

Jagadis Bose National Science Talent Search



ANNUAL REPORT

2015



In Pursuit of Excellence
Since 1960



“The whole world is a
living laboratory in which
the most wonderful experiments
are constantly being performed.
We should indeed be fascinated
if only we had eyes to see them.”

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH

(Registered under Act XXI of 1860)

Memorandum of The Association

1. Name of the Society : JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
2. The Registered Office of the Society is situated at 93/1, Acharya Prafulla Chandra Road, Calcutta – 9 in the State of West Bengal
3. The object for which the Society is established are: to select students with the special aptitude for Science and providing a scheme for counseling. Conserving and helping this most precious resource, namely human talent, which is necessary for building up the nation, by award of scholarships and otherwise. The scheme of JBNSTS shall extend to the whole of West Bengal and may later be extended to other areas.
4. The Names and Addresses and Description of the present members of the Executive Committee (Governing Body) are :

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DR. S K MITRA, Institute of Radio Physics, Calcutta – 9, Member, Governing Body

DR. S C MITRA, 12, Hindustan Road, Calcutta – 29, Member, Governing Body;

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Pandit Jawaharlal Nehru addressing the Inaugural Award Giving Ceremony on 11th April, 1961



H. E. SHRI KESHARI NATH TRIPATHI

The Hon'ble Governor, Government of West Bengal
Patron-in-Chief, JBNSTS, Raj Bhavan, Kolkata 700 062

MEMBERS OF THE GOVERNING BODY OF JBNSTS

MS. MAMATA BANERJEE

Hon'ble Chief Minister, Government of West Bengal & President, JBNSTS
"NABANNA" West Bengal Secretariat, Howrah 711 102

PROF. (DR.) AMITAVA RAYCHAUDHURI

Chairman, JBNSTS and
Sir Tarak Nath Palit Professor of Physics, University of Calcutta
92 Acharya Prafulla Chandra Road, Kolkata 700 009

SHRI VIVEK KUMAR, IAS

Principal Secretary, Department of Higher Education
Government of West Bengal, Bikash Bhavan
Sector-I, Salt Lake, Kolkata 700 091

SMT. REENA VENKATARAMAN, IAS

Additional. Chief Secretary, Dept. of Science & Technology
Government of West Bengal, 4th Floor, East Block,
Bikash Bhawan, Sector-I, Salt Lake, Kolkata 700 091

SHRI ARNAB RAY, IAS, Secretary

Department of School Education, Government of West Bengal
Bikash Bhawan, Sector-I, Salt Lake, Kolkata 700 091

SHRI BHASKAR PRAMANIK

Chairman, Microsoft Corporation (I) Pvt. Ltd.
10th Floor, Tower B & C, DLF Building No.5 (Epitome)
Cyber City, DLF Phase III, Gurgaon, 122 002

SHRI Y. C. DEVESHWAR

Chairman, ITC LIMITED, Virginia House
37 J. L. Nehru Road, Kolkata - 700 071

PROF. (DR.) AMITA CHATTERJEE

Emeritus Professor, School of Cognitive Science, Darshan Bhavan,
Jadypur University Campus, Jadavpur, Kolkata 700 032

SHRI SAMAR GHOSH, IAS

Member, State Administrative Tribunal, West Bengal Administrative Tribunal
Bikash Bhavan, Salt Lake, Kolkata 700 091

PROF (DR.) DHRUBAJYOTI CHATTOPADHYAY

Vice Chancellor, Amity University, Kolkata, Major Arterial Road,
Action Area II, Kadampukur Village, Rajarhat, Newtown, Kolkata 700 135

PROF. (DR.) PARTHA P MAJUMDER

Director, National Institute of Biomedical Genomics
Netaji Subhas Sanatoriums, 2nd Floor, Kalyani 741 251, Dist. Nadia

PROF. (DR) ABU TALEB KHAN

Vice Chancellor, Aliah University, New Town Campus
IIA/27, New Town (Near Eco Space), Kolkata 700 156

DR. SUDIP CHATTERJEE

Hon. Professor VIMS, Kolkata
Park Clinic, 4 Gorkey Terrace, Kolkata 700 017

PROF. (DR.) MAITREE BHATTACHARYYA

Director and Member-Secretary Ex-officio, JBNSTS
1300 Rajdanga Main Road, Kasba, Kolkata 700 107

H. E. SHRI KESHARI NATH TRIPATHI

The Hon'ble Governor, Government of West Bengal
Patron-in-Chief, JBNSTS, Raj Bhavan, Kolkata 700 062

MEMBERS OF THE PREVIOUS GOVERNING BODY OF JBNSTS**MS. MAMATA BANERJEE**

Hon'ble Chief Minister, Government of West Bengal & President, JBNSTS
"NABANNA", West Bengal Secretariat, Howrah 711 102

DR. PURNENDU CHATTERJEE

Chairman, The Chatterjee Group and Chairman, JBNSTS
888 Seventh Avenue, 34th Floor, New York 10106-0089

SHRI VIVEK KUMAR, IAS

Principal Secretary, Department of Higher Education
Government of West Bengal, Bikash Bhavan
Sector-I, Salt Lake, Kolkata 700 091

VACANT (from 13/12/2014)**PROF.(DR.) MANJU RAY**

Emeritus Scientist, Council of Scientific & Industrial Research
Dept. of Bio Physics, Bose Institute, Centenary Building
P1/12, CIT Scheme - VIIM, Kolkata 700 054

SHRI DIPANKAR CHATTERJEE

Managing Director, The Luxmi Tea Company Limited
17 R N Mukherjee Road, Kolkata 700 001

PROF. (DR.) JAYANTA K BHATTACHARJEE

Professor & Director, Harish-Chandra Research Institute
Chhatnag Road, Jhusi, Allahabad 211 019

PROF. (DR.) DEBESHANKAR RAY

Senior Professor, Indian Association for the Cultivation of Science
Jadavpur, Kolkata 700 032

PROF. (DR.) AMITA CHATTERJEE

Emeritus Professor, School of Cognitive Science, Darshan Bhavan,
Jadavpur University Campus, Jadavpur, Kolkata 700 032

SHRI B GUPTA

Director (F & A), India Diary Products Ltd.
AE-6, Sector - I, Salt Lake, Kolkata 700 064

PROF. (DR.) KALYAN B SINHA

Bhatnagar Fellow, Jawaharlal Nehru Centre for Advanced Scientific
Research, PO. Jakkur, Bengaluru 560 064

PROF. (DR.) ABHIJIT MOOKERJEE

SN Bose National Centre for Basic Sciences
Block - JD, Sector - III, Salt Lake, Kolkata 700 098

PROF. (DR.) SIBAJI RAHA

Director, Bose Institute, Centenary Building
P1/12, CIT Scheme - VIIM, Kolkata 700 054

PROF.(DR.) PARTHA P MAJUMDER

Director, National Institute of Biomedical Genomics
Netaji Subhas Sanatoriums, 2nd Floor, Kalyani 741 251, Dist. Nadia

PROF. (DR.) PAPIYA NANDY (till 14/01/2015)

Hony. Director and Secretary Ex-officio, JBNSTS
1300 Rajdanga Main Road, Kasba, Kolkata 700 107

PROF. (DR.) MAITREE BHATTACHARYYA (15/01/2015 on wards)

Director and Member-Secretary Ex-officio, JBNSTS
1300 Rajdanga Main Road, Kasba, Kolkata 700 107

ACADEMIC ADVISORY BOARD, JBNSTS (Till 18th December, 2015)

1. **Prof. Gour Prasad Das**
Dept. of Material Science
Indian Association for the Cultivation of Science
Jadavpur, Kolkata 700 023
2. **Prof. Pratip Palit**
Formerly of Central Research Institute for Jute and Allied
Fibers, 28/1 E Bose Pukur Road, Kolkata 700 042
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Chairman, Shankar Madhav Jr. College
Maniknagar, R G Barua Road, Guwahati 781 005
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Homi Bhabha National Institute,
2nd Floor, Training School Complex,
Anushaktinagar, Mumbai - 400 094
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Department of Physics, Manipur University
Chanchipur, Imphal 795 001
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Centre for Interdisciplinary Research and Education
404B Jodhpur Park, Kolkata 700 068
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Jadavpur University, Kolkata 700 032
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Formerly Professor, Dept. of Physics Presidency College,
Kolkata, Suit No. - 7, P-286, Darga Road, Kolkata 700 017
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Council of Science Museums Kolkata,
4 Kali Kumar Mazumdar Road Santoshpur, Kolkata-700075
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Tata Institute of Fundamental Research
Centre for Interdisciplinary Sciences, 21 Brundavan Colony,
Narsingi, Hyderabad 500 075
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National Center for Biological Sciences (NCBS),
UAS-GVK Campus, Bellary Road, Bangalore 560 065
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MD Anderson Cancer Centre
University of Texas, Texas 77030, USA
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Adjunct Professor & Raja Rammanna Fellow
Electronic Sc. Dept. Pune University, Ganeshkhind,
Pune 411 007
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School of Mathematical Sciences, Trinity College, Dublin
Belfield, Dublin - 4, Ireland
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Chemical Science Division,
Saha Institute of Nuclear Physics
Bl. - AF, Sector - I, Salt Lake, Kolkata 700 064
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Director of Research, LV Prasad Eye Institute
Road No. 2, Banjara Hill, Hyderabad 500 034
17. **Prof. Bimal K. Roy**
Director, Indian Statistical Institute
203 B.T.Road, Kolkata 700108, India
18. **Prof. Soumya Chakraborti**
Formerly Professor at California State Polytechnic University
1/3 Fern Road, Ballygunj, Kolkata 700 019
19. **Prof. Siddhartha Roy**
Department of Bio Physics
Bose Institute, Centenary Building
P1/12, CIT Scheme - VIIM, Kolkata 700 054
20. **Prof. (Dr.) Soumitra Sengupta**
Dept. of Theoretical Physics
Indian Association for the Cultivation of Science
Jadavpur, Kolkata 700 032
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Transmission Executive
Science Cell, All India Radio, Kolkata 700 001
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Professor & Head, Department of Physiology
Agartala Government Medical College, Agartala 799 006
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Director, Calcutta International School
724 Anandaur, Kolkata 700 107
24. **Prof. Parimal Sen**
Division of Molecular Medicine
(Formerly Professor of Chemistry)
Bose Institute, 93/1 A P C Road, Kolkata 700 009
25. **Prof. S C Bera**
Formerly Professor of Chemistry, Jadavpur University
159, Jadavpur University Employees Housing Cooperative
Society, Panchasayar, Kolkata 700 094
26. **Dr. Kallol Pal**
Associate Professor, Department of Mathematics
Jadavpur University, Kolkata 700 032
27. **Shri Siddhartha S Chatterjee**
Bidhannagar Govt. High School
BD-303, Sector - I, Salt Lake, Kolkata 700 064
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Associate Professor,
Dept. of School of Mathematical Sciences
RK Mission Vivekananda University, PO. Belur Math 711202
29. **Dr. Sukhen Das**
Associate Professor, Department of Physics
Jadavpur University, Kolkata 700 032

Keshari Nath Tripathi
GOVERNOR OF WEST BENGAL



RAJ BHAVAN
KOLKATA 700 062

8th January, 2016

Message

I am glad to learn that Jagadis Bose National Science Talent Search is going to bring out its Annual Report of 2015.

I am sure that the Annual Report will be an informative and useful document of the academic achievements and research activities of the Institute.

I wish the publication all success.

A handwritten signature in blue ink that reads 'K. N. Tripathi'.

Keshari Nath Tripathi

মমতা বানার্জী
মমতা বৈনর্জী
ممتا بنرجی
Mamata Banerjee



মুখ্যমন্ত্রী, পশ্চিমবঙ্গ
मुख्यमंत्री, पश्चिम बंगाल
وزیراعلیٰ مغربی بنگال
CHIEF MINISTER, WEST BENGAL

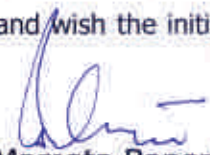
11th January, 2016

MESSAGE

I am glad to know that the **Annual Award Ceremony** of 'Jagadis Bose National Science Talent Search' will be held on January 16, 2016 at Presidency University, Kolkata and the annual report of the society will also be published on the occasion.

Over the years, JBNSTS has played a very important role in identification and nurturing of talent in the fields of science, engineering and medicine. I hope this will be strengthened even further in the coming years.

I convey my heartiest greetings on the occasion and wish the initiative every success.


(Mamata Banerjee)

Prof. (Dr.) Maitree Bhattacharyya
Director
Jagadis Bose National Science Talent Search
1300, Rajendra Main Road
Kasba
Kolkata – 700 107

Nabanna, West Bengal Secretariat, Howrah-711 102
West Bengal, India

Tel : + 91-33-22145555. + 91-33-22143101
Fax : + 91-33-22144046. + 91-33-22143528



JBNSTS Staff with Smt. Mamata Banerjee, President, JBNSTS and Hon'ble Chief Minister, West Bengal

Chairman's message to the new Awardees



Prof. (Dr.) Amitava Raychaudhuri
Chairman, JBNSTS

It gives me great pleasure that in the function today JBNSTS will bring to its fold new Awardees. Welcome young friends! You have been chosen because your superior talent and abilities distinguish you from the others. You have capabilities which few possess. India has high expectations from you. I am confident that just as many previous awardees have done you too will excel in your endeavour and make the country proud.

Over the years JBNSTS has widened its activity to many programmes ranging from organising science camps for high-ranking school students, non-formal training methods, laboratory training for the young, etc, while keeping full focus on its primary role of identifying talent and nurturing them. Under continued inspiring leadership it has established itself as a catalyst for scientific excellence. It has been recognised as a very efficient talent-spotter and a large number of promising students have been nurtured through its programmes to scale great heights.

In the years ahead we expect that JBNSTS through its efforts will be able to spot the high-quality students from relatively remote areas of the country who often lack the right facilities and exposure and also motivate a larger number of talented female students to take up science as a career. India has a great demographic advantage. It is our responsibility to identify and encourage future innovators among them so that the country can forge ahead.

My best wishes for the entire JBNSTS community.

A handwritten signature in blue ink, reading "Amitava Raychaudhuri".

Prof. (Dr.) Amitava Raychaudhuri
Chairman, JBNSTS



Dream is not that you see in sleep, dream is something that does not let you sleep.

– A. P. J. Abdul Kalam

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Prof. (Dr.) Maitree Bhattacharyya
Director of JBNSTS

From the Director's Desk

Respected Chairman, members of the Governing Body of JBNSTS, dignitaries on the dais, Distinguished guests, JBNSTS scholars and new awardees, students, guardians, my colleagues at JBNSTS, ladies and gentlemen,

It is a great privilege for me to address this august gathering at the 56th Annual Ceremony of JBNSTS. I have joined this Institution exactly one year back and it is a wonderful learning experience for me during last one year of my journey at this esteemed institution. Last one year journey of JBNSTS can be described as an attempt to comprehend its strengths and weaknesses, to take initiative to explore newer and newer areas to further expand the activities of JBNSTS so as to bring more and more teachers and students within its fold . We have attempted to build up networking with other agencies, institutions and professional bodies so that the mission of JBNSTS can be pursued in association and with the help and support of other institutions existing within the Society. I believe, we have been successful to a large extent in that pursuit.

At this juncture, I would like to express our heartfelt gratitude to His Excellency Shri Keshari Nath Tripathi, Hon'ble Governor of West Bengal, who has kindly consented to be the Chief Patron of JBNSTS in this year and helped in increasing the pride and prestige of our esteemed organisation.

I would also like to put it on record the immense support and encouragement that we have received during last one year from the Government of West Bengal and especially from Ms. Mamata Banerjee, Hon'ble Chief Minister of West Bengal, who is kind enough to accept our request and prayer and took over the chair of President of JBNSTS in June'15. It is her personal initiatives and encouragement which has resulted in manifold development as well as recognition of JBNSTS in different corners in a single calendar year. We do not have the audacity to thank her, but we always acknowledge her kind help and support and her presence in our campus on 2nd June, 2015.

I strongly believe that an organisation like JBNSTS can play a vitally important role in building up of scientific temper and enlightening the curiosity amongst the students to pursue science in their future life. You must have seen the motivation of our organisation. It is

“Help students to realize the importance of excellence in the scientific world and try to cultivate this in their own lives as students of science.” The question being posed time and again does JBNSTS is in competition with the schools and colleges in imparting scientific temper and excellence amongst the students. To me, that would be a completely wrong idea. Role of schools and colleges in science education is extremely important. They always been the most important means of transferring the education, scientific knowledge and wealth of tradition from one generation to the next. This applies today in an even higher degree than in former time. Due to the immense development in science & technology and also change in social, economic and cultural world during nineteenth and twentieth century, there is a noticeable change in social dialectics and fabric, which cannot and should not be ignored.

