

## S. N. Bose National Centre for Basic Sciences

S. N. Bose National Centre for Basic Sciences is an Autonomous Research Institute established under Department of Science and Technology, Government of India in 1986 as a Registered Society. The Centre was established to honour the life and work of Professor S. N. Bose who was a colossal in theoretical physics and has made some of the most fundamental conceptual contributions in the development of Quantum Mechanics and Quantum Statistics.

Since its inception in 1986, the Centre has emerged as a major institution for research and development in Basic Sciences, specifically in the area of physical sciences and related disciplines. The Centre, while focusing on basic research, has also made a new move to contribute in application driven basic research, in particular, in areas of national needs.

Situated on a 15 acre lush-green picturesque campus in Salt Lake, the Centre is engaged in basic research (theoretical, computational and experimental) in selected areas of Physical and Chemical Sciences including Physics of Complex Systems, Astrophysics and High Energy Physics, Condensed Matter Physics and Material Sciences, Nanosciences and Chemical and **Biological Physics.** 

The Centre has advanced research facilities such as high performance computing facilities, advanced facilities for materials synthesis and characterization at nanoscopic level, and clean room facilities for nanolithography with features down to 20nm and related nanofabrication facilities. The Centre also has advanced experimental facilities at low temperature with high magnetic field, ultrafast and high frequency spectroscopy including femto-second systems, time resolved MOKE and Tera-Hertz Spectroscopy.

The Centre is also a major hub of advanced manpower training and linkage in this crucial area of Science and Technology. The Centre offers residential programme leading to PhD and has a vigorous Visitors & Linkage programme.

# **Department of Physics, Gurucharan College**

The Physics Department of Gurucharan College was established in the year of 1949 as a part of the `Arun Kumar Chanda Science Section'. In persuasion of the introduction of the higher education in the collegiate framework, the B Sc (Pass) course in Physics was introduced in 1954 which was upgraded to the Honours standard in 1962. Since inception, the department has got its solid foundation because of the selfless service of many dedicated teachers.

The department's humble endeavour of providing better science education was inspired by the august visit of the world-renowned scientist Professor Meghnad Saha in 1954. Since then the Department received wide appreciation not only because of the brilliant results of its students, but also due to the organizing of Science Exhibition and other related academic activities in the college. During the yesteryears of the Science Exhibition held during the College Social, various models, electronic gadgets, resourceful data and posters, science debate and quiz etc. of the physics pavilion were applauded by all sections of the society. To keep up these activities, the department periodically organizes regional and national level symposium, seminar lectures etc which are attended by many noted scientists like Prof J R Taylor Former VC, Gauhati University (1964), Prof Bikash Sinha, Director, SINP, Kolkata (1997), Professor J V Narlikar Former Director, IUCAA, Pune (1999), Prof Asoke Sen, HRI, Allahabad (2004), Prof Sushanta Dattagupta, Director, IISER, Kolkata (2004) among others.

The department has its own annual magazine `Anweshan', which is instrumental in recording the creative scientific thoughts of our students. The present faculty members have been able to develop a modest infrastructure to carry out research in some selected fields in theoretical and experimental physics by bringing several projects. Many of its alumni have excelled in the fields of science, technology and other fields. In a nutshell, these academic endeavours, which form the basic threads of higher education and research in Physics in South Assam, are still being cultivated as a part of its unique tradition.

**Department of Physics GURUCHARAN COLLEGE** SILCHAR- 788004, ASSAM, INDIA



# **Topical Research School** On **Current Trends in Theoretical and Experimental Physics**

# MARCH 20, 21, 22 & 23, 2023

Organised by

&



S. N. Bose National Centre for Basic Sciences

SALT LAKE, JD BLOCK, SECTOR-III, **BIDHANNAGAR, KOLKATA, WEST BENGAL,** 700106



## About the School

The Theoretical Physics Seminar Circuit (TPSC) was set up by the DST, Govt of India, to promote collaboration and sharing of research ideas and results between different research centres in India. The S.N. Bose National Centre for Basic Sciences is the nodal centre.

The other participating Centres are : TIFR, Mumbai School of Physics, Central University, Hyderabad MatScience, Chennai IOP, Bhubaneshwar IIT, Kanpur PRL, Ahmedabad Department of Physics and Astrophysics, University of Delhi and the IISc, Bangalore. The Topical Research Seminar is called Topical Research School (TRS).

ongoing scenario of research in theoretical and experimental physics and provide a platform for interaction among prominent place in the history of the royal game Polo undergraduate and postgraduate students, including Travel: The city is well-connected with Agartala, Aizawl, researchers of the region.

#### **Who can Participate**

Students of B.Sc Fnal Year (Physics Hons.), M.Sc( Physics), M.Sc Applied Physics & Research Scholars

#### How to apply

The application is to be submitted through the Google Form obtained by scanning the QR code below:



### Important information

**Deadline:** The last date of submission of application for the proposed School is 5th March, 2023. The application is to be submitted through the Google Form obtained by scanning the QR code below. The participants will be apprised of their selection via E-Mail on 10th March, 2023

Registration Fee: There is no registration fee for the participants

Accommodation: Local hospitality will be provided to the participants

About Silchar: Silchar, located on the left bank of the river Barak, is the economic gateway to the state of Mizoram and part of Manipur. It is situated 420 km south east of Guwahati. The main purpose of the proposed School is to spotlight the The town of Silchar has tremendous commercial importance and is the second largest in the state of Assam. It occupies a

Guwahati, Imphal and Shillong by road. Participants may also reach here by train enjoying the unique picturesque terrain of North Cachar and Barail Hills. There also exists flights from Kolkata, Guwahati, Bangaluru, Delhi, Imphal, etc Temperature: The minimum temperature in Silchar during the third week of March hovers around 17° C.

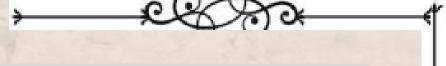
> **Address for correspondence Dr. Apratim Nag** Convener Topical Research School(TRS)

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Prof. Asoke Kumar Sen (AUS), Prof. Atri Deshamukhya (AUS), Prof. Pralay Kumar Karmakar (TU), Prof. B. Indrajit Sharma (AUS), Dr. Ram Prasad Prajapati (JNU), Dr. Subhasis Panda (NIT, Silchar), Dr. Himadri Sekhar Das (AUS), Dr. Rupak Dutta (NIT, Silchar), Dr. Saumya R. Mohapatra (NIT, Silchar), Dr. Avijit Chowdhury (SNBNCBS), Dr. Manoj Mandal (SNBNCBS), Dr. **Tapas Baug** (SNBNCBS)

Patron: Prof. Sajalendu Das Laskar, President, Governing Body, Gurucharan College Chairman: Dr. Bibhas Deb,

Dr. Avijit Chowdhury (SNBNCBS) Jt. Conveners: Dr. Indira Dey(GCC) & Dr. Rajarshi Krishna Nath (GCC) Treasurer: Mr. Kumar Sunar (GCC)



# **Resource Persons:**

# **Local Organising Committee**

Principal,

Gurucharan College

Convener(s): Dr. Apratim Nag (GCC)

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