Bangalore and Hyderabad in terms of the variety, reach and diversity of the research represented by any one single region.

The Chandigarh region is modern, with wide boulevards, fast-flowing traffic and the feel of a European city (Chandigarh was designed by the French architect, Le Corbusier, after India's independence). Chandigarh is the gateway to the lower Himalayas particularly the Shivalik and Dhauladhar ranges) and is a city nestled amongst hills. Of particular note is the fact that the CRIKC institutions - between them - host nearly 70 researchers engaged in some form of biophysical research activity, with many more using leading-edge facilities.



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## CALL FOR ABSTRACTS

IBS 2017 invites original contributed research in the form of abstracts from Academic, Institutional or Corporate Scientists, Technologists and Research Scholars on any topics in molecular, cellular, organ-based or organismal biophysics for presentation (oral or poster presentation) during the symposium. Topics might include, but are not limited to :

- Structure and dynamics of biological macromolecules
- Membranes and ion channels
- Cellular Biophysics
- Mechano-biology
- Form and function of macromolecular assemblies
- Form and function of organs; tissue and organ engineering
- Cellular Stress, Protein Folding, and Disease
- Biophysical methods and instrumentation
- Protein structure and drug design
- DNA structure and dynamics
- Structural Bioinformatics
- Bio-photonics and Imaging
- Neuro-biophysics
- Nano-biotechnology and biosensors
- Interdisciplinary materials science (Chemistry-Biology Interface)

## ABSTRACT SUBMISSION GUIDELINES

- Abstracts for poster presentation should be submitted online. The abstract should be 150-200 words long, and should be submitted without images. All fields should be completed in the online form before submission. The last date for submission of abstract for consideration for poster presentation is January 25, 2017. Abstracts submitted after this date will be considered based on availability of slots.
  - Submission of abstract does not require registration. However, for presentation of poster, it is required that you pay your registration fee.
  - At least one of the authors of the submitted abstract should be registered for the conference. A registered delegate will be permitted to present one paper only. However, if at the last minute a registered delegate is unable to attend the meeting, a colleague can help with the presentation of the poster (without the poster being eligible for consideration for any of the poster awards). The abstracts received without payment of the accompanying registration fee will not be included in the symposium's scientific program.
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- The submission requires uploading of the abstract in the template given below. The file should be uploaded in MS word format only.

**Abstract Template :** [http://ibssymp2017.in/wp-content/uploads/2016/10/Abstract\\_Template.docx](http://ibssymp2017.in/wp-content/uploads/2016/10/Abstract_Template.docx)

**Sample Abstract :** [http://ibssymp2017.in/wp-content/uploads/2016/10/Sample\\_Abstract.docx](http://ibssymp2017.in/wp-content/uploads/2016/10/Sample_Abstract.docx)

- Please write your abstract here within the space allocated in above template and should NOT exceed the single A4 page.
- DO NOT change the font or the size of any of the components in this template.
- The file should be uploaded in MS word format only.
- Please DO NOT include any figures in your abstract.
- Submission of an abstract does not require registration as a pre-requisite. However, for presentation of a poster, it is required that you pay your registration fee. If you have any further questions, contact [ibssymp2017@gmail.com](mailto:ibssymp2017@gmail.com).

## REVIEW PROCEDURE

- On submission, you will receive an acknowledgement mail with abstract identification number.
- After submission your abstract will be screened by the scientific program committee.
- The acceptance/rejection of abstracts for presentation will be intimated within 10 days of submission after which the registration process should be completed as soon as possible.
- Poster presenters must register in advance and will not be allowed to register on spot.
- Poster presenters not registered in time will not be allowed to present and their abstract will not be included in the abstract book.

## BEST POSTER AWARDS (FROM IBS GUIDELINES)

### Ratna Phadke Award:

- Ratna Phadke Award (for young scientists below 35 years of age).
- Such abstracts should be accompanied by the bio-data of the young investigators duly attested by the Supervisor/HOD.
- The oral presentation for Ratna Phadke Award is pre-selected. For this purpose, the participants' nomination is invited and a small committee may decide on the awardee, who is paid an award money of Rs.1500/- and 3rd AC to and fro train fare from the normal place of his work.