Due to sudden introduction of so much amenities, cultural diversifications and source of amusement and enjoyment in economic as well as in social life over a relatively short period of time, the family as bearer of tradition and education has been weakened to a large extent. The continuance and health of human society is therefore in a still higher degree dependent on the educational institutions than in previous period. This is particularly important for a country like India, where each day neo-literates are joining the society who can understand the importance of scientific education and impacts of different discoveries and inventions in a better manner, who start dreaming in an endless manner for a better status, self-respect and security not only for themselves or for their generation, but more for their progenies and future generation. Therefore the role of JBNSTS has become crucial to nurture this immense potential.

As mentioned by Albert Einstein, “Imagination is more important than knowledge”, and we know an individual student is an immensely vibrant and enthusiastic one. In JBNSTS, we always try to *nurture the students through enrichment programs so as to indulge their various imaginations and to develop their talents.* JBNSTS is exactly inculcating that as a complimentary to School Education. This has been pursued ever since the establishment of JBNSTS in 1958.. We did not want to always search for the “Correct”, but we did search for “imaginative answers and newer ideas”, we did explore to identify the courageous who want to know further.

In pursuit of that, last year also the Senior Talent Search Test (STST) was organised from September'15 to December'15 with the financial support of Higher Education Department, Government of West Bengal. Through this process, we have identified 56 students who will be awarded today. The identification of these students were carried out through three fold examinations - written, viva-voce and scientific creativity test. The qualities and abilities of the awardees through such tests are well recognized at the national level. 25 awardees, who are pursuing their careers in different subjects of General Science disciplines will get their scholarships through INSPIRE Programme of Department of Science & Technology, Government of India. Rest, who are pursuing either Technical or Medical streams, will be provided scholarships from JBNSTS directly from own generation funds as provided by different organisations.

We organised a tour for the senior scholars to visit well known research institutions and research laboratories in Bangalore this year, with the financial support from CSIR. I must mention the help and support that we received from the renowned scientists of such institutions who not only interacted with these students for a long time but also guided them with many ideas. For the students, it was a wonderful experience to see the luminaries of Indian Science of the present time and to have a firsthand idea of the world of science, which is waiting for them to get explored.

Keeping in mind the proverb “Catch them Young”, this year for the first time JBNSTS conducted the Junior Talent Search Test (JTST) for the students who have passed the secondary examination and now

are in 11th Standard. This was carried out with the financial support of Department of Science & Technology, Government of West Bengal. This is a two step examination process – written and interview. Altogether 3524 students from all over West Bengal participated in this programme. 102 number of students have been awarded the scholarship and 52 number of students have been identified for encouragement award. We are having the plan to nurture these students in a similar manner as is being done for the senior scholars over the years. We are in the process of designing this and will be communicated to the awardees shortly.

As I have mentioned the role of schools in science education is of primary importance. School teachers only introduce the students to the arena of science. Keeping that in consideration, a programme was initiated in the year 2004 to innovative science teaching programs for middle and high school science teachers under the guidance of mentors and facilitators. Unfortunately, that programme was discontinued for last five years, which has been revived this year with the financial support from Department of Science & Technology, Government of West Bengal. We have very big expectations in this issue.

District Science Scheme is a running programme of JBNSTS. This programme is sponsored by Department of Higher Education, Government of West Bengal. This year, we have expanded the ambit of this programme further and have included the schools from Sundarban and Sagar Island in South 24 Pgs, Basirhat and Hasnabad in North 24 Pgs and also the districts of Hooghly and Nadia, which are well known for social vulnerability and physiographic problem.

In a commercial world, motivating young talents to pursue career in science is a great challenge, which is also the major objectives of JBNSTS. This year we organised, five INSPIRE science camps with the financial support from Department of Science & Technology, Government of India. To give them an exposure of state of art laboratories, we always keep one day visit to different laboratories like Centre for Research in nanoscience and nanotechnology, Calcutta University, innovation hub- BITM etc. We arrange hands on activities and experiments for them in our JBNSTS laboratory. We also make it a point to make them understand that science is not divided into the domains of physics, chemistry, mathematics or biology. To solve a real life problem, they need to think of science in an integrated manner, interdisciplinary approach can only take the challenge.

JBNSTS has been recognised as a centre for Higher Education by University Grants Commission this year. Already students are pursuing their Ph D programme through JBNSTS under NET scholarships. One Post-doctoral Research Scholar has joined JBNSTS under DST Fast Track Programme.

Science communication and science popularisation is also another domain of activity of JBNSTS. This year, we observed National Science Day in collaboration with West Bengal Science Academy. Prof. Bimal K Roy, the then Director of Indian Statistical Institute and a Padma awardee in this year was felicitated on that day.

JBNSTS first time successfully organised and conducted two-day “Meet the Scientists” Programme at Netaji Indoor Stadium on 4-6th October, during the State-Youth Science Fair, 2015 a programme of Department of Youth Services, Government of West Bengal.

The activities and ambit of JBNSTS is expanding day by day. Expectations from JBNSTS are also growing at all levels which has almost reached the sky. It is difficult to cater all the needs with such small infrastructure. So we have planned to expand this two-story building. Another three story building, with the provision to construct another two stories has been planned. The fund has been sanctioned and already received from the Higher Education Department for that construction. Hooghly River Bridge Commissioners has been entrusted to carry out that job at the earliest. The MoU has also

been signed and the work is progressing at a fast rate, although the construction work is yet to start.

At the same time, the existing office infrastructure of JBNSTS needs upgradation. For this, we have already been sanctioned and received an additional grant from Higher Education Department, Government of West Bengal. The MoU has been signed with Hooghly River Bridge Commissioners and the tender process will be over within few days, as per the information available from them. We are grateful to Hon'ble Chief Minister of West Bengal for supporting us in these two expansion drives.

In this context, I would like to express my heartfelt thanks and gratitude to Shri Vivek Kumar, IAS, Principal secretary, Department of Higher Education for his unstinted support and continuous encouragement to our all programs and development endeavour.

As a partial layman in the realm of pedagogy with no foundations except personal experience in teaching and personal conviction, I want to derive courage to acknowledge all the experts, the mentors, facilitators and finally the science minded people of this country without whom it was not possible to implement any of the programmes at JBNSTS. This institution is meant for the students, scientific community and science minded people of India. Based on the continuous and encouraging support from my colleagues at JBNSTS, I can assure you that in the coming days, we at JBNSTS will not deviate from that motto even for a single moment. After all, Dr. Sarvepalli Radhakrishnan, who had a lively bondage with this city, has reminded us "Human nature is fundamentally good, and the spread of enlightenment will abolish all wrong."

As told by Father of the Nation Mahatma Gandhi: "I do not want my house to be walled in on all sides and my windows to be stuffed. I want the cultures of all the lands to be blown about my houses as freely as possible." Whatever has so far been done was extremely good, but we need more ideas, thoughts and more activities. Nobody can deny it. I want to call upon my scholars to come forward and participate in all programmes and enrich us with ideas and thoughts. I must conclude with Rabindranath Tagore who reposed on the students with the remark "*tomra Jodi eai bidyabhobaner jonyo gourab anubhob karo, tabei ehar gourab bridhi paibe (in Bengali script)*". Let us come forward to fulfil that historic duty bestowed on us by the Society.

Let there be Science and Scientific Temper at all corners of Society and Life!!!!

Prof. (Dr.) Maitree Bhattacharyya
Director of JBNSTS



JBNSTS At a Glance

VISION

Identify, Motivate and Nurture to develop the world's brightest minds

MISSION STATEMENT

To see every talented student of science realize their potential and to harness their talent for nation building

To convey the joy of learning science amongst high ability students and to create innovative learning environments for them.

To systematically build up human resource in applied and basic sciences to produce future leaders in science and technology.

OUR ACTIVITIES

- ❖ The JBNSTS Senior Talent Search Test
- ❖ The JBNSTS Junior Talent Search Test
- ❖ The JBNSTS District Schools Program
- ❖ The JBNSTS Teacher Training Program
- ❖ Senior Scholars' Nurture Program
- ❖ JBNSTS-DST-INSPIRE Science Camps
- ❖ Research and Innovation



Prof. (Dr.) Maitree Bhattacharyya



Dr. Paromita Roy



Mr. Joydip Das

Meet us
at
JBNSTS



Dr. Smarajit Manna



Dr. Abhijit Kar



Mr. Sujit Baran Chanda



Mr. Basudeb Dutta



Mr. Dipankar Sarkar



Mr. Prasenjit Chakraborty



Ms. Swapna Dey



Ms. Sucharita Kundu



Ms. Puspa Biswas



Mr. Ranjit Kumar Mallick



Mr. Pushkar Naskar



Mr. Mahadev Das

Meet us at JBNSTS



Mr. Santimoy Biswas



Mr. Saugata Roy



Mr. Sudip Das



Ms. Paromita Majumdar



Mr. Debnarayan Mukherjee



Ms. Mahasweta Mandal



Ms. Monalisa Char



Dr. Pijush Basak

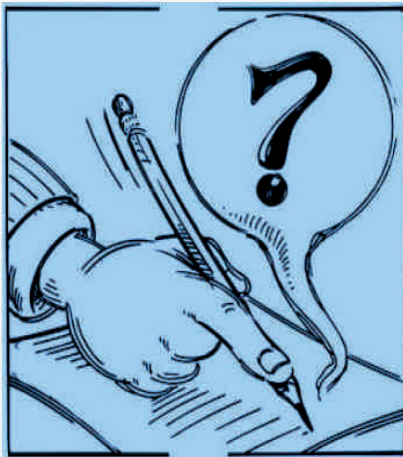
THE JBNSTS
SENIOR TALENT
SEARCH TEST

**India's first talent
search initiative for
undergraduate
students studying
Basic Sciences,
Engineering and
Medicine from
registered institutions
in West Bengal**

Jagadis Bose Senior National Science Talent Search Test

Jagadis Bose National Science Talent Search (JBNSTS), an autonomous institute under Department of Higher Education, Government of West Bengal, conducting the JBNSTS Senior Scholarships Test, since 1958. JBNSTS is the oldest and first talent search institute of India and this prestigious scholarship is very well recognized across the globe. The Senior Scholarship program of the Jagadis Bose National Science Talent Search is one of the core program designed for undergraduate students studying in Basic Sciences, Engineering & Medicine in recognized institutes of West Bengal. This program identifies talented students through a unique and rigorous method of selection followed by series of nurturing and motivational programs like, 1) *Those who make us proud*, 2) *Talent enrichment program*, 3) *Seminars*, 4) *Research Projects* etc. These motivational programs for this group of students involve exposure to the field of creative & innovative personalities through different contact programs & research project activities.

JBNSTS Scholar Selection Process



(a) **Written Test (First Phase):** For all eligible applicants, a three hour written test is arranged at different examination centres across West Bengal.

JBNSTS has designed a novel method of testing, to identify talented students of STEM and it is well recognized for its uniqueness both nationally & internationally.

Written test is designed in order to judge the basic understanding of different science subjects, fundamental perception of the students in particular domains of science & technology, the level of innovativeness & the passion for

science & technology.

(b) **Personal Interview (Second Phase) :** The students have already been tested for their subject wise knowledge. Their originality of thinking has also been judged through a specially designed thought passage. Now the candidates selected through the written tests have to appear for an interview, which is essentially a scientific interaction with a panel of experts.

During this personal interaction, students are exposed to nationally & internationally acclaimed scientists who judge their level of confidence, attitude towards life, and finally,



ability to think differently & innovatively. They identify scientific talent and curiosity of the students toward research/ technology. Students are also encouraged to activate their capacity to think independently & explore new horizons of science towards the innovation and developments of science & technology.



(c) **Scientific Creativity Test (Final phase)** : Finally the students who succeed in the first two phases appear at this third phase known as “Scientific Creativity Test”. Here the candidates are evaluated on the basis of their capability to handle a scientific problem which may or may not have any definite standard solution. This is an open book residential test, where the candidates spend 36 hours at JBNSTS, to share their lunch and dinner with us, to think/work on different challenging problems assigned to them. He/she is allowed to consult books and to discuss with other candidates in a relaxed manner. The candidate then present / defend their approach to solve the chosen problem new ideas generated in

the process and possible applications of the problem. This is evaluated by a panel of eminent domain experts.

Finally the students who qualify even the SCT are identified as JBNSTS scholars.

IMAGINATION IS MORE IMPORTANT THAN KNOWLEDGE. KNOWLEDGE IS LIMITED BUT IMAGINATION ENCIRCLES THE WORLD.

Albert Einstein



AWARDS OF JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH SENIOR SCHOLARSHIP

The scholars are awarded with the certificate and insignia during our Annual Award Ceremony every year.

- The scholars are awarded a scholarship amount of Rs. One Thousand (Rs. 1000/-) per month in case of students of medicine and engineering, till they complete their graduation. These scholars' from medicine & engineering faculty also receive the Annual Book Grant of Rs. One Thousand (1000/-) per annum.
- Since the DST-INSPIRE Govt. of India, recognized JBNSTS, the candidates selected from basic sciences are entitled to the DST-INSPIRE scholarship & research grant (for projects) of Rs. Eighty Thousand (Rs.60,000/- + Rs. 20,000/-) per annum till completion of their Masters degree.

The scholars are assigned to carry out an innovative research project for one year after their selection and on final presentation, the best three projects are awarded with MEDHA SAMMAN.

HOW TO APPLY FOR JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH SENIOR SCHOLARSHIP TEST

Examinations and grades are temporary but education is permanent.

Candidature for the JBNSTS examination needs to be an

- (1) Indian National and
- (2) Must have passed Higher Secondary (12th grade) or equivalent examination in the year of application and must be studying B.Sc. (Hons.), Engineering or Medicine in any institution registered in West Bengal.



Eligible candidates are required to apply for the examination. Details of the examination schedule etc. are usually published in the leading newspapers and also at our website i.e. www.jbnsts.org

Interested and eligible students can download the application form and the admit card from our official web portal. The students can also obtain the application form and admit card by post and from our office. If the candidate needs more details regarding this Senior Scholarship Test, they may contact JBNSTS office, or write to scientific officer/ in-charge of the examination.



FACT SHEET FOR JBNSTS Senior Talent Search Test-2015

This year senior talent search test was held on 27th September, 2015, during 10:00AM – 01:00PM, at 20 centres across WEST BENGAL. The list of the centres in 2015 is provided below :

Sl No.	Name of Examination Centre
1	RKM-Narendrapur, Kolkata
2.	RKM-Vidyamandira, Belur, Howrah
3.	Presidency University, Kolkata
4.	Indian Statistical Institute, Kolkata
5.	Indian Institute of Technology, Kharagpur
6.	National Institute of Technology-Durgapur - M.G. Avenue, Durgapur
7.	Barrackpore R. S College, Kolkata
8.	Burdwan Raj College, Burdwan
9.	Krishnath College, Murshidabad
10.	Siliguri College, Siliguri
11.	Jadavpur University, Kolkata
12.	J. K. College, Purulia
13.	Adamas Institute of Technology ,Barasat
14.	Acharjya Brajendra Nath Seal College; Coochbihar
15.	Krishnagar Govt. College,Nadia
16.	Bankura Sammilani College ,Kenduadihi, Bankura
17.	Visva-Bharati University ,Santiniketan, Birbhum,
18.	Raiganj Surendranath Mahavidyalaya, Dinajpur
19.	Muragachha Govt. College, Nadia
20.	Prabhat Kumar College, Contai, Purba Medinipur

PHASE OF TEST	DATE	NUMBER OF CANDIDATES APPEARED
Written Test	27/09/2015	907
Interview	21/11 - 22/11/15	184
Scientific Creativity Test	05/12 - 06/12/15	75

On 13th December 2015, results of the 56th STST was published and 56 students were selected for the scholarship in the year 2015, which included 28 students from Engineering, 3 students from Medicine and 25 Students from Basic Science.

South Point High School has been selected for the Best School award considering the maximum number of awardees passed higher secondary level examination from that school. A Rotating Shield and a Library Grant of Rs. 5000/- are awarded to the best school each year.

