

Bengal Science Initiative



West Bengal State Council of
Science & Technology
and
Department of Science & Technology
Govt. of West Bengal

Bengal Science Initiative



Satellite Programme & Brain Storming Sessions
on
100 Years of Science in India
January 9 & 10, 2013
Meghnad Saha Auditorium
SAHA INSTITUTE OF NUCLEAR PHYSICS

Bengal Science Initiative (BSI) is an umbrella programme comprising of various schemes and activities with an integrated approach to **Promote and Popularize Science** in one hand and to identify and undertake more socially relevant Research and Development projects on the other.

BSI has been launched this year immediately after the Indian Science Congress to commemorate the 100th year of Science Congress in India with a programme “**Bengal Science Lecture**”, a programme under Bengal Science Initiative, followed by a **Satellite Conference** the theme of which was **Agriculture, Environment & Energy**.

In order to make **Science** more attractive to the students and free the education from the confines of strict borders of class room activities, the Council aims to launch certain programmes, complimentary to their usual curriculum, to be launched on an experimental basis, which eventually can provide a guide line for the Council as well as the other concerned department to replicate with suitable alterations and modifications as the case may be. Generation of scientific temper in the society at large by organizing State or District Level **Science Exhibition**, hosting **Special Science Education Camps** in collaboration with various Science Organizations, Universities and Research Institutes and **Experimental Skill Development Programme** for the college & university students are few of its types, some of which have already been launched while others are in pipeline.

Toxin induced change in defense enzyme profile and nitroreductase level reduce severity of leaf blight disease caused by *Alternaria alternata* in *Withania somnifera* Dunal through tissue culture.



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Salient Features

Research Initiative

- Five Research Fellowship Awards in different disciplines
- Two Research Grant Awards to generate awareness among the mass

Bengal Science Lecture

- Lectures on Current topics by Eminent Scientists in India

Student Level Programme

- District/Block level Science Camps for the school students
- State level Science Fair in Kolkata
- Experimental skill development programme for UG/PG students

