

# Science Academies Lecture Workshop

On

## Magnetic and Optical Properties of Molecular Materials: Principles and Applications

October 19 - 21, 2016



Organized by:



Department of Chemical Sciences  
Tezpur University  
Napaam-784028, Assam

## Sponsored by



IASc



INSA



NASI

## How to apply

University/college teachers and students at post graduate and research level are invited to apply for participation.

Please write to the coordinator giving your educational qualifications, address for communication, mobile number & e-mail address to the workshop coordinator by post/ e-mail on or before **10<sup>th</sup> October, 2016**.

No TA/DA will be provided to the participants.

## Speakers

Professor K. L. Narasimhan,  
IIT Bombay, Mumbai

Professor P. K. Das,  
IISc, Bengaluru

Dr. Sheela K. Ramasesha,  
IISc, Bengaluru

Professor Satish Patil,  
IISc, Bengaluru

Dr. V. R. Supradeepa,  
IISc, Bengaluru

Professor S. Ramasesha,  
IISc, Bengaluru

Coordinator

Dr. Nayanmoni Gogoi  
Dept. of Chemical Sciences  
Tezpur University,  
Napaam-784028

Email ID: [ngogoi@tezu.ernet.in](mailto:ngogoi@tezu.ernet.in)

Phone: 03712 275065;  
Cellphone: 8011545888

## Indian Academy of Sciences

The *Indian Academy of Sciences* (IASc), Bangalore was founded in 1934 by C. V. Raman. Its objectives include promoting the progress of science in pure and applied branches. Major activities include organizing meetings for discussions on important topics, publication of scientific journals, recognizing scientific talent, improvement of science education and taking up other issues of concern to the scientific community.

## Indian National Science Academy

The *Indian National Science Academy* (INSA), New Delhi founded in 1935 is a premier science academy in the country, INSA plays crucial role in promoting, recognizing and rewarding excellence.

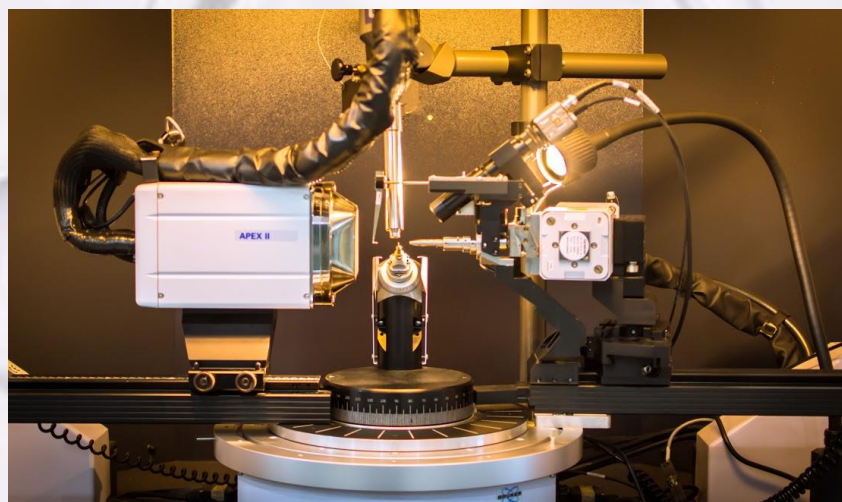
## National Academy of Sciences

The *National Academy of Sciences* (NASI), Allahabad was founded in 1930. The main objective of the academy is to provide a national forum for the publication of research work carried out by Indian scientists.

## Tezpur University

*Tezpur University* (TU) was established by an Act of Parliament in 1994. The main objective of this Central University is to offer courses and promote research in areas which are of special and direct relevance to the region and in emerging areas in Science and Technology.

TU was conferred Visitors Best University 2016 award and was accredited with "A" Grade by **NAAC**.



## Objectives of the Workshop

The aim of the proposed workshop is to introduce the basic concepts in magnetism such as exchange mechanisms, cooperative magnetic phenomena, single molecule and molecular magnets. In the realm of optical properties topics such as light-matter interaction, electron states in molecules and polymers, linear and nonlinear optical phenomena, electronic processes in devices will be covered. There will also be talks on molecular electronic devices, synthesizing polymers for niche applications and harnessing solar energy through photovoltaics.

## Topics to be covered

1. Light-matter interactions. Introduction to Light sources and time resolved spectroscopies.
2. Origin of magnetic forces. Classification of Magnetic Materials. Magnetic Exchange and Molecular Magnetism.
3. Nonlinear Optic Phenomena in molecular materials.
4. Molecular Optical Devices.
5. Synthetic strategies for device molecules.
6. Harvesting solar energy.