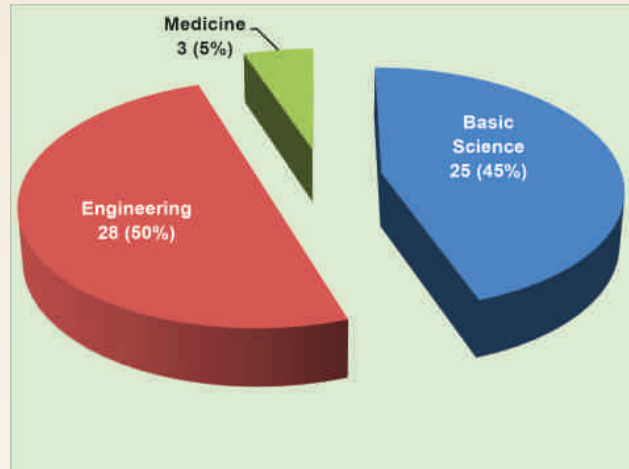
List of JBNSTS Senior Scholars 2015

S.N	NAME (IN ALPHABETICAL ORDER)	CURRENT INSTITUTE	SUBJECT
1.	ABHISHEK KARMAKAR	National Institute of Technology, Durgapur	Engineering
2.	ADHA RANJITH KUMAR	Indian Institute of Technology, Kharagpur	Engineering
3.	AGNISH RAKSHIT	University of Calcutta, Kolkata	Engineering
4.	ALOK ANAND PATRA	Indian Institute of Technology, Kharagpur	Engineering
5.	ANIKET MAJUMDAR	Jadavpur University, Kolkata	Physics
6.	APARAJITO BHATTACHARYA	Raja Peary Mohan College, Hooghly	Physics
7.	ARIGHNA SARKAR	Ramkrishna Mission Vidyamandira, Belurmath, Howrah	Chemistry
8.	ARIJIT SAR	Presidency University, Kolkata	Physics
9.	ARKAJIT PAL CHOUDHURY	Ramkrishna Mission Vidyamandira, Belurmath, Howrah	Mathematics
10.	ATHREY RANJITH KRISHNANUNNI	Indian Institute of Technology, Kharagpur	Engineering
11.	ATUL	Indian Institute of Technology, Kharagpur	Engineering
12.	AYAN KARMAKAR	Midnapore Medical College	Medicine
13.	B. VISHNU VARDHAN	Indian Institute of Technology, Kharagpur	Engineering
14.	BISHAL CHATTERJEE	Jadavpur University, Kolkata	Engineering
15.	BOYA SRIKARAN REDDY	Indian Institute of Technology, Kharagpur	Engineering
16.	BURADA MANIDEEP	Indian Institute of Technology, Kharagpur	Engineering (Dual Degree)
17.	BURIDI SREE ADITYA	Indian Institute of Technology, Kharagpur	Engineering (Dual Degree)
18.	D V S S SUBRAMANYAM	Indian Institute of Technology, Kharagpur	Engineering
19.	DEBAYAN CHATTERJEE	St. Xavier's College, Kolkata	Physics
20.	DEBDOOT DAS	University of Calcutta, Kolkata	Engineering
21.	DIBYAJYOTI PRADHAN	Jadavpur University, Kolkata	Engineering
22.	DIPAMOY BHATTACHARYA	Medical College, Kolkata	Medicine
23.	DISHA ROY	Presidency University, Kolkata	Biological Science
24.	GOURAB BHATTACHARYA	Bankura Sammilani Medical College	Medicine
25.	K N V SARATH CHANDRA	Indian Institute of Technology, Kharagpur	Engineering
26.	KUMAR SHUBHAM	Indian Institute of Technology, Kharagpur	Engineering
27.	MANASI DAS	Burdwan Raj College, Burdwan	Physics

28.	MANSI MANDAL	Acharya Brojendra Nath Seal College, Coochbehar	Physics
29.	MOULI ROY CHOWDHURY	Lady Brabourne College, Kolkata	Physics
30.	PAYEL DE	Burdwan Raj College, Burdwan	Physics
31.	PRANEESH PAL	Indian Institute of Technology, Kharagpur	Engineering (Dual Degree)
32.	PRATIK DEY	Jadavpur University, Kolkata	Physics
33.	PRATYOY DAS	Jadavpur University, Kolkata	Engineering
34.	PRITAM PATHAK	IEST Shibpur, Howrah	Engineering (Dual Degree)
35.	RAHUL DEV KUNDU	Indian Institute of Technology, Kharagpur	Engineering
36.	RAJDEEP BISWAS	Indian Institute of Technology, Kharagpur	Engineering
37.	RITAM BASU	R K Mission Residential College, Narendrapur, Kolkata	Physics
38.	RITWIK HAZRA	Ramkrishna Mission Vidyamandira, Belurmath, Howrah	Chemistry
39.	RUDRANIL NANDI	Academy of Technology, Hooghly	Engineering
40.	RUMJHUM MUKHERJEE	St. Xavier's College, Kolkata	Microbiology
41.	SABANA YEASMIN	Taki Govt. College Hasnabad, North 24paraganas	Mathematics
42.	SAGNICK MUKHERJEE	Presidency University, Kolkata	Physics
43.	SAIKAT DASGUPTA	National Institute of Technology, Durgapur	Engineering
44.	SARANYU CHATTOPADHYAY	Indian Institute of Technology, Kharagpur	Engineering
45.	SAUGATA BARAT	Presidency University, Kolkata	Physics
46.	SAYAR DAS	Jadavpur University, Kolkata	Engineering
47.	SHYAMAL DATTA	Ramkrishna Mission Vidyamandira, Belurmath, Howrah	Mathematics
48.	SOHAM RAYCHOWDHURY	Presidency University, Kolkata	Chemistry
49.	SOURADIP BHATTACHARYYA	Prisidency University, Kolkata	Physics
50.	SUBHAJIT GHOSH	Ramkrishna Mission Vidyamandira, Belurmath, Howrah	Mathematics
51.	SUBHAMOY DEB	Siliguri College, Siliguri	Physics
52.	SUKALYAN DEB	Ramkrishna Mission Vidyamandira, Belurmath, Howrah	Microbiology
53.	TUHIN BANDOPADHYAY	Indian Institute of Technology, Kharagpur	Engineering (Dual Degree)
54.	TUMPA SARKAR	Sree Chaitanya College, Habra	Zoology
55.	UJJAWAL KUMAR	Indian Institute of Technology, Kharagpur	Engineering
56.	VIVEK GUPTA	Indian Institute of Technology, Kharagpur	Engineering

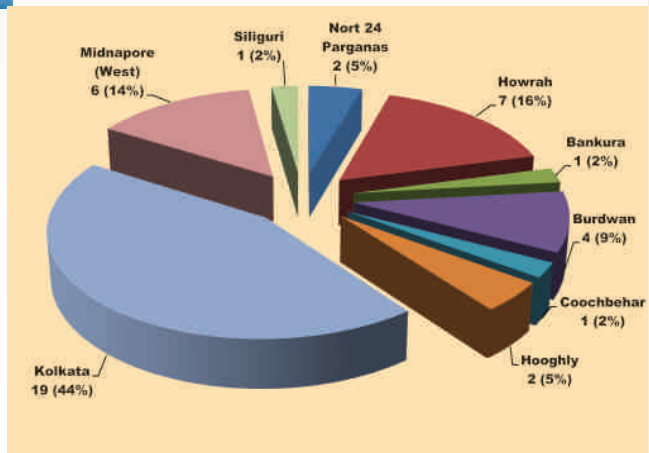
DISTRIBUTION PROFILE OF JBNSTS SCHOLARS 2015- NATIONAL AND WEST BENGAL

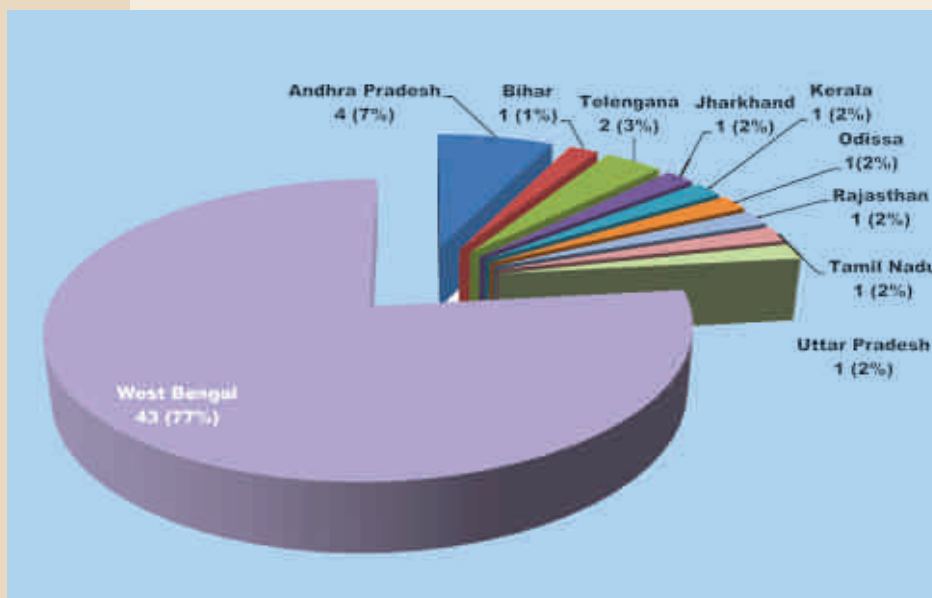
TOTAL NUMBER OF JBNSTS SCHOLARS OF 2015 BATCH IS 56



State wise distribution of JBNSTS Senior Scholars (2015 batch) according to their origin based on the 12th std. study information (West Bengal: 43 + Rest of India: 13)

Distribution of Scholars from West Bengal (district wise) according to their current studying Institutions





DISTRICTS	INSTITUTIONS FROM WHICH THE STUDENTS QUALIFIED FOR JBNSTS SCHOLARSHIPS-2015 (IN WEST BENGAL)
North 24 Parganas (2)	SREE CHAITANYA COLLEGE, HABRA
	TAKI GOVT. COLLEGE, HASNABAD
Bankura (1)	BANKURA SAMMILANI MEDICAL COLLEGE
Burdwan (4)	BURDWAN RAJ COLLEGE
	NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR
Coochbehar (1)	ACHARYA BROJENDRA NATH SEAL COLLEGE
Hooghly (2)	ACADEMY OF TECHNOLOGY
	RAJA PEARY MOHAN COLLEGE
Howrah (7)	RAMKRISHNA MISSION VIDYAMANDIRA, BELURMATH
	INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY, SHIBPUR
Kolkata (19)	PRESIDENCY UNIVERSITY
	JADAVPUR UNIVERSITY
	R K MISSION RESIDENTIAL COLLEGE, NARENDRAPUR
	UNIVERSITY OF CALCUTTA
	ST. XAVIER'S COLLEGE
	LADY BRABOURNE COLLEGE
Midnapore (West) (20)	KOLKATA MEDICAL COLLEGE
	INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR
Midnapore (West) (20)	MIDNAPORE MEDICAL COLLEGE
	SILIGURI COLLEGE
Siliguri (1)	SILIGURI COLLEGE



ACHARYA JAGADISH CHANDRA BOSE



November 30, 1858 – November 23, 1937

“They who behold the One, in all the changing manifoldness of the universe, unto them belongs the eternal truth, unto none else, unto none else.”

Sir Jagadish Chandra Bose is one of the most prominent first Indian scientists who proved by experimentation that both animals and plants share much in common. He demonstrated that plants are also sensitive to heat, cold, light, noise and various other external stimuli. Bose designed and built a very sophisticated instrument called Crescograph which could record and observe the minute responses because of external stimulants and was capable in magnifying the motion of plant tissues to about 10,000 times of their actual size..

Jagadish Chandra Bose was born on 30 November, 1858 at Mymensingh, now in Bangladesh. He was raised in a home committed to pure Indian traditions and culture. He got his elementary education from a vernacular school, because his father thought that Bose should learn his own mother tongue, Bengali, before studying a foreign language like English. Bose attended Cambridge after studying physics at Calcutta University. He returned to India in 1884 after completing a B.Sc. degree from Cambridge University. Bose authored two illustrious books; 'Response in the Living and Non-living' (1902) and 'The Nervous Mechanism of Plants' (1926). He also extensively researched the behaviour of radiowaves. Mostly known as a plant physiologist, he was actually a physicist. Bose devised another instrument called 'Coherer', for detecting the radiowaves.

In order to commemorate the birth centenary celebration of Sir J. C. Bose, Jagadis Bose National Science Talent Search was established in the year of 1958.

THE JBNSTS JUNIOR TALENT SEARCH TEST

*A new initiative from
JBNSTS to identify,
support and nurture
science talent in
higher secondary
level students*

Junior Talent Search Test

JBNSTS has been conducting the time honoured and prestigious Senior Talent Search Program in West Bengal to identify, nurture and motivate the talented undergraduate students of science, engineering and medicine towards the pursuit of excellence since its inception. Through our work-experience of more than five decades, we have realized the necessity of same endeavor for lower classes also. JBNSTS provides an ideal platform for the talented students to achieve their scientific goals and to flourish their innovative mind and we also realized that it will be more effective if we catch the students when they are very young. Accordingly, we have made a proposal and submitted it to the Government of West Bengal. We are very proud that our Hon'ble Chief Minister and President of JBNSTS Ms. Mamata Banerjee appreciated this proposal and announced the grant for this attempt during her presence at JBNSTS in the month of June of this year.

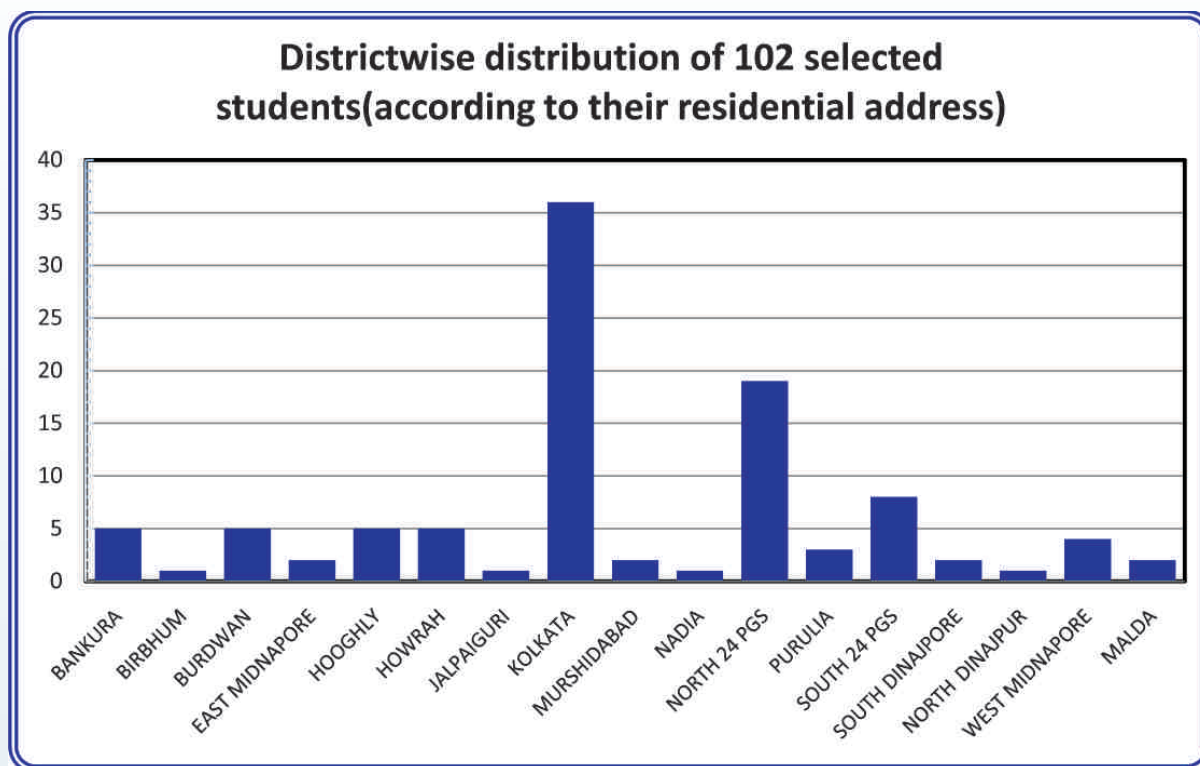
The main objectives of this program are to motivate, identify and nurture of talented science students (+ 2 level) of West Bengal by

- i) providing financial support to the bright and talented science students all over West Bengal to encourage them to study science at higher level.
- ii) giving them exposure at a young age to the world of science through interaction with scientists, visit to research laboratories, scientific project work etc.
- iii) encouraging and inculcating the creative aptitude of the students.

The outline of our efforts of last one year is given below:

- Initiated on 2nd June, 2015 during the presence of our Hon'ble CM at JBNSTS campus.
- Awareness in different districts of West Bengal.
- Details of participants: Students who have obtained minimum 75% marks in their 10th Std. examination & studying science in class XI in any school in West Bengal..
- Written test held on 27th September, 2015 at 24 centres across West Bengal.
- There was provision of both online and offline application.
- Total of 3974 (2034 online + 1940 offline) candidates applied.
- 3524 candidates appeared in written examination.
- Total 294 candidates were selected for interview (based on their performance in the written test).
- Among them, 102 students have been selected for scholarship from almost all districts of West Bengal and 52 students have been selected for encouragement award.