**Other Poster Awards:**   » D M Bose           » N N Das Gupta           » K S Korgaonkar  
                                  » N N Saha           » A R Gopala Ayengar   » R Srinivasan





## TRAVEL SUPPORT FOR YOUNG RESEARCHERS

If there are sufficient funds available, partial travel costs may be available for a limited number of research scholars (M.Sc students, Ph.D students and postdoctoral researchers). Please write to indianbiophysicalsociety@gmail.com

## REGISTRATION AND ACCOMMODATION GUIDELINES

- Filling of registration form is mandatory for payment made by any of the payment options.
  - Attendees can register for the Pre-conference Corporate Lecture Series and the Main Symposium, by clicking the appropriate buttons in the online registration form. Registration forms submitted without completion of payment will not be processed.
  - Single registration form is required to be submitted for participation in both Pre-conference Corporate Lecture Series, Main Symposium as well as accommodation. Payment for Pre conference lecture series, Main symposium and Accommodation can also be deposited together but the details should be clearly mentioned in the registration form.
  - Registration charges include participation in scientific sessions, conference kit and refreshments for the relevant dates.
  - Attendees can opt to either
    - » Book their own accommodation and/or make their own arrangements for transport to the venue of the symposium
    - » Opt to have their accommodation arranged by the organizers of the symposium (in which case they will need to click the appropriate buttons on the forms on the website to indicate this).
  - Participants who wish to make the payment through a Demand Draft will need to furnish full details of the draft at the time of registration (at the suitable location in the form on the website). The Demand Draft should be made in the favor of IBS Symposium 2017.
  - Registration may be completed by online payment through Credit/Debit Card using Payment Gateway or Direct Net Banking/ Bank Transfer (NEFT), OR by Demand Draft. Payment in cash is not acceptable.
  - After submission of form online, print form and send it along with the Bank Draft/Cheque to IBS 2017 Symposium Secretariat, Select Biosciences India (SELECTBIO), Unit 21, Level 2, Berkeley Square, Plot No 24, Industrial Area Phase I, Chandigarh 160002, India M: 0172 5025050
  - Delegates willing to pay by Online registration using Credit/Debit card will have to pay additional Payment Gateway administrative charges which will be added to the standard registration charges online.
  - Filled registration form should be submitted only after depositing the payment by online mode/bank transfer. Registration form submitted without payment details will not be accepted.
- 

- Participants who wish to make the payment through a Demand Draft will need to furnish full details of the draft on the registration form at the time of registration (at the suitable location in the form on the website). The Demand Draft should be made in the favor of IBS Symposium 2017 and payable at Mohali branch.
- The delegates will get online and email acknowledgements on successful submission of the registration form.
- Invited Symposium Speakers and Corporate Lecture Series Speakers will be automatically registered by the organizers and their cost of accommodation will be borne by the symposium organizers.
- The delegates will get online and email acknowledgements on successful submission of the registration form.
- Please use the following details for payment by NEFT/RTGS. Please retain the UTR number/Transaction id for communication and also fill it in the registration form.

### **BANK DETAILS**

Bank Name	Canara Bank
Account Name	IBS Symposium 2017
Account Number	4790201000023
Account Type	Saving Account
IFSC Code	CNRB0004790

### **INFORMATION ABOUT REGISTRATION AND ACCOMMODATION COSTS (INR)**

In the form on the website, registrants will need to click buttons separately for

- registration for the corporate lecture series (22nd March, 2017)
- registration for the main symposium (23rd, 24th and 25th March, 2017)
- accommodation – at the same overall cost - for either three days (23rd, 24th and 25th March, 2017) or four days (22nd, 23rd, 24th and 25th March, 2017).

Once registrants have clicked any/all of the above buttons, the form on the website will add the separate costs and create provisions for either a consolidated online payment, or for filling of information about a consolidated Demand Draft.

**CORPORATE LECTURE SERIES REGISTRATION COST (INR)**  
**(22<sup>nd</sup> MARCH, 2017)**

Category	Till 31 <sup>st</sup> December 2016	After 31 <sup>st</sup> December 2016	Offline on-the-spot registration
Pre-Conference Lecture Series	1000 (1050)	1500 (1575)	2000 (2100)

**SYMPOSIUM REGISTRATION COST (INR)**  
**(23<sup>rd</sup> - 25<sup>th</sup> MARCH, 2017)**

Category	Till 31 <sup>st</sup> December 2016	After 31 <sup>st</sup> December 2016	Offline on-the-spot registration (15th March, 2017, Onwards)
MSc/Ph.D. Students	2500 (2600)	3000 (3150)	3500
Post-doc fellows	3000 (3150)	3500 (3675)	4000
Academic Faculty/Researchers	3500 (3675)	4000 (4200)	4500
Corporate/Industrial Participants	5000 (5250)	6000 (6300)	8000

**ACCOMMODATION COST (INR)**  
for arrangements by symposium organizers

Category	Amount
MSc/Ph.D. Students	1500 (1575)
Post-doc fellows	2000 (2100)
Academic Faculty/Researchers	3000 (3150)

## MEMBERSHIP OF THE INDIAN BIOPHYSICAL SOCIETY

Membership of the Indian Biophysical Society is not mandatory for registration and attendance. However, all registrants are encouraged to become life-members of the society for a fee of Rs. 1000/-

(For more details, visit: <http://indianbiophysicalsociety.org/index.html>)

*Please fill up the application form and attach a Demand Draft drawn on any nationalized bank favoring "**Indian Biophysical Society**" Payable at **Mumbai**, towards Life Membership fee and send to:*

### **Prof. K.V.R. Chary**

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