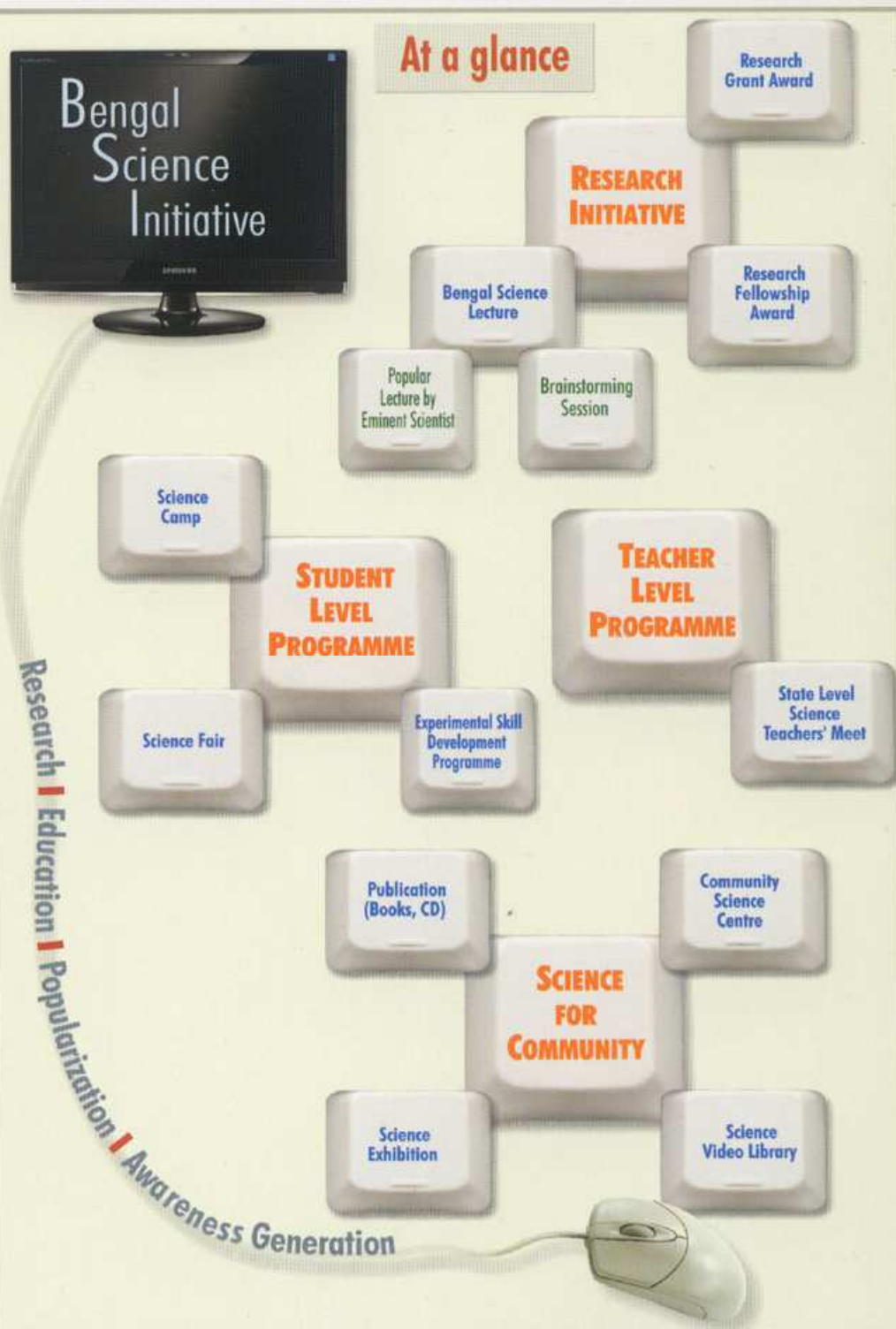
Teacher Level Programme

- Science Teachers' Meet

Science for Community

- Science Exhibition to promote scientific temper
- Establishment of Science Community Centre at District level
- Translation of available books
- Resource Centre (Video, Books, Telescope)

At a glance



Science Education Camp

Programme already launched



Supplementary effort of West Bengal State Council of Science & Technology to augment the scientific temper throughout the state

Target group : School and college students.

Domain area addressed : Social science, Physical, Life, Earth, and Space Sciences.

Coverage : 19 districts of the state (Composition : 8 students from each school / Teacher / Extension programme.)

Collaborating Agencies : District Institute of Education and Training, Saha Institute of Nuclear Physics (SINP), Calcutta University, Presidency University, Burdwan University, Birla Institute of Technological Museum (BITM), Department of School Education.

'Lab to Land'

Taking benefits of science to every rural corners of West Bengal ensuring quality Science Education

One of the major objectives of West Bengal State Council of Science & Technology has been to promote and popularize science and technology to meet the growing demand of the emerging future as well as to generate science awareness in the society.

In order to accomplish this goal and the Council plans to extend its area of activities to ensure quality science education in schools by taking series of programmes including

- Vernacular Science Congress (ongoing programme)
- Hands on Learning
- Teacher Training Programme
- Science Resource Library equipped with Science Books, Models, Films
- School level Seminar Circuit
- Inter-school Science Meet
- Summer / Winter School
- Science & Technology Innovation Camps
- Rural Camps
- Research Fellowship Programmes
- Educational Tours
- Special Outreach Programmes
- Special Academic Meet
- Community Science Centres
- Publication & Documentation
- Special Support to the socially / economically backward sectors



Programme to be launched

Experimental Skill Development Programme

This programme targets to involve teachers & students alike – to enthuse the teachers to develop ‘Table-top Experiments’ and encourage the students to implement them under the guidance of their teachers. These “out-of-curriculum” experiments are expected to create more effect about experimental science than curriculum based routine practical classes. The planning, design and setting-up of these experiments will expose them towards modern scientific techniques and instrumentation which may help to inculcate new ideas and generate enthusiasm for experimental science in future.

Community Science Centre

School or college libraries are part & parcel of our knowledge based learning system but that alone is not adequate for successful functioning of a student in this information based society. To fill up the lacuna, the Council targets to establish resource centre at district level that will be equipped with ‘documents’ that includes all kind of reading materials e.g. books other than text materials, periodicals, Govt. publications as well as audio-visuals, slides, paintings, globes, charts, maps and documentary films on current topics.