According to the residential address, districtwise distribution of 102 selected students is shown in the chart.



LIST OF JBNSTS JUNIOR SCHOLARSHIP AWARDEES (According to alphabetical order)

Sl. No.	Name of Student	Present Institution
1	Abhik Chattopadhyay	Sri Aurobindo Institute of Education, Kolkata
2	Abir Mondal	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
3	Alakananda Das	Nava Nalanda High School (H.S.), Kolkata
4	Anamitra Roy	Shyamnagar Kanti Chandra High School, North 24 Parganas
5	Aniket Mondal	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
6	Anirudhya Kanjilal	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
7	Anjishnu Adhikari	Bhatpara Amarkrishna Pathsala (HS), North 24 Parganas
8	Anurag Basu	Bharatiya Vidya Bhawan, Kolkata
9	Aranya Dutta	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
10	Archisman Panigrahi	Hooghly Collegiate School, Hooghly
11	Archito Sahoo	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
12	Arghadip Das	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
13	Arghya Chatterjee	Delhi Public School, Ruby Park, Kolkata



Sl. No.	Name of Student	Present Institution
14	Arghyadip Dhara	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
15	Arindam Bhunia	Ballygunge Government High School, Kolkata
16	Arnab Das	Julien Day School, Kolkata
17	Arnab Moitra	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
18	Arpan Ghosh	Barasat Peary Charan Sarkar Government High School, Barasat, North 24 Parganas
19	Ashis Paul	Chatra Nandalal Institution, Hooghly
20	Bhagyashree Bhattacharyya	Madarat Popular Academy, Baruipur, South 24 Parganas
21	Bisakh Banerjee	Howrah Zilla School, Howrah
22	Bratati Saha Chowdhury	Bethune Collegiate School, Kolkata
23	Debangkana Dutta	Baranagar Rajkumari Memorial Girls' High School (H.S.), Kolkata
24	Debmalya Bandyopadhyay	Kalyani Public School, Barasat, North 24 Parganas
25	Dhruba Jyoti Sen	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
26	Dibyajyoti Ghosh	Raiganj Coronation High School, Uttar Dinajpur
27	Dibyendu Saha	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
28	Diganta Bhattacharya	Delhi Public School, Ruby Park, Kolkata
29	Diganta Mukhopadhyay	Garden High School, Kolkata
30	Dipra Bhagat	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
31	Iman Burman	Howrah Zilla School, Howrah
32	Jishnu Howli	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
33	Kamalesh Mahato	Purulia Zilla School, Purulia
34	Kaustav Banerjee	B. T. Road Government Sponsored H.S. School, Kolkata
35	Kaustava Ghosh	Krishnath College School, Murshidabad
36	Kinjal Ray	Delhi Public School, Ruby Park, Kolkata
37	Krishnendu Dey	Katwa Kashiram Das Institution, Katwa, Burdwan
38	Kushan Lahiri	Adamas International School, Belgharia, Kolkata
39	Manisankar Mahato	Ramakrishna Mission Vidyapith, Purulia
40	Niladri Kal	The Future Foundation School, Kolkata
41	Padmanava Dasgupta	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
42	Pritam Paul	Garalgacha High School, Hooghly
43	Prithwitosh Dey	St. Stephen's School, Dum Dum, Kolkata
44	Rafshan Ul Atik	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
45	Rahul Chandra Duari	BK.T.P.P. Prabir Sengupta Vidyalaya, Birbhum
46	Rajanya Dasgupta	St Stephens School Dum Dum, Kolkata

Sl. No.	Name of Student	Present Institution
47	Rajdeep Mondal	Krishnagar Collegiate School, Nadia
48	Rani Chatterjee	Bankura Banga Vidyalay, Bankura
49	Ratul Dey	Ramkrishna Mission Vidyapith, Purulia
50	Riffat Amin	Calcutta Boys' School, Kolkata
51	Risabh Sahu	Ramkrishna Mission Vidyapith, Purulia
52	Riya Mondal	Purulia Govt. Girls H.S. School, Purulia
53	Rupak Majumder	Bankura Zilla School, Bankura
54	Rupak Majumder	Ramakrishna Mission Boys' Home High School, Rahara, Kolkata
55	Sagnik Mukherjee	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
56	Saikat Mondal	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
57	Sanghita Chandra	Kalyani Public School, Barasat, North 24 Parganas
58	Sankalita Guin	Ghatal Vidyasagar High School, West Midnapore
59	Saptarshi Soham Mohanta	Garden High School, Kolkata
60	Sattwik Das	Delhi Public School, Ruby Park, Kolkata
61	Sayak Chakrabarti	South Point High School, Kolkata
62	Sayak Chatterjee	Hindu School, Kolkata
63	Sayan Adhikari	Bengal Engineering College Model School, Howrah
64	Sayan Debnath	Barrackpore Government High School, North 24 Parganas
65	Sayan Mallick	Ramakrishna Mission Boys' Home High School, Rahara, Kolkata
66	Shouvik Middey	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
67	Shreyam Chatterjee	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
68	Shubham Hansda	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
69	Snigdha Khanna	Calcutta Girls' High School, Kolkata
70	Soham Banerjee	St. Xavier's Collegiate School, Kolkata
71	Soham Das	Ramakrishna Mission Boys' Home High School, Rahara, Kolkata
72	Sohan Mukhopadhyay	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
73	Soubhadra Maiti	Basirhat High School, North 24 Parganas
74	Sougata Saha	Patiram High School, South Dinajpur
75	Soumya Kanti Das	Garden High School, Kolkata
76	Soumyadeep Mandal	Ramakrishna Mission Vidyabhavan, West Midnapore
77	Soumyadip Sarkar	Barasat Peary Charan Sarkar Government High School, Barasat, North 24 Parganas
78	Soumyajyoti Mallick	South Point High School, Kolkata
79	Soumyanil Adhikary	K. T. P.P. High School(H.S.), East Midnapore

Sl. No.	Name of Student	Present Institution
80	Sourav Kanti Giri	Sundarban Adarsha Vidyamandir, South 24 Parganas
81	Souvik Kundu	Bidhannagar Government High School, Salt Lake, Kolkata
82	Souvik Mohanta	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
83	Sovan Dhabal	Bankura Zilla School, Bankura
84	Srijita Karmakar	Delhi Public School, Ruby Park, Kolkata
85	Subhadip Banerjee	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
86	Subhajit Mandal	Bankura Zilla School, Bankura
87	Subham Sinha Roy	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
88	Sudarshan Bhattacharjee	Jalpaiguri Zilla School, Jalpaiguri
89	Sukrit Sarkar	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
90	Sumit Dey	St Xaviers Collegiate School, Kolkata
91	Sunwrita Dastidar	Modern High School For Girls, Kolkata
92	Suprakash Paul	Dum Dum Kishore Bharati High School (H.S.), Kolkata
93	Supratim Sarkar	B D M International School, Kolkata
94	Suritra Bandyopadhyay	B D M International School, Kolkata
95	Susmita Pathak	Bidhannagar Government High School, Salt Lake, Kolkata
96	Syed Muztaba Ali	La Martiniere for Boys, Kolkata
97	Tathagata Bhattacharya	Ramakrishna Mission Boys' Home High School, Rahara, Kolkata
98	Tathagata Mondal	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
99	Tufan Chatterjee	Bankura Zilla School, Bankura
100	Tusar Kanti Paul	Patiram High School, South Dinajpur
101	Upamanyu Chakrabarty	Ramakrishna Mission Ashrama Vidyalaya, Narendrapur, Kolkata
102	Vaishna Biswas	South Point High School, Kolkata

LIST OF ENCOURAGEMENT AWARDEE -JBNSTS JUNIOR TALENT SEARCH TEST 2015 (According to alphabetical order)

Sl. No.	Name	Present Institution
1	Abhra Sen	D.A.V. Public School, Asansol, Burdwan
2	Amrita Datta Chaudhuri	Adamas International School, Belgharia, Kolkata
3	Aniruddha Maji	Howrah Zilla School, Howrah
4	Anushka Biswas	Satish Chandra Memorial School, Chakdah, Nadia
5	Argo Chakraborty	R. K. Mission, Narendrapur, Kolkata
6	Aritra Mandal	Kenduadihi High School, Bankura
7	Arjun Panja	Ramakrishna Mission Vidyabhavan, West Midnapore

Sl. No.	Name of Student	Present Institution
8	Arka Prabha Das	R. K. Mission, Narendrapur, Kolkata
9	Arkadeep Das	St. Xavier's Institution, Kolkata
10	Arnab Chanda	National Gems Higher Secondary School, Kolkata
11	Arnab Dey	Arambagh High School (H.S), Hooghly
12	Arnab Nath	Habra High School, North 24 Parganas
13	Arpan Mondal	R. K. Mission, Narendrapur, Kolkata
14	Avik Das	Serampore Union Institutions, Hooghly
15	Bubai Guchhait	R. K. Mission, Narendrapur, Kolkata
16	Debajyoti Saha	R. K. Mission, Narendrapur, Kolkata
17	Dipankar Das	Shyamnagar Kanti Chandra High School, North 24 Parganas
18	Diptangshu Pal	Hooghly Collegiate School (Government), Hooghly
19	Geetanjali Aich	Calcutta Girls High School, Kolkata
20	Munna Pati	Rakhera High School, Purulia
21	Noureen Hossain	Contai Hindu Girls' High School, East Midnapore
22	Plabon Banerjee	R. K. Mission, Narendrapur, Kolkata
23	Pratim Sarkar	St. Xavier's Institution, Panihati, Kolkata
24	Priyam Bose	Ramkrishna Mission Boys' Home High School, Rahara, Kolkata
25	Priyanka Pal	Calcutta Girls' High School, Kolkata
26	Purbali Das	Gramya Hitakari Girls School, Howrah
27	Rahul Mandal	Ramkrishna Mission Vidyapith, Purulia
28	Ranodeep Saha	Ramakrishna Mission Boys' Home High School, Rahara, Kolkata
29	Ratnadeep Chakraborty	Ramkrishna Vivekananda Mission Vidyabhawan, Barrackpore, North 24 Parganas
30	Ratnawip Sarkar	Narendra Nath Vidyamandir, Kolkata
31	Rohan Kundu	R. K. Mission, Narendrapur, Kolkata
32	Sahil Ahmed	R. K. Mission, Narendrapur, Kolkata
33	Saikat Patra	R. K. Mission, Narendrapur, Kolkata
34	Saikat Roy	Ramkrishna Mission Vidyapith, Purulia
35	Saikat Sahu	R. K. Mission, Narendrapur, Kolkata
36	Saptarshi Mukherjee	St Stephens School, Dum Dum, Kolkata
37	Sayan Ray	Salt Lake School (English Medium), Kolkata
38	Shatabdi Bhattacharyya	Naihati Katyayani Girls' High School, North 24 Parganas
39	Shatanik Bhattacharya	Delhi Public School, New Town, Kolkata
40	Shaurjya Mandal	Hem Sheela Model School, Durgapur, Burdwan



Sl. No.	Name of Student	Present Institution
41	Shayaneel Nath	Raiganj Coronation High School, Uttar Dinajpur
42	Shibashis Mondal	Budge Budge P.K. High School, Kolkata
43	Shinjini Khanra	Ramkrishna Vivekananda Mission Vidyabhawan, Barrackpore, North 24 Parganas
44	Shwetam Chatterjee	R. K. Mission, Narendrapur, Kolkata
45	Srijan Chatterjee	Bidhannagar Government High School, Salt Lake, Kolkata
46	Srijan Das	Vivekananda Mission School, Kolkata
47	Srijato Bhattacharyya	South Point High School, Kolkata
48	Subham Pal	Krishnapur Adarsha Vidyamandir, Kolkata
49	Suprateek Das	St. Xavier's Collegiate School, Kolkata
50	Swagata Pramanik	Ramkrishna Mission Vidyapith, Purulia
51	Tanmay Chanda	Hooghly Collegiate School, Hooghly
52	Utsav Mondal	Bankura Zilla School, Bankura

*I am aware of the usefulness of science to society
and of the benefits society derives from it.*

- Subrahmanyan Chandrasekhar

THE JBNSTS
WEST BENGAL
DISTRICT SCHEME
PROGRAM

A motivational and
need based science
program for middle
school students and
teachers from
district schools of
West Bengal

THE JBNSTS WEST BENGAL DISTRICT SCHEME PROGRAM

West Bengal has been the cradle of academic activities long before independence. Educational and especially scientific movement of West Bengal has always been recognized in India. Talented students are likely to be present in every population and rural areas of West Bengal are no exception. However, due to the lack of awareness and low socioeconomic status, talented students from these regions lag behind in mainstream academic and professional careers, lack exposure to newer developments in science, do not find opportunities to meet and interact with exceptional minds who pursue science and have virtually no means to conduct experiments. Their experience and knowledge of science gets trapped in limited school curriculum and passing of examinations. At an age when they are receptive, inquisitive, physically and intellectually energetic, the joy, the excitement, and the rigor of science learning eludes them. This JBNSTS project with Government of West Bengal aims to create a better learning platform for middle school students through rigorous and innovative methods of curriculum teaching.

The Government of West Bengal and especially the Higher Education Department has been the backbone of JBNSTS's existence through lending its valuable support at all possible quarters. With the support of the academic and student community of the state, JBNSTS is successfully implementing the project for the underprivileged schools in the districts of West Bengal.



GROUP LEARNING

Through the West Bengal District Scheme Program for middle school students, which has been operational since 1998, JBNSTS has been working in the challenging area for motivating bright students in the age group of 12-14 years in the district schools of West Bengal towards the learning of science using innovative methods. This Project known as the West Bengal District Scheme Project . Under West Bengal

District Scheme (WBDS) Program, JBNSTS designs and implements science programs for Grade 8 and 9 students who are of moderate or high ability. Depending on the design of the program, every year 800 - 1500 students of district level schools (rural or semi rural backgrounds) come under the ambit of this

program, this program has already benefited more than 18000 students and 450 middle school science teachers.

Unlike some other States of India, education is still given priority over entrepreneurship and vocational training and where parents continue to believe that education for their wards will ensure economic progress and better quality of lives. But the paucity of teachers and lack of infra-structure , extreme poverty of the students and their family are the reasons the problems which make the education scenario really difficult and quite alarming in our state. Under these circumstances, issues such as innovative teaching, motivating students to learn better, attending to special needs and counseling are forced into taking a back seat. This is therefore, an area where intervention is urgently needed and JBNSTS has been successful in this initiative. We have adopted the *Schoolwide Enrichment Model (SEM)* , an internationally acclaimed model for school students by Prof. Joseph Renzulli, from University of Connecticut, USA. The detailed blueprint for total school improvement program allows schools to develop a collaborative school culture that takes advantage of resources and appropriate -making opportunities to create meaningful, high-level and potentially creative ainbience for students to develop their talents. SEM suggests that educators should examine ways to make schools more inviting, friendly, and enjoyable places that encourage the full development of the learner.