# SCIENCE ACADEMIES' EDUCATION PROGRAMME

SEP/LW/October2016

08 September 2016

## JOINT SCIENCE EDUCATION PANEL

### Indian Academy of Sciences

Sebastian, K. L.  
(Chairman)  
Arunan, E.  
Bachhawat, A. K.  
Balakrishnan, V.  
Chattopadhyay, Nitin  
Dhar, Deepak  
Mukunda, N.  
Murthy, M.R.N.  
Radhakrishnan, T. P.  
Rangarajan, Govindan  
Saidapur, S.K.  
Sankaran, P.  
Satheesh, S.K.  
Sengupta, Pulak  
Subramaniam,  
Annapurni

### Indian National Science Academy

Chattaraj, P. K.  
Chattoo, B.B.  
Chaudhuri, Probal  
Goswami, J.N.

### The National Academy of Sciences, India

Dimri, V.P.  
Khurana, Paramjit  
Misra, Gadadhar  
Mittal, J.P.

### Contact Address

Mahabaleswara, T.D.  
Coordinator  
Refresher Courses &  
Lecture Workshops  
Indian Academy of  
Sciences  
P.B. No. 8005  
C.V. Raman Avenue  
Sadashivanagar P.O.  
Bengaluru 560 080  
India

### Telephone:

91-80-2266 1210  
91-80-2266 1222  
Fax:  
91-80-2361 6094

### Email:

sep@ias.ernet.in

Dr Nayanmoni Gogoi  
Dept. of Chemistry  
Tezpur University  
Tezpur 784 028

Sub: Lecture Workshop on "Magnetic and optical properties of molecular materials: principles and applications" at Tezpur University, Tezpur during 19-21 October 2016.

Dear Dr Gogoi,

This has reference to the letter forwarding a proposal and/budget for organizing a three-day Lecture Workshop in your College. The Joint Science Education Panel of the three Academies will be happy to sponsor and support the Lecture Workshop. We note that Prof. S. Ramasesha (IISc, Bengaluru) will be the Workshop Convener and that you will be the Workshop Co-ordinator.

(a) Your budget of Rs. 1,98,000/- for 120 participants (inclusive of travel expenses for Resource Persons) has been approved by the Science Education Panel. Please note that as per guidelines an amount of Rs. 2000/- will be the honorarium per lecture. Accordingly, we have reduced the excess amount projected towards this in your budget.

(b) Please note that only the names of Convener and Coordinator of the Workshop should be included in brochure/invitation etc. Names of members of the management, organizing committees, patrons etc should be strictly avoided.

(c) Please ensure that the expenditure on individual items does not exceed the sanctioned BUDGET HEAD. If the actual expenditure exceeds the sanctioned budget, THE HOST INSTITUTION SHOULD TAKE CARE OF THE DIFFERENCE.

(d) Lecture Workshops are sponsored and supported by the three National Science Academies – IASc, INSA and NASI. The names of INDIAN ACADEMY OF SCIENCES (BENGALURU), INDIAN NATIONAL SCIENCE ACADEMY (NEW DELHI) and THE NATIONAL ACADEMY OF SCIENCES, INDIA (ALLAHABAD) should therefore be mentioned in all publicity material such as programme sheet, invitation cards, etc.

(e) It may be noted that no formal certificates should be issued to participants. A letter of attendance signed by Coordinator may be issued to those who need it.

(f) The Workshop should be called Science Academies' Lecture Workshop on "Magnetic and optical properties of molecular materials: principles and applications".



Indian Academy  
of Sciences,  
Bangalore



Indian National  
Science Academy,  
New Delhi



The National Academy  
of Sciences, India  
Allahabad

(g) You should send us three copies of the printed programme cards once it is printed.

(h) We can advance money by electronic transfer on a specific request from you. We will need the following bank details:

1. Account No;
2. Name of the Account Holder;
3. Name of the Bank;
4. Name of the Branch;
5. IFS code for non-SBI accounts.

(i) The audited expenditure statement/utilization certificate duly signed by competent authority (CA or Financial Controller) to be sent along with the report, once the Course is over. This is required for the audit compliance.

You can go ahead with organizing the Workshop in consultation with Prof. S. Ramasesha and keep in touch with us about the progress.

With regards,

Yours sincerely,



T. D. Mahabaleswara  
Coordinator (Lecture Workshop/Refresher Course)  
Science Education Panel