Programme already launched

Research Fellowship Award & Research Grant Award

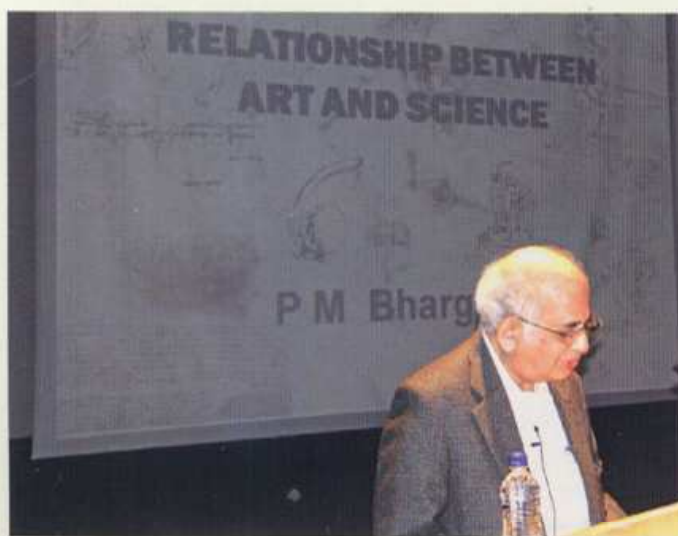
This programme is being launched with an aim to promote and popularize research with particular focus to take science from the 'Lab to Land' for the benefit of the common people particularly poorer & under privileged sections of the society. Agriculture, Environment and Energy are the focal points since each of which has tremendous importance in respect to rural Bengal.

Five Research Fellowship Awards have been declared in the name of the Indian scientists who are the icons of science internationally, which include

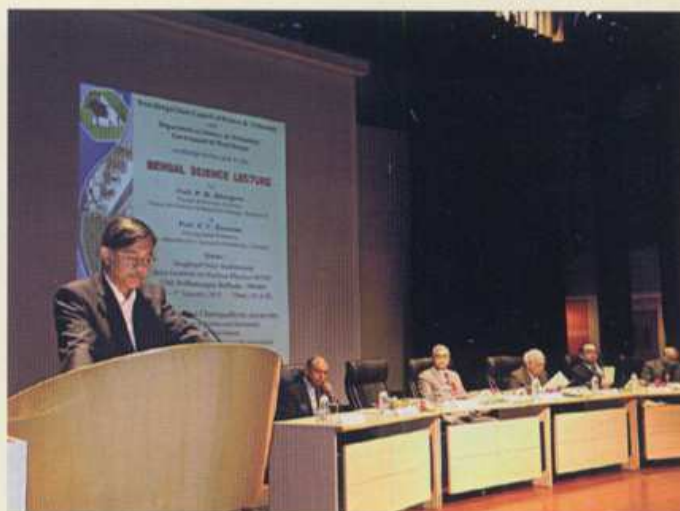
1. Jagadish Chandra Fellowship for life-science/ telecommunication
2. Acharya Prafulla Chandra Roy Fellowship for chemical science
3. Meghnad Saha Fellowship for river science research
4. Satyendra Nath Bose Fellowship for theoretical physics
5. Upendra Nath Bramhachari Fellowship in health science

Two Research Grant Awards have been declared which include

1. Swami Vivekananda Research Grant for rural Development
2. Rabindra Nath Tagore Research Grant for promotion of science education & research



Bengal Science Lecture



In order to make students aware about the current topics of science as well as to create an opportunity to meet the eminent scientists of India, meet them in person and interact with them, a series of lectures are being arranged called Bengal Science Lecture.

The first programme of this type has already been launched where lectures by Prof. P. M. Bhargava (Topic-Two Faces of Beauty : Science & Arts) & Prof. P. C. Kesavan (Topic-Transforming Green Revolution into Evergreen Revolution: Pathway to Green Economy) were followed by Seminar Session viz. Last 100 years of Science in India and a Brainstorming Session with the scientists of the Council & DST, GoWB, to formulate the guidelines of future activities with an emphasis on the issues of Science in general as well as on Agriculture, Environment & Energy.

Activities on the emerging topics are in progress.