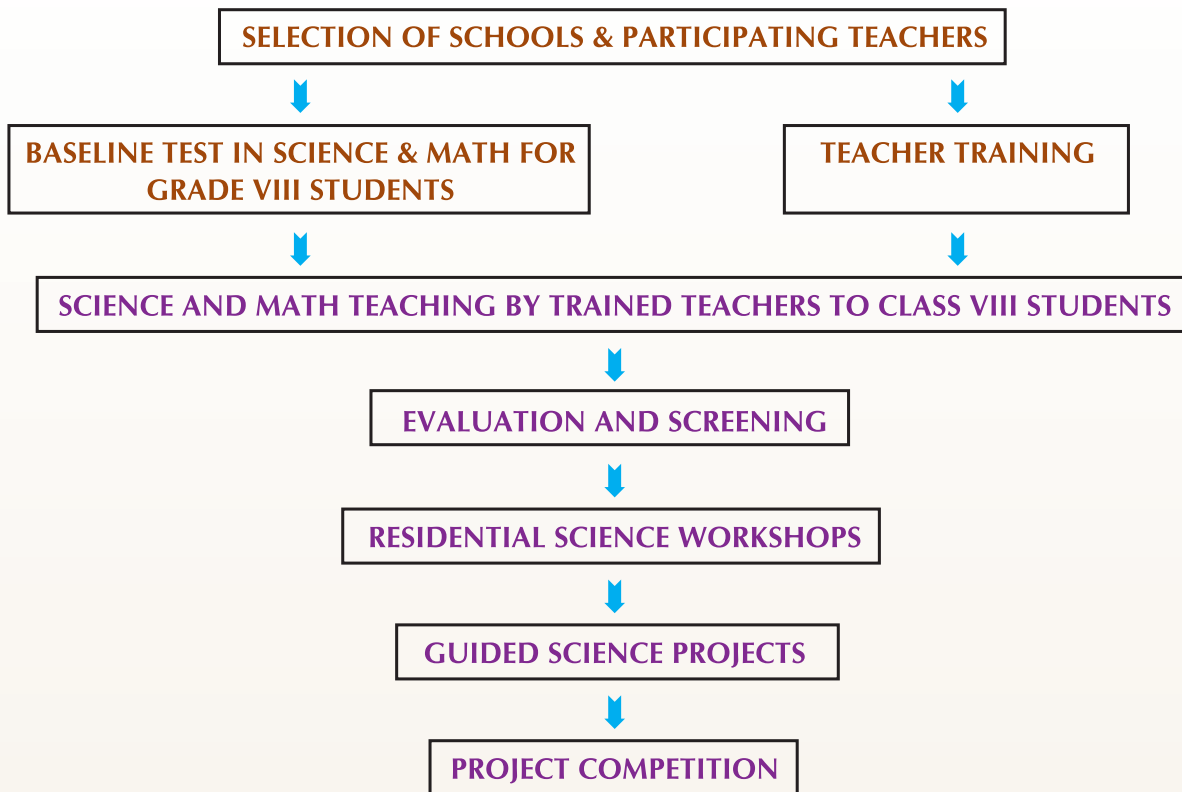
Selected schools in 2014-15

To implement the WBDS scheme in 2014-15, JBNSTS adopted 5 schools from 5 neighboring districts. :

Name of School

- Howrah Jogesh Chandra Girls' High School, District Howrah, West Bengal
- Barrackpore Government Boys' High School, District North 24 Parganas, West Bengal
- Contai Girls' High school, District East Midnapore, West Bengal
- Jiaganj R K V high school, District Murshidabad , West Bengal
- Supapusuri High school, District West Midnapore, West Bengal

Under this program, all the students from Classes VIII of all the 5 selected schools were exposed to the nature and structure of science through innovative curriculum that helped them grasp science and mathematics content more effectively. Various syllabi oriented sessions were organized in the selected schools. A team of motivated and trained teachers were identified and trained by JBNSTS-experts so that, they can serve as facilitators during the special workshops and classes. The classes consisted of theory and practical lessons, laboratory & outdoor assignments . Orientation and training of science teachers is also held for the selected schools at the beginning of the program by JBNSTS resource persons. The science project competitions provided the selected students with a motivating platform. Students were rewarded with books and certificates. Each of the 5 schools were provided with a simple microscope for their school laboratories.



Calendar of Events

January 2015	Students' Follow-up Science Workshop for 76 students of East Midnapore and Howrah Students' Follow-up Science Workshop for 54 students of West Midnapore and Murshidabad
February 2015	Students' Follow-up Science Workshop for 40 students of Barackpore
May & June 2015	Preliminary Project Competitions at 5 participating schools
July 2015	Final Competitions among 17 science projects from 5 schools

HOWRAH JOGESH CHANDRA GIRLS' SCHOOL
SCIENCE PROJECT COMPETITION
JAGADIS BOSE NATIONAL SCIENCE CENTRE, KOLKATA
District School (Higher Education)
DATE: M...



SCIENCE PROJECT AT JOGESH CHANDRA GIRLS' SCHOOL, HOWRAH



FIELD WORK BY STUDENTS AT SUPAPURSURI HIGH SCHOOL, WEST MIDNAPORE



PROJECT PRESENTATION AT
JIAGANJ HIGH SCHOOL,
MURSHIDABAD

PROJECT PRESENTATION AT CONTAL GIRLS
HIGH SCHOOL, EAST MIDNAPORE





FINAL PROJECT COMPETITION AT JBNSTS

The JBNSTS program for districts in 2015-16:

A successful program with 5 schools earlier this year, gave JBNSTS the impetus to scale up the program from 5 schools to 10 schools. The School wide Enrichment Model was adapted to suit Indian settings. The programs planned under this year's work plan involved adopting ten schools (four from South 24 Parganas, two from Hooghly, two from North 24 Parganas, and one school each from Nadia and Kolkata). The following schools came under the ambit of this year's program.

Name of Schools

- Rameswarpur Union Adarsho Vidyaloy, Hasnabad, North 24 Parganas
- Basirhat Town High School, North 24 Parganas
- Sundarban Adarsha Vidya Niketan, Basanti, South 24 Parganas
- Gurudaspur Mahendra Indra Vidyamandir, Patharprotima, South 24 Parganas
- Sundarban Adarsha Vidya Mandir, Kakdwip, South 24 Parganas
- Dhablat Lakshman Parabesh High School, Sagar, South 24 Parganas
- Guptipara High School, Hooghly
- Dwarbasini Girl's High School, Hooghly
- Uttar Rabindra Nagar Vivekananda High School, Dumdum Cant. Kolkata
- Shantipur Municipal School, Nadia

**Calendar of
Events for
2015-16**

August 2015

Baseline test in 10 schools for class VIII students

September 2015

Middle school teacher training program in Math and science for 30 teachers from 10 schools for 4 days

**October and
November 2015**

4 science workshops for 5 days each involving more than 300 students covering schools (one school dropped out)



**TEACHER TRAINING
PROGRAM IN PROGRESS**

**GLIMPSES OF WORKSHOPS
WITH DISTRICT STUDENTS**



January 2016 :	Special Follow up program for class X students (60) Amarnath Bhaduri Memorial Day
February 2016 :	Science Project Workshops for students (300) from 10 districts



**GLIMPSES OF WORKSHOPS
WITH DISTRICT STUDENTS
AT JBNSTS**



THE JBNSTS DST INSPIRE SCIENCE CAMPS

A frontrunner in the
“Science Camp
Movement” in India.
50th camp already
under way. A great
learning experience!

The highest education is that which does not merely give us information but makes our life in harmony with all existence

Rabindra Nath Tagore



JBNSTS-DST INSPIRE SCIENCE CAMP



IN SEARCH OF BUILDING NATION

It was June 2009, when the 1st INSPIRE Science Camp was organized by us at JBNSTS under the financial assistance of Department of science & Technology, Govt. of India and very soon we are going to organize the 50th INSPIRE Science Camp in March, 2016. In these years long journey, we tried our best to complement DST's aim.

Innovation in Science Pursuit for Inspired Research (INSPIRE) is one of the innovative programs developed by the Department of Science & Technology, Govt. of India for attraction of talent to Science and had been launched in December 2008. The basic objective of INSPIRE is to attract talented youth, ranked within top 1% in Class X board examinations and presently studying Science in +2 levels, to study science and motivate them to take up research career and inculcate scientific thought processes in all walks of their life and thus build the required critical human resource pool for strengthening and expanding the Science & Technology system and Research & Development base. It also aims to excite the interns by rubbing shoulders with global leaders in science including Nobel Prize Winners to experience the joy of innovations.

Considering the year long experience and expertise, JBNSTS is now being considered as the pioneer institute for organizing science camps in India.

UNIQUENESS OF THE JBNSTS-DST INSPIRE SCIENCE CAMP

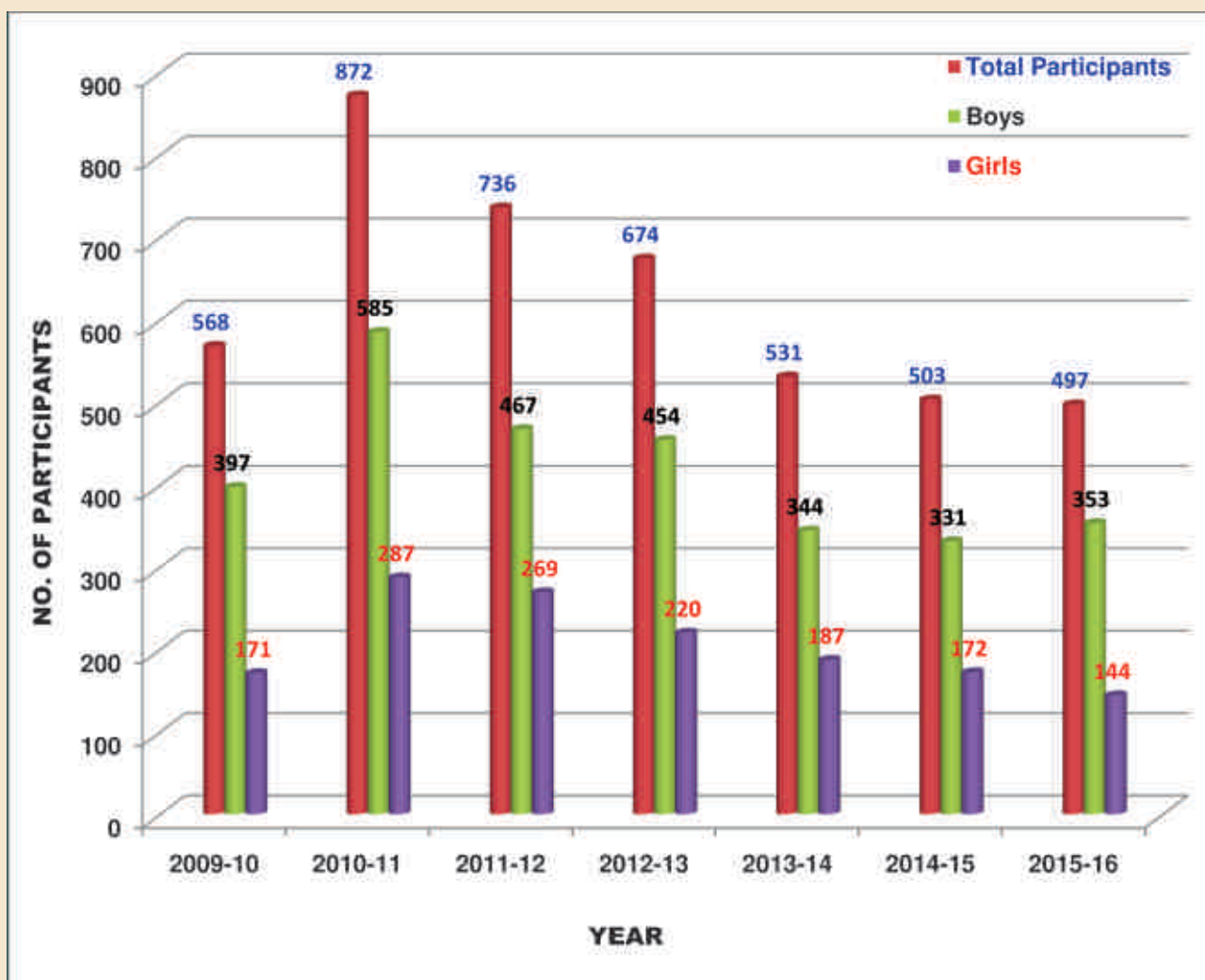
Understanding the inherent need of the bright students, JBNSTS has designed its science camp module under the guideline of DST since the early days of such *learning through science camp* culture in India. Some of the unique features are :

1. Limited number of students in each camp (~ 115-130) and 10-15 mentors for better mentor-student interaction
2. About 60% or more time is allotted for activity based learning through experiment
3. Opportunity to develop research aptitude by carrying out short time research projects during the camp- A module developed by the JBNSTS
4. Develop aptitude toward transformational research culture at early age of the students
5. Opportunity to interact and learn form the internationally famous scientists

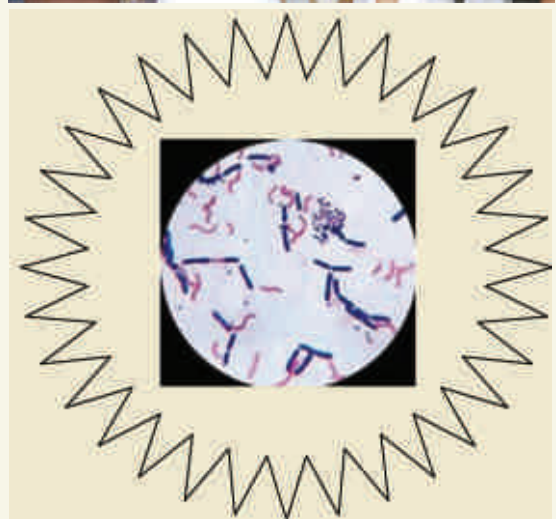
Period	No. of Camps	No. of Students	No. of Schools	No. of Mentors
June 2009 - December, 2015	49	4381 (Male: 2931 Female: 1450)	~ 200	~ 300
January - December, 2015	5	590 (Male: 416 Female: 174)	~ 75	~ 60

We cater the facilities to the eligible students from almost all the districts of West Bengal

**IN LAST 7 YEARS WE HAVE OBSERVED A VERY WELL DISTRIBUTION
OF PARTICIPATION FROM BOYS & GIRLS**



HALL OF FAME



RESEARCH APTITUDE DEVELOPMENT

Participating students are allowed to carry out research at JBNSTS Laboratory. Students are taught the basic principles of interdisciplinary research methodologies and make them learn about fundamental concepts of differently available dry & wet laboratory facilities at JBNSTS.

Students are allowed to plan and carry out research work for their projects under the guidance of different faculty members of JBNSTS and from other institutions. During this session, students are allowed to work independently/group with several instruments such as, **Source Measuring Unit, Metallurgical Microscope, Biological Microscopes, Scanning Tunneling Microscope, Micro Centrifuge, UV-VIS Spectrophotometer, Millican Oil-drop Experimental Setup** etc.

In each camp, participating students are allowed to present their experimental work in the Project Presentation session before the panel of judges.

Some Interesting Topics on Which Science Camp Participants Worked at JBNSTS

- Quest for Chlorophyll-a Voyage to Modern Treasure Island
- Microbes in Air & Water
- Effect of Medicinal Plant in the Soil
- Determination of Molar Extinction Coefficient of Unknown Salt
- Different Environmental Factors on Chlorophyll & its Efficiency
- Generation of Electric Potential by Using Wires of Dissimilar Metals
- Colour versus Heat Absorption
- Conductivity & Percolation Concept for New Materials Development

OTHER IMPORTANT SEGMENTS OF THE JBNSTS-DST INSPIRE SCIENCE CAMP

- **MOTIVATIONAL LECTURES:** The topics are not being covered in an information delivery fashion, rather these are concept-based to bring out the inter-disciplinary connections and excite the young minds about what remains unknown. The duration of the talk is about 45-60 minutes and 30-40 minutes are being kept for interactions.
- **ACADEMIC VISIT:** Our main focus is to give the students an exposure to different R&D laboratories where cutting edge research activities are going on, such as *Indian Association for the Cultivation of Science, Indian Institute of Chemical Biology, Central Glass and Ceramic Research Institute, Saha Institute of Nuclear Physics, Variable Energy Cyclotron Centre, Centre for Research in Nanoscience and Nanotechnology, National Institute of Biomedical Genomics, ICAR Central Research Institute for Jute and Allied Fibres* etc. so that the students could get the opportunity to learn at their early age and ponder over research & development toward their contribution in future.



HOW IT LOOKS IN THE EYE OF THE STUDENTS

We are looking at the biggest sky of unlimited knowledge.

Our Curiosity is outcoming successfully. So, the experienced mentors giving us advice and we are clearing our doubt. We almost come to know about basic science, modern science and many other things.

The practical demonstrations helped us hugely to make our concepts clear. These demonstrations also have helped to grow our interest about Research on Basic Science

The hands-on experience was, according to me, the best experience ever. We were introduced to research and learnt to work in a group with new instruments.



HOW IT LOOKS IN THE EYE OF THE MENTORS

Very palpable. I have come across students who have shaped their views regarding their future career and is now actively thinking of taking up basic science as their future study area.

(Signature of the Mentor)

Excellent selection of students plus very innovative set of activities

Some Singh

Very good attempt to motivate the young minds towards science and technology, obviously, the such attempts will produce good numbers of researchers in the future.

Shruti Adhikari

HON'BLE CHIEF MINISTER MS. MAMATA BANERJEE INSPIRING STUDENTS OF A SCIENCE CAMP AT JBNSTS IN JUNE 2015





A few moments from JBNSTS Science Camp



THE JBNSTS
NURTURE
PROGRAMS
FOR SCHOLARS

Acceleration and
enrichment programs
for young
undergraduate students
from Science,
Engineering and
Medicine
A UNIQUE
MENTORING
PROGRAM

The JBNSTS Scholars' Nurture Programs

● Seminars and workshops

In this forum we organize lecture presentations by scientists, our scholars and our scholar get the opportunity to meet eminent personalities from various fields other than science.

This year we have organized a two days seminar entitled "Those Who Make Us Proud" on 21-22 March, 2015 for current Senior JB-Scholars. On the first day, our scholars had the opportunity to interact with renowned scientists and on the second day, eminent personalities from other fields interacted with the students.

Glimpses of Seminars with our Scholars





● Academic Tour (Talent Enrichment Program)

The philosophy of this program is to give an opportunity to young minds to be exposed to the field of modern research techniques and to interact with scientists all over the country.

This year we have organized this program for Senior JB-Scholars of batch 2014 to visit several institutes and science establishments in Bangalore during June 17th to 30th, 2015. Students visited the following Science & Technology Centres in Bangalore:

- Indian Space Research Organization
- National Aerospace Laboratories
- Hindustan Aeronautics Limited
- Indian Institute of Astrophysics, Koramangala and CREST campus, Hosekote
- Indian Institute of Science
- Jawaharlal Nehru Centre for Advanced Scientific Research
- National Centre for Biological Sciences
- Science Museum
- National Institute of Mental Health & Neuro-Sciences.



Glimpses of Academic Tour at Different Institutes in Bangalore



● Preparation and presentation of scientific research projects in a group

Aim of this program is

- to build up the ability of group activity among the scholars
- to give the opportunity to the scholars to get into the field of research at their early age.

Report of last final project presentation program for JBNSTS Scholars of batch 2013 held on December 21, 2014

13 projects were submitted and 8 projects were presented and the following three projects were selected for “UCO Bank Medha Samman Award”.

1. Green Synthesis of Silver Nanoparticles and Analysis of their Biological Properties.

Prepared by: Debasruti Boral, Botany, Bethun College, Harshita Kaul, Microbiology, St. Xavier's College, and Sampurna Mukherjee, Biological Sciences, Presidency University.

2. Mathematical Representation of DNA sequences

Prepared by: Subhadeep Dasgupta, Physics, RKM Narendrapur, Indrajit Pal, Electronics & Communication Engineering, Heritage Institute of Technology.

3. In Search of Crescograph

Prepared by: Parichita Chakraborty, Biological Sciences Presidency University and Kaustav Mitra, Physics, Presidency University.

Glimpses of Project Presentation Program by our Scholars





JBNSTS Scholars of batch 2013 are showing their model of 'Crescograph' in Project Presentation program.



JBNSTS Scholars of batch 2013 are presenting their project work.

In order to train Middle School Science Teachers of West Bengal and creating science awareness, building scientific temper of the teachers, JBNSTS has planned to conduct science TEACHERS TRAINING PROGRAM under the financial assistance of Department of Science & Technology, Government of West Bengal. The plan for the scheme has already been sanctioned for this year.

Objective of this Project

This teachers training program aims at promoting scientific awareness & arrange training for middle school (7th -10thstd.) science teachers and consequently to the student community at large. An innovative & dynamic science teaching module shall be developed. Trained teachers would be able to teach scientific events in a more lucid and interesting way so that the students shall have clear and transparent ideas about scientific events & get motivated to learn science and develop scientific temper. Students shall also learn to link textbook theories to real life problems and demonstrate how such theories may be implemented practically for the solving of real world problems. Indirectly, the final objective is to motivate the students at a young age to pursue the study of science and develop an inclination towards research work at higher level.

This program shall attempt to develop activity based teaching module and also shall be able to develop teachers:-

- With better knowledge & activity based teaching skills
- With ability to motivate students for pursuing career in science
- With capability of developing network of teachers and percolate the ideas of innovative science teaching to the others.

This training will complement regular class book teaching to make education complete.

The programs shall address the gap between knowledge acquired during classroom teaching and its application in to real world research. This initiative will develop a functional scientific literacy to build up stronger future for young innovative students. Most importantly, they will be able to strengthen the intellectual human resource pool of the nation, which in turn will help to develop our nation. The program will support transformative science teaching methodology, to develop a student community with creative mind and innovative aptitude. Following the resource materials developed, many other institutes across the nation may get benefited.

Other Collaborative Programs

● NATIONAL SCIENCE DAY CELEBRATION -28TH FEBRUARY 2015

An open house program, jointly organized by TWAS and INSA in collaboration with JBNSTS, Kolkata was held at the Nirupama Chatterjee Hall of Scholars, JB-Centre of Excellence for Student Scientists. Prof. A. N. Lahiri Majumder, FNA, Raja Ramanna Fellow (DAE), Bose Institute graced the occasion as Chief Guest and Prof. Maitree Bhattacharyya, Director of JBNSTS presided over the function. The program schedule was as follows:

Inaugural Session

An invocation: performed by Smt. Soumi Mukherjee, JBNSTS scholar of batch 2014.

Welcome address: by Prof. Maitree Bhattacharyya, Director, JBNSTS, Kolkata

Address : by Prof. A. N. Lahiri Majumder, FNA, Raja Ramanna Fellow (DAE), Bose Institute, Kolkata



Lecture Session

- (1) **“Understanding 'Intelligence' in Plants : Acharya J.C. Bose and Beyond”** by Dr. Sonali Sengupta, INSA, Young Scientist Awardee and DST Young Scientist, Bose Institute, Kolkata.
- (2) **“From Newton to Einstein : A Journey Through Centuries”** by Prof. Soumitra Sengupta, Indian Association for Cultivation of Science, Kolkata.
- (3) **“Good, better, best, you may never rest, till your good is better and your better is best”** by Prof. Syamal Roy, FNA, Chief Scientist, CSIR- Indian Institute of Chemical Biology, Kolkata.

● FELICITATION PROGRAM OF PROF. BIMAL K. ROY, DIRECTOR, ISI, KOLKATA

In order to honour Prof. Bimal K. Roy, Director, ISI, Kolkata, on his receiving the Padma Shri Award 2015, JBNSTS gave him a felicitation on 21st March 2015

Program as follows:

Welcome Address by Director, JBNSTS, Kolkata
Introduction of Padma Shri Prof. Bimal K. Roy by Prof. Kalyan Das, Department of Statistics, Calcutta University. Felicitation to Padma Shri Prof. Bimal K Roy by Dr. Amit Sanyal, Special Secretary, Department of Higher Education, Government of West Bengal.

Guest of Honour address by Dr. Amit Sanyal, Special Secretary, D.H.E, Govt. of West Bengal.

Address by Padma Shri Prof. Bimal K Roy to the general audience, scholars and students.



Dr Paromita Roy, Deputy Director JBNSTS and a psychologist has been involved in gifted education research since 2014. This year she was invited to two international conferences to speak on the status of gifted education in India. In February 2015 she was invited to Budapest, Hungary to The International Workshop on Talent Development organized by The Hungarian Talent Support Organization (MATEHETZ) where she presented her work on "Talent Networks in India". In October, she was invited to Nuremberg, Germany to speak at the conference on "Cutting Edge Research in Talent Development" organized by the International Research Association for Talent Development (IRATDE) .

Publications :

- Roy, P., & Kurup, A. (2015). A critical assessment of gifted education in India. In D. Y. Dai, & C. C. Kuo (Eds.), Gifted education in Asia: Problems and prospects. Charlotte, NC: Information Age Publishing
- Roy, P. (in press). Creativity and science education for the gifted: Insights from psychology. In K.S. Taber & M. Sumida (Eds.), Perspectives on Science Education for the Gifted: Key issues and challenges. Cambridge: Routledge ISBN 978-0-415-73740-1
- Jurisevic, M., Blumen, S., Eberle, T., Sánchez-Escobedo, P., Park, K., Roy, P., Sak, U., Li, X., Shi, S., Leana-Tascilar, M. Z., Vialle, W., Ziegler, A. (2015). Perceptions of high-achieving students: Results of a cross-cultural study with teachers. Paper presented at the 21st conference of the World Council for Gifted and Talented Children. Odense, Denmark: 13 August 2015.

Dr Abhijit Kar, Scientific officer is engaged in active research, which has been manifested in the following publications.

Publications :

- Rashmi Das, Harshita Kaul, Deboshruti Boral, Sampurna Mukherjee, Arup K Mitra, Riddhi Majumder, Abhijit Kar; "Anti Microbial property of silver nanoparticles synthesized by green technology"; Proceedings of Frontiers of Microbiology : Prospects and Challenges, UGC Sponsored National Seminar at RKM-Belur, 20-21 November, 2014.
- Debasruti Boral, Harshita Kaul, Sampurna Mukherjee, Rashmi Das, Riddhi Majumder, Abhijit Kar; "Effect of green synthesized silver nanoparticle on both gram positive & gram negative microorganisms"; Proceedings of the First International Conference on Emerging Materials Characterization and Application (EMCA-2014), at Kolkata, 4-6 December 2014.
- Arnab Banerjee, Sukhen Das, Abhijit Kar; "Reliability analysis of the lead free solder to copper joint interface"; Proceedings of the First International Conference on Emerging Materials Characterization and Application (EMCA-2014), at CG&CRI, Kolkata, 4-6 December 2014.
- Rashmi Das, Debasruti Boral, Sampurna Mukherjee, Harshita Kaul, Arup K Mitra, Riddhi Majumder, Abhijit Kar; "Effect of silver nanoparticles synthesized by green technology on microbes"; An Interdisciplinary Approach to Biological Science (IABS-2015), at IACS-Kolkata, 2-3 February.
- Abhinanda Kar, Soumi Mukherjee, Abhijit Kar; "Determination of sugar level through mathematical modeling of a biophysical activity"; WB State Student Youth Science Fair, Kolkata, 4-6 October, 2015

Dr. Smarajit Manna, has been conducting his research work in the field of Bioinformatics and Material Science. In the field Bioinformatics, he is pursuing research work on mathematical modeling of DNA Sequences to establish evolutionary relatedness among various species. In the field of Material Science, He is trying to develop best suited composite material for making Super Capacitors.



Research publications (in 2015):

- Biplab Kumar Paul, Smarajit Manna, Debasis Roy, Papiya Nandy and Sukhen Das, "Cobalt Alumino Silicate Ceramic(CASC) Nanocomposite, a Material with Moderately High Dielectric Constant and Low Tangent Loss at a Critical Concentration in High Frequency Range" Mol2Net, 2015, 1(Section C), pages 1-10, Proceedings of International Conference on Multidisciplinary Sciences under Science Forum.
- Subhadeep Dasgupta, Dwaipayan Sen, Indrajit Pal, Smarajit Manna, "Analysis of DNA sequences using the 1st invariant of a rank 2 tensor", Communicated in the Journal of Mathematical Chemistry (Manuscript no. JOMC-D-15-00193).

Prof. Maitree Bhattacharyya, Director, JBNSTS is involved in research activities in different fields like Microbial ecology, Diabetes and cardiovascular disease and structural biology. A few of her publications are cited here.

- Pijush Basak, Arnab Pramanik, Sohan Sengupta, Sudip Nag, Anish Bhattacharyya, Debojyoti Roy, Rudradip Pattanayak, Abhrajyoti Ghosh, Dhruvajyoti Chattopadhyay, Maitree Bhattacharyya, Bacterial diversity assessment of pristine mangrove microbial community from Dhulibhashani, Sundarbans using 16S rRNA gene tag sequencing, Genomics Data, 2016, 7: 76–78
- Arnab Pramanik, Pijush Basak, Satabdi Banerjee, Sanghamitra Sengupta, Dhruvajyoti Chattopadhyay, Maitree Bhattacharyya, Metagenomic exploration of the bacterial community structure at Paradip Port, Odisha, India, Genomics Data, 2016, 7: 94–96
- Sohan Sengupta, Arnab Pramanik, Abhrajyoti Ghosh, Maitree Bhattacharyya, Antimicrobial activities of actinomycetes isolated from unexplored regions of Sundarbans mangrove ecosystem, BMC Microbiology (2015) 15:170, DOI 10.1186/s12866-015-0495-4
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MENTORS, ADVISORS, FACILITATORS AND EXPERTS WITH JBNSTS

Year long programs of JBNSTS are possible only because of the broad network of teachers, mentors and facilitators who spare their time and share their expertise with the entire spectrum of students and teachers attending these programs.

JBNSTS expresses its heartfelt gratitude to all academicians/scientists/educators for walking this road with us.

Mentors, Advisors, Facilitators and Experts of JBNSTS Activities

Name of the mentors, advisors, facilitators & experts	Affiliation
Shri A. N. Lahiri Majumder	Bose Institute, Kolkata
Shri Abdul Halim Seikh	Ramakrishna Ashram Institute, Baruipur, South 24Parganas
Shri Abhijit Bardhan	Science Communicators Forum, Kolkata
Shri Abhijit Bhattacharyya	University of Calcutta, Kolkata
Shri Abhijit Taraphder	Apollo Gleneagles Hospital, Kolkata
Shri Abhishek Dey	Maulana Azad College, Kolkata
Shri Abhrajyoti Ghosh	Bose Institute, Kolkata
Shri Achintya Pal	Formerly of ONGC
Shri Achintya Sarkar	Bidhannagar College, Kolkata
Shri Amit Chakraborty	National Institute of Technology, Durgapur
Shri Amit Sanyal	Department of Higher Education, Government of West Bengal
Shri Amitava Gupta	Jadavpur University, Kolkata
Shri Amitava Raychaudhuri	Calcutta University, Kolkata
Shri Angshuman Das	St. Xavier's College, Kolkata
Shri Angshutosh Khan	Formerly Ashutosh College, Kolkata
Smt. Anindita Ukil	University of Calcutta, Kolkata
Shri Anirban Ganguly	SSKM Hospital, Kolkata
Shri Anirban Kundu	Calcutta University, Kolkata
Shri Aniruddha Mukherjee	Calcutta University, Kolkata
Shri Anshuman Das	Ramakrishna Mission Ashram Lokasiksha Parishad, Narendrapur, Kolkata
Smt. Anupama Sengupta	Science Communicators Forum, Kolkata
Shri Arindam Bhattacharyya	Calcutta University, Kolkata
Shri Arindam Ganguly	Singer and Actor
Shri Arindam Rana	City College, Kolkata
Shri Aritra Banerjee	Calcutta University, Kolkata
Shri Arnab Chakraborty	Indian Statistical Institute, Kolkata
Shri Arnab Pramanik	Calcutta University, Kolkata
Shri Arunabha Mishra	Vidyasagar College, Kolkata
Shri Arup Kumar Mitra	St. Xavier's College, Kolkata
Shri Arup Sengupta	Garfa DNM High School, Kolkata

Name of the mentors, advisors, facilitators & experts	Affiliation
Shri Arupratan Dutta	Fortis Hospital and Kidney Institute, Kolkata
Shri Ashok Prasun Chattopadhyay	Kalyani University, Kalyani, Nadia
Shri Asok K. Nanda	Indian Institute of Science Education & Research, Kolkata
Shri Avijit Lahiri	Vidyasagar Evening College, Kolkata
Shri Barun Chanda	Actor and Author
Shri Bhabani Joardar	Formerly of Ashutosh College, Kolkata
Smt. Bhaswati Pandit	Institute of Biomedical Genomics, Kalyani, North 24Parganas
Shri Bhupati Chakrabarti	Formerly of City College, Kolkata
Shri Bibaswan Mondal	Dum Dum Motijheel College, Kolkata
Shri Bichitra Kumar Guha	Indian Institute of Engineering Science and Technology, Shibpur, Howrah
Shri Bijoy Bal	Saha Institute of Nuclear Physics, Kolkata
Shri Bimal Kumar Roy	Indian Statistical Institute, Kolkata
Shri Bimalendu Bhusan Bhattacharya	SN Bose National Centre for Basic Sciences, Kolkata
Smt. Chaitali Mukherjee	Santoshpur Rishi Aurobindo Balika Vidyapith, Kolkata
Smt. Chaitali Mukherjee	Netaji Nagar College, Kolkata
Shri Chinmoy Bhattacharyya	Indian Institute of Engineering Science and Technology, Shibpur, Howrah
Shri Debajyoti Ghoshal	Jadavpur University, Kolkata
Shri Debasis Jana	Ramakrishna Mission Vidyamandira, Belur Math, Howrah
Shri Debasis Sarkar	Calcutta University, Kolkata
Shri Deboprasad Chattopadhyay	Indian Council for Medical Research (ICMR), Kolkata
Shri Debi Prasad Duari	MP Birla Institute of Fundamental Research, MP Birla Planetarium, Kolkata
Shri Dhiman Basu	Barrackpore Government School, Barrackpore
Shri Dhruvajyoti Chattopadhyay	Amity University, Kolkata
Shri Dipankar Chattopadhyay	Calcutta University, Kolkata
Shri Dipankar Mandal	Jadavpur University, Kolkata
Shri Gautam Basu	Bose Institute, Kolkata
Shri Gautam Ganguly	Calcutta University, Kolkata
Shri Gautam Halder	Theatre Actor
Shri Gobardhan Das	Jawaharlal Nehru University, New Delhi
Shri Guruprasad Samanta	Indian Institute of Engineering Science & Technology, Shibpur
Shri Haraprasad Mondal	Government Engineering College
Shri Jayanta Sen	Taki Government College, Kolkata

Name of the mentors, advisors, facilitators & experts	Affiliation
Smt. Jhuma Ganguly	Indian Institute of Engineering Science & Technology, Shibpur
Shri Joydip Mitra	Scottish Church College, Kolkata
Shri K.P Sarkar	Gurudas College, Kolkata
Smt. Kakoli Sen Sarma	World Bank Consultant
Shri Kallol Pal	Jadavpur University, Kolkata
Shri Krishnendu Mukhopadhyay	Indian Institute of Engineering Science & Technology, Shibpur
Shri L S Shashidhara	Indian Institute of Science Education and Research, Pune
Smt. Madhumita Dobe	Health Promotion and Education, All India Institute of Hygiene and Public Health, Kolkata
Smt. Mahasweta Mitra Ghosh	St. Xavier's College, Kolkata
Smt. Maitrayee Saha	Saha Institute of Nuclear Physics, Kolkata
Shri Manas Pratim Das	All India Radio, Kolkata
Smt. Manju Ray	Bose Institute, Kolkata
Shri Milan Chandra Gain	Uttar Rabindra Nagar Vivekananda High School, Dum Dum Cantt., Kolkata
Shri Minhaz Hossain	Indian Institute of Engineering Science & Technology, Shibpur
Smt. Mita Choudhury	Formerly of Asansol College, Burdwan
Smt. Mousumi Das	Gurudas College, Kolkata
Shri Mrinal Mukherjee	Nangi High School, Kolkata
Shri Mukut Chakraborty	West Bengal State University, Barasat
Shri Nabakumar Bera	Barasat Government College, Kolkata
Shri Nanigopal Mandal	Ramakrishna Mission Residential College, Narendrapur, Kolkata
Shri Narayan Pradhan	Indian Association for the Cultivation of Science, Kolkata
Shri Nikhil Guchhait	University of Calcutta, Kolkata
Shri Nitin Chattopadhyay	Jadavpur University, Kolkata
Shri P.K.Sen	Jadavpur University, Kolkata
Shri Pabitra Debnath	St. Xavier's College, Kolkata
Shri Pallab Dasgupta	Indian Institute of Technology, Kharagpur
Shri Panchanan Pramanik	Indian Institute of Technology, Kharagpur
Shri Parimal Karmakar	Jadavpur University, Kolkata
Shri Partha Chakrabarti	Indian Institute of Chemical Biology, Kolkata
Shri Partha Dev Ghosh	Kalyani University, Kalyani, Nadia
Shri Partha Karmakar	Muragachha College, Nadia
Shri Partha Pratim Majumder	National Institute of Biomedical Genomics, Kalyani, Nadia

Name of the mentors, advisors, facilitators & experts	Affiliation
Shri Partha Pratim Roy	South Point High School, Kolkata
Shri Parthasarathi Mukhopadhyay	Ramakrishna Mission Residential College, Narendrapur, Kolkata
Shri Pijush Basak	Calcutta University, Kolkata
Shri Pinaki Chowdhuri	Calcutta University, Kolkata
Shri Pintu Sinha	Katwa Kasiram Das Institution, Burdwan
Shri Pradipta Bandopadhyay	Indian Statistical Institute, Kolkata
Shri Pradipta Ghosh	Jhargram Raj College, Jhargram
Shri Pradyut Ghosh	Indian Association for the Cultivation of Science, Kolkata
Shri Prasanta Bag	University of Calcutta, Kolkata
Shri Prashanta Rudra	Formerly of Kalyani University
Shri Pratip Palit	Formerly of Central Research Institute for Jute & Allied Fibers Barrackpore
Shri Prithwijit De	Tata Institute of Fundamental Research, Mumbai
Shri Priyotosh Dutta	Ananda Mohan College, Kolkata, Kolkata
Shri Probir Roy	Saha Institute of Nuclear Physics, Kolkata
Shri Prodip Roy	Mahadevananda Mahavidyalay
Shri Pulak Kundu	South Point High School, Kolkata
Shri Punarbasu Chaudhuri	Calcutta University, Kolkata
Shri Rajib Sarkar	Muragachha College, Nadia
Shri Riddhi Majumder	St. Xaviers College, Kolkata
Smt. Ruma Ray	Jadavpur University, Kolkata
Smt. Rupa Sarkar	Bose Institute, Kolkata
Shri Sabyasachi Mitra	Calcutta International School, Kolkata
Shri Sailendranath Sarkar	University of Calcutta, Kolkata
Shri Samadyuti Haldar	Hooghly Women's College, Hooghly
Shri Samar Bagchi	Kishore Bharati Development Society, Kolkata
Shri Samarjeet Kar	National Institute of Technology, Durgapur
Shri Samir Kumar Pal	SN Bose National Centre for Basic Science, Kolkata
Smt. Samita Basu	Saha Institute of Nuclear Physics, Kolkata
Shri Sanat Manik	Burdwan Raj College, Burdwan
Shri Sanatan Chattopadhyay	University of Calcutta, Kolkata
Shri Sandhi Kumar Bera	Howrah College, Howrah
Smt. Sanghamitra Sengupta	University of Calcutta, Kolkata

Name of the mentors, advisors, facilitators & experts	Affiliation
Shri Sanjib Bagchi	Indian Institute of Science Education & Research and Presidency University
Shri Saptarshi Mondal	Tangrakhali High School, South 24Parganas
Smt. Satabdi Banerjee	Calcutta University, Kolkata
Smt. Sharbari Ghosh	Vidyasagar College, Kolkata
Smt. Sharmistha Bhattacharya	Ananda Ashram Balika Vidyalaya, Kolkata
Shri Shyamal Chakrabarti	Calcutta University, Kolkata
Shri Siddhartha S Chattopadhyay	Bidhannagar Government High School, Kolkata
Shri Siddhartha Sen	Trinity College, Dublin, Ireland
Shri Somenath Roy	Vidyasagar University, Midnapore
Shri Somnath Bhattacharyya	Indian Institute of Technology, Kharagpur
Smt. Sonali Sengupta	Bose Institute, Kolkata
Shri Soumen Basak	Saha Institute of Nuclear Physics, Kolkata
Shri Soumen Prasad Mandal	Government College of Education (CTE), Banipur, Noarth 24Parganas,
Shri Soumitra Sengupta	Indian Association for the Cultivation of Science, Kolkata
Shri Sraddhendudev Das	Ramakrishna Mission Vidyalaya, Narendrapur
Smt. Srimanti Sarkar	Bose Institute, Kolkata
Shri Subhamoy Moitra	Indian Statistical Institute, Kolkata
Shri Subhankar Chowdhury	SSKM Hospital, Kolkata
Shri Subhankar Ray	Jadavpur University, Kolkata
Shri Subhash Bhattacharyya	Jadavpur University, Kolkata
Shri Subhash Chandra Bera	Formerly of Jadavpur University
Shri Subhrangshu Aditya	Jadavpur University, Kolkata
Shri Subir Bhattacharya	Dum Dum Kishore Bharati School, Kolkata
Shri Subir Nag	Satyapriya Roy College of Education, Kolkata
Shri Subrata Singha	Mahadevananda Mahavidyalaya, Kolkata
Smt. Suchismita Das	TDHC Kankaria Jain College, Kolkata
Shri Sudhendu Mandal	Vidyasagar University, Midnapore
Smt. Sudipta Chaudhuri	Sujata Devi Vidyamandir, Kolkata
Shri Sujit Kar	Bongaon College, North 24 Pgs
Shri Sujoy Ghosh	SSKM Hospital, Kolkata
Shri Sumitra Purkayastha	Indian Statistical Institute, Kolkata
Shri Supratik Pal	Indian Statistical Institute, Kolkata

Name of the mentors, advisors, facilitators & experts	Affiliation
Shri Surajit Chakrabarti	Maharaja Manindra Chandra College, Kolkata / RKMV - Belurmath, Howrah
Shri Surajit Sengupta	Tata Institute of Fundamental Research, Hyderabad
Shri Surajit Sinha	Indian Association for Cultivation of Science, Kolkata
Smt. Swagata Das Gupta	Indian Institute of Technology, Kharagpur
Shri Swapan Bramha	Asutosh College, Kolkata
Smt. Swati Sircar	Azjm Premji Foundation, Bangalore
Shri Syamal Roy	CSIR- Indian Institute of Chemical Biology, Kolkata
Shri Tapan Kumar Kar	Indian Institute of Engineering Science & Technology, Shibpur
Shri Tapas Kumar Kundu	Jawaharlal Nehru Centre for Advance Scientific Research, Bangalore
Shri Tushar Kanti Saha	Surendranath College, Kolkata
Shri Ujjwal Kumar Pahari	Netaji Nagar College, Kolkata
Shri Upal Das Ghosh	Jogomaya Devi College, Kolkata
Smt. Urmi Chatterjee	University of Calcutta, Kolkata

“*Science is a perception of the world around us. Science is a place where what you find in nature pleases you.*”

Subrahmanyan Chandrasekhar

December 2014

13/12 – 14/12/14: Scientific Creativity Test (3rd and final Phase): For short listed (81) undergraduate science students of West Bengal for the award of Senior JBNSTS Scholarship, held at JB - Centre of Excellence, Kolkata.

16/12 – 20/12/14 : DST - Inspire Internship Science Camp in association with JBNSTS entitled “বিজ্ঞান ভাবনা” for Class XI **science** students (120) of Kolkata, Howrah, Hooghly and North 24 Parganas, held at JB-Centre of Excellence, Kolkata.

Participants of the Science Camp visited 'Innovation Hub' at BITM, Kolkata.

21/12/14: The final project presentation program for JBNSTS Scholars of batch 2013: 18 students participated in this program. 13 scientific projects were submitted by the scholars and 8 projects were presented and 3 projects were selected for “UCO Bank Medha Samman Award”.

30/12/14: Annual Award Ceremony: Held at JB-Centre of Excellence.

Scientific Session : Lecture and interactive session by Dr. Suman Chakraborty, Mechanical Engineering Department, Indian Institute of Technology, Kharagpur for the JB Scholars during 2.00 p.m. to 4.00 p.m.

Annual Award Ceremony was started with the Welcome Address delivered by Prof. Sibaji Raha. Director, Bose Institute followed by the Director's Address by Prof. Papiya Nandy. Prof. Nadrian C. Seeman, New York University, graced the Chair of the Chief Guest and delivered the Key Note address of the ceremony and then gave away the Certificates of Merit to JBNSTS Senior Scholars, 2014. Project Awards were conferred to the JBNSTS Scholars of batch 2013 and the Rotating Shield as **Best School Award** for the year 2014 was handed over to the teachers and students of **South Point High School**, Kolkata. Dr. Paromita Roy proposed the Vote of thanks. The ceremony was ended with the National Anthem.

January 2015

Prof. (Dr.) Maitree Bhattacharyya of University College of Science, University of Calcutta joined as new Director of JBNSTS on 15/01/2015

27/01 – 31/01/15: WBDS Interactive Students' Follow-up Science Workshop : For middle School Girls' Students (76) from East Midnapore and Howrah, held at JB-Centre of Excellence, Kolkata.

Participants of the workshop visited 'Innovation Hub' at BITM, Kolkata.

SERB Project (DST, GOI) : The project entitled “**Lead free solder alloy development for micro electronics**” funded by DST, Govt. of India is continuing since August, 2013. Presently one Research scholar is working in this project. Dr. Abhijit Kar, Scientific Officer, JBNSTS is the P.I of this project

Project funded by Maulana Abul Kalam Azad Institute for Asian Studies (MAKAIAS), Dept. of Culture, Govt. of India . A 15 month project entitled “**Education and Identification of Talented Students of India**” has been awarded to. Dr. Paromita Roy, Dy. Director, JBNSTS as the Principal Investigator of this project.

International Collaborative project entitled “Cross Nation Study on Teacher Perceptions of Student Abilities running in collaboration with University of Erlangen – Nuremberg, Germany has also been initiated by Dr . Paromita Roy.

February 2015

28/02/2015: “National Science Day – 2015 Celebration”: An open house program, jointly organized by TWAS and INSA in collaboration with JBNSTS, Kolkata held at the Nirupama Chatterjee Hall of Scholars, JB-Centre of Excellence for Student Scientists. Prof. A. N. Lahiri Majumder, FNA, Raja Ramanna Fellow (DAE), Bose Institute graced the occasion as Chief Guest and Prof. Maitree Bhattacharyya, Director of JBNSTS presided over the function.

March 2015

07/03 – 11/03/2015: WBDS Interactive Students' Follow-up Science Workshop : For middle School Students (54) from West Midnapore and Murshidabad, held at JB-Centre of Excellence, Kolkata.

Participants of the workshop visited 'Innovation Hub' at BITM, Kolkata.

21/03/- 22/03/2015 : Two days Seminar entitled “Those who make us proud” for JBNSTS Senior Scholars (41) held at JB-Centre of Excellence, Kolkata

Welcome address by Prof. Maitree Bhattacharyya, Director, JBNSTS

Guest of Honour : Dr. Amit Sanyal, Special Secretary, Department of Higher Education, Government of West Bengal

Felicitation ceremony of Padmashri Professor Bimal Kumar Roy, Director, Indian Statistical Institute, Kolkata by JBNSTS, Kolkata

Interaction with JB-Scholars by the following eminent personalities:

1. Shri Arindam Ganguly, Singer and Actor
2. Shri Gautam Halder, Theatre Actor
3. Shri Barun Chanda, Actor and Author

24/03 – 28/03/15 : DST - Inspire Internship Science Camp in association with JBNSTS entitled “Learning Science” for Class XI **science** students (93) of Kolkata and Howrah held at JB-Centre of Excellence, Kolkata.

April 2015

27/04 – 29/04/2015: WBDS Interactive Students' Follow-up Science Workshop : For middle School Students (40) from Barrackpore, held at JB-Centre of Excellence, Kolkata.

Collaborative project with JU and CIRE, funded by Central Council for Research in Homeopathy, Govt. of India

A collaborative project on the mechanism of action of homeopathic medicine is undertaken with Jadavpur University and CIRE, Kolkata. Dr. Abhijit Kar, Scientific Officer, JBNSTS is Co-PI in this project.

May 2015

Summer Research Project

4 students from Kalyani University joined for their Summer research projects (for two months) on “Plant Biotechnology” for Masters' Dissertation in our laboratory under Dr. Abhijit Kar, Scientific Officer, JBNSTS.

20/05/15: WBDS Project presentation Competition (1ST Phase): held at Howrah Jogesh Chandra Girls' H S School, Howrah. All together 9 projects were presented by the selected students (39) of class IX of Howrah Jogesh Chandra Girls' H. S. School, Howrah.

June 2015

02/06/- 06/06/2015 : DST-Inspire Internship Science Camp in association with JBNSTS entitled “বিজ্ঞান ভাবনা” for Class XI science students of Kolkata was held at JB-Centre of Excellence, Kolkata. 131 students from different schools participated in the camp.

09/06/ – 10/06/15 : WBDS Project Presentation Competition (1ST Phase): Held at Digha Science Centre, Digha, West Midnapore. Alltogether 15 projects were presented by the selected students (50) of Class IX from Supapusuri High School, Supapusuri, East Mindnapore and Contai Hindu Girls' School, West Midnapur.

12/06/15 : WBDS Project Presentation Competition (1ST Phase): Held at Jiaganj Raja Bijoy Sing Bidyamandir, Jiaganj, Murshidabad. Alltogether 6 projects were presented by the selected students (29) of Raja Bijoy Sing Bidyamandir, Jiaganj, Murshidabad.

17/06 – 29/06/15: Talent Enrichment Program funded by CSIR, Govt. of India, at Bengaluru: 19 Senior JB - Scholars' visited the following 10 Science & Technology centres at Bangalore :

(1) Indian Space Research Organization, (2) National Aeronautics Limited (NAL), (3) Indian Institute of Astrophysics, (4) CREST Hosekote Campus, (5) Indian Institute of Science, (6) Jawaharlal Nehru Centre for Advanced Scientific Research, (7) National Centre for Biological Sciences (NCBS), (8) Gas Turbine Research Establishment, (9) National Institute of Mental Health & Neuro-Sciences, (10) Hindustan Aeronautics Limited (HAL). Dr. Smarajit Manna, Student Advisor, JBNSTS guided the team along with his other colleagues.

July 2015

04/07/15: WBDS Project presentation Competition (Final): held at JB-Centre of Excellence, Kolkata. 75 students participated in this program. 17 scientific projects were submitted by Supapursuri High School, West Mednipur, Contai Girls' High school, East Mednipur, Jiaganj Raja Bijoy Singha Bidyamandir, Murshidabad, Barrackpur Govt. High School, North 24Parganas and Howrah **Jogesh Chandra Girls' H S School, Howrah.**

21/07/ - 25/07/2015 : DST – Inspire Internship Science Camp in association with JBNSTS entitled 'Learning Science' for Class XI science students (131) of West Bengal, held at JB-Centre of Excellence, Kolkata.

Participants of the Science Camp visited at Variable Energy Cyclotron Centre, Kolkata

August 2015

25/08/2015 WBDS Baseline Test : For Students of Class VIII. 228 students appeared for the test held at Dhablat Lakshman Parabesh High School (HS) Sagar, South 24Parganas

25/08/2015 WBDS Baseline Test : For Students of Class VIII. 105 students appeared for the test held at Dwarbisini Girls' High School, Dwarbisini, Pandooah, Hooghly

26/08/2015 WBDS Baseline Test : For Students of Class VIII. 146 students appeared for the test held at Gurudaspur Mahendra Indra Vidyamandir, Patharpratima, South 24Parganas

28/08/2015 WBDS Baseline Test : For Students of Class VIII. 110 students appeared for the test held at Sundarban Adarsha Vidyaniketan, Basanti, South 24 Parganas

28/08/2015 WBDS Baseline Test : For Students of Class VIII. 62 students appeared for the test held at Guptipara High School, Guptipara, Hooghly

September 2015

01/09/2015 WBDS Baseline Test : For Students of Class VIII. 146 Students appeared for the test held at Basirhat Town School, Basirhat, North 24Parganas.

01/09/2015 WBDS Baseline Test : For Students of Class VIII. 89 Students appeared for the test held at Rameswarpur High School, Hasnabad, North 24Parganas.

01/09/2015 WBDS Baseline Test : For Students of Class VIII. 204 Students appeared for the test held at Sundarban Adarsha Vidyamandir, Kakdwip, North 24Parganas.

03/09/2015 WBDS Baseline Test : For Students of Class VIII. 43 Students appeared for the test held at Uttar Rabindranagar Vivekananda High School, Dum Dum Cantonment, Kolkata

07/09 – 09/09/15: Teachers' Training Program on "Physical Science, Life Science and Mathematics": Held at JB-Centre of Excellence, Kolkata for teachers of different schools of South 24Parganas (Sagar and Sundarban), North 24Parganas, Nadia and Hooghly.

15/09/ - 19/09/2015 : DST — Inspire Internship Science Camp in association at JBNSTS entitled 'Learning Science' for Class XI **science** students (131) of West Bengal, held at JB-Centre of Excellence, Kolkata.

Participants of the Science Camp visited 'Innovation Hub' at BITM, Kolkata.

27/09/2015: 56th Senior Talent Search Test : 1086 undergraduate science students applied for STST examination and 907 students appeared for the test from West Bengal at the following 20 examination centres:

(1) Presidency University, Kolkata, (2) Ramakrishna Mission Residential College, Narendrapur, South 24Parganas, (3) Barrackpore Rastraguru Surendranath College, Barrackpore, North 24Parganas, (4) Jadavpur University, Kolkata, (5) Indian Statistical Institute, Kolkata, (6) Adamas Institute of Technology, Barasat, North 24Parganas, (7) Krishnanagar Govt. College, Krishnanagar, Nadia, (8) Muragachha Govt. College, Nadia, (9) National Institute of Technology, Durgapur, Burdwan (10) Prabhat Kumar College, Contai, East Midnapore, (11) Krishnath College, Behrampur, Murshidabad, (12) J K College, Purulia, (13) Visva Bharati, Shantiniketan, Birbhum, (14) Ramakrishna Mission Vidyamandira, Belur Math, Howrah, (15) ABN Seal College, Coochbehar, (16) Indian Institute of Technology, Kharagpur, (17) Burdwan Raj College, Burdwan, (18) Bankura Sammilani College, Bankura, (19) Raiganj Surendranaath Mahavidyalaya, Raiganj, Uttar Dinajpur, (20) Siliguri College, Siliguri, Darjeeling.

27/09/2015 : 1st Junior Talent Search Test : 3974 Science Students (Class XI) applied for JTST examination and 3524 Students appeared for the test from West Bengal at the following 24 centres.

(1) Vidyasagar College, Kolkata, (2) Bidhannagar College, Kolkata, (3) Jadavpur University, Kolkata, (4) Adamas Institute of Technology, North 24Parganas, (5) Barrackpore Rashtraguru Surendranath College, Barrackpore, North 24Parganas, (6) Krishnanagar Govt. College, Nadia, (7) Muragachha Govt. College, Nadia, (8) Vivekananda College, Alipurduar, (9) Visva Bharati, Shantiniketan, Birbhum, ((10) Narasinha Dutta College, Howrah, (11) ABN Seal College, Coochbehar, (12) National Institute of Technology, Durgapur, Burdwan, (13) Burdwan Raj College, Burdwan, (14) Midnapore College, West Midnapore, (15) J K College, Purulia, (16) Bankura Sammilani College, Bankura (17) Balurghat College, Balurghat, Dakshin Dinajpur, (18) Malda College, Malda, (19) Krishnath

College, Berhampore, Murshidabad, (20) Hooghly Mohsin College, Chinsurah, Hooghly, (21) Raiganj Surendranath Mahavidyalaya, Raiganj, Uttar Dinajpur, (22) Fakir Chand College, Diamond Harbour, South 24Parganas, (23) Sonarpur Mahavidyalaya, Rajpur, South 24Parganas, (24) Siliguri College, Siliguri, Darjeeling.

October 2015

01/10 – 04/10/2015 : “WBDS Students Science Workshop” supported by Department of Higher Education, Government of West Bengal : For middle School Students (50) from 2 selected schools (Guptipara High School, Hooghly and Gurudaspur Mahendra Indra Vidyamandir, Patharprotima, South 24Parganas), held at JB-Centre of Excellence, Kolkata.

06/10 – 09/10/2015 : “WBDS Students Science Workshop” supported by Department of Higher Education, Government of West Bengal : For middle School Students (68) from 3 selected schools (Rameswarpur U.A.V, Hasnabad, North 24Parganas, Sundaraban Adarsha Vidyaniketan, basanti, South 24Parganas, and Dhablat L. P. High School, Sagar, South 24Parganas), held at JB-Centre of Excellence, Kolkata.

13/10 – 16/10/2015 : “WBDS Students Science Workshop” supported by Department of Higher Education, Government of West Bengal : For middle School Students (46) from 2 selected schools (Uttar Rbindranagar Vivekananda High School, Dum Dum, Kolkata, and Sundarban Adarsha Vidyamandir, Kakdwip, North 24 Parganas), held at JB-Centre of Excellence, Kolkata.

27/10 – 30/10/2015 : “WBDS Students Science Workshop” supported by Department of Higher Education, Government of West Bengal : For middle School Students (54) from 2 selected schools (Dwarbasini Girls High School, Hooghly and, Basirhat Town High School, Basirhat, North 24Parganas), held at JB-Centre of Excellence, Kolkata.

November 2015

21/11 - 22/11/15: Senior Talent Search Test Interview (2nd Phase) : for short listed (184) students of West Bengal held at JB - Centre of Excellence, Kolkata.

30/11/ - 04/12/2015 : Inspire Internship Science Camp in association with JBNSTS entitled 'Learning Science' for Class XI *science* students (124) of West Bengal, held at JB-Centre of Excellence, Kolkata.

An academic visit was organized for the participants of the Science Camp at “Centre for Research in Nanoscience and Nanotechnology”, Calcutta University, Salt Lake Campus, Kolkata.

December 2015

05/12 – 06/12/15: Scientific Creativity Test (3rd and final Phase) : for short listed (75) undergraduate science students of West Bengal for the award of Senior JBNSTS Scholarship, held at JB - Centre of Excellence, Kolkata.

12/12 – 13/12/15: Junior Talent Search Test final Interview (2nd Phase) : for short listed (294) students of West Bengal held at JB - Centre of Excellence, Kolkata.

SERB Project (DST, GOI) : The project entitled *Metagenomics of Sunderbans estuarine ecosystem using deep sequencing: A valuable tool for exploration of novel genes and bioactive compounds* funded by DST, Govt. of India is continuing since December, 2015. Dr. Pijush Basak has joined JBNSTS as the P.I of this project.

Annual Award Ceremony 2014

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH

Annual Award Ceremony of JBNSTS for the year 2014 was held at Jagadis Bose National Science Talent Search, 1300 Rajdanga Main Road, Kolkata 700107 on December 30, 2014 at the Nirupama Chatterjee Hall of Scholars in its premises. Annual Award Ceremony began with the Welcome Address delivered by Prof. Sibaji Raha. Director, Bose Institute followed by the Director's Address by Prof. Papiya Nandy. Many senior scholars, experts, guardians, teachers and well wishers of JBNSTS gathered to welcome the new scholars into the JBNSTS fraternity.

There was a scientific lecture and interactive session with the scholars by Dr. Suman Chakraborty, Mechanical Engineering Department, Indian Institute of Technology, Kharagpur. Prof. Nadrian C. Seeman, New York University, graced the Chair of the Chief Guest and delivered the Key Note address of the ceremony and then gave away the Certificates of Merit to JBNSTS Senior Scholars, 2014. Project Awards were conferred to the JBNSTS Scholars of batch 2013 and the Rotating Shield as **Best School Award** for the year 2014 was handed over to the teachers and students of **South Point High School**, Kolkata. The ceremony ended with vote of thanks followed by National Anthem.





Prof. Sibaji Raha addressing the audience at Annual Award Ceremony, 2014

Annual Award Ceremony 2014



Prof. Papiya Nandy, Director, JBNSTS at Annual Award Ceremony, 2014



Prof. Wadrian C. Seeman at Annual Award Ceremony, 2014



Scholars' Achievement

Sri Raunak Chitlangia, a JBNSTS scholar of batch 2013, presented a paper in the XIX annual international conference by Society of Operations Management (SOM), 2015.

Sri Sougata Hazra, a JBNSTS scholar of batch 2013, is the topper among all the third years in the Department of Mechanical Engineering (160 students) at IIT, Kharagpur. He won Gold medal in the Inter Hall Hardware Modelling Event in second year (part of Mechanical Team) for innovating and building a working model of an automated bicycle, i-BIKE, operable by text messages. Apart from academics, he also received Gold medal in Postering and Creative Writing at the Open IIT contest at IIT, Kharagpur.

Sri Sabarna Mitra, a JBNSTS scholar of batch 2013, featured in the top 1% national toppers list of National Graduate Physics Examination organized by IAPT.

Ms. Sampurna Mukherjee, a JBNSTS scholar of batch 2013, was selected for the preliminary interview for Rhodes Scholarship 2016.

Sri Abhishek Ray, a JBNSTS scholar of batch 2011, published two research articles in the SAGE journal "Studies in Microeconomics".

Sri Upamanyu Moitra, a JBNSTS scholar of batch 2011, was selected for participation in the Lindau Nobel Laureate Meeting 2015, in which he represented India as a "Young Scientist".

Ms. Aditi Chatterjee, a JBNSTS scholar of batch 2011, received the SN Bose scholarship for summer internship and pursued her research work in the Geochemistry Department at California Institute of Technology. She was also the gold medalist in B.Sc. Geology course at Presidency University.

Sri Utsarga Adhikary, a JBNSTS scholar of batch 2010, has joined in PhD program in Biological and Biomedical Sciences, Division of Medical Sciences of Harvard University. During last one year Utsarga received **ONGC Scholarship** 2014 for the highest CPI in his class at Dept of Chemistry IIT, Guwahati, Institute Silver Medal 2015, IIT, Guwahati, Debesh Kamal Scholarship 2015 from Ramakrishna Mission Institute of Culture, Golpark, and Harvard University Graduate Fellowship 2015-2021. As a co-author he has published a research paper entitled "Structure-Activity Relationship of Amino Acid Tunable....against Bacterial Persisters in" Bioconjugate chemistry (2015).

Sri Prantik Saha, a JBNSTS scholar of batch 2010, **entered into Ph. D program at** Inter-University Centre for Astronomy & Astrophysics (IUCAA), Pune.

Sri Avinash Ruchandani, a JBNSTS scholar of batch 2010, is currently pursuing post graduate program in management at IIM Ahmedabad. He received DAAD scholarship from the German government to pursue a semester at University of Cologne, Germany.

Sri Prakash Chakraborty, a JBNSTS scholar of batch 2010, is currently in pursuing PhD in Statistics at Purdue University, West Lafayette, USA and he has been awarded the Ross Fellowship. As a co-author he has published a research article entitled "Population variation in total genetic risk susceptibility polymorphisms in a very **prestigious journal** –**"Human Molecular Genetics"** from Oxford Press.

Sri Subhajit Mazumdar, a JBNSTS scholar of batch 2008, is working on Black Holes in Large Spacetime dimensions at IIFR, Mumbai and published a paper entitled **"Unitarity, Crossing Symmetry Susy Matter Chern-Simons theories"** in a prestigious journal JHEP 1510 (2015) 176.

Sri Akshat Mathur, a JBNSTS scholar of batch 2008, is currently Senior Manager for Business Development in Flipkart and has been selected for admission in Cambridge University for MBA.

Sri Arnab Rudra, a JBNSTS scholar of batch 2007, defended his thesis in Cambridge University for his Ph.D. dissertation and going to join in the Physics Department at UC Davis as a post-doctoral scholar.

Current Donors and Donations 2014 - 15

A. SCHOLARS RESERVE FUND

i) Donations (General)

1) Deptt. of Higher Education, Govt.of West Bengal	104,000.00	
2) Deptt. of Health and Family Welfare, Govt. of West Bengal	108,500.00	
3) Luxmi Charitable Trust	40,500.00	
4) Daulat Ram Mehndiratta Charitable Trust	27,000.00	
5) Armenian Holy Church of Nazareth	27,000.00	
6) MP Birla Smarak Kosh (South Point)	115,000.00	
7) AN Bhaduri Memorial Charitable Trust	15,500.00	
8) Biren Roy Trust	27,000.00	
9) Mayukh Mitter Foundation	54,000.00	
10) TWAS - INSA (Local Chapter, Kolkata)	25,000.00	543,500.00

B. DEVELOPMENT FUND

i) Donation - Corpus

1) Prof.(Dr.) Papiya Nandy	42,500.00	
2) Smt. Dipti Dasgupta	15,000.00	57,500.00

ii) Donation (Gen)

1) Prof. (Dr.) Amitava Gupta	1,500.00	1,500.00
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C. LABORATORY FUND

i) DONATION (General)

1) Dr.Riddhi Majumder	500.00	
2) Shri Kamal Dasgupta	1,500.00	
3) Prof.(Dr.) Amitava Raychaudhuri	2,000.00	4,000.00

FUNDS AND ACCOUNTS



M. Saha & Co.
Chartered Accountants

"KALYANI APARTMENT"

113/6 Hazra Road, 1st Floor,
Kolkata-700 026, : 2455-1236
E-mail : msaha_co@yahoo.com

INDEPENDENT AUDITORS' REPORT

To the Members of the Governing Body,
Jagadis Bose National Science Talent Search,
Kolkata - 700 107

1.0 We have audited the attached Balance Sheet of the Jagadis Bose National Science Talent Search as on 31st March, 2015 and also the Income and Expenditure Account for the year ended on that date annexed thereto. These financial statements are the responsibility of the management of the Institute. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall financial statements presentation. We believe that our audit provides reasonable basis for our opinion.

2.0 On the basis of our audit as indicated in paragraph 1.0 above and subject to our Audit Observations (Annexure-I attached herewith), we report that:

- i. We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
- ii. In our opinion, proper books of account as appears from our examination of those books;
- iii. The Balance Sheet and Income & Expenditure Account dealt with by this report are in agreement with the books of account;
- iv. In our opinion and to the best of our information and according to the explanations given to us, the said accounts read with the schedules A to O enclosed thereto and subject to our comments in Audit Observations above, give the information in the manner so required and give a true and fair view.
 - a) In the case of the Balance Sheet, of the state of affairs of the Institute, as at 31st March, 2015; and
 - b) In case of the Income & Expenditure Account, of the surplus for the year ended on that date.

Place: Kolkata
Date: 4th day of August, 2015

For M. Saha & Co.
Chartered Accountants

Sd/-
CA DEBARSHI SAHA
Partner

(Mem No : 061398, FRN : 305135E)



M. Saha & Co.
Chartered Accountants

"KALYANI APARTMENT"

113/6 Hazra Road, 1st Floor,
Kolkata-700 026, : 2455-1236
E-mail : msaha_co@yahoo.com

Annexure-I

Audit Observations

1. During physical verification of Fixed Assets, it was found that few assets were not useable and marked as "Scrap" but the valuation of those impaired assets were not made. The management in its representation also acknowledged the fact that valuation of, such old scrap item of fixed assets is a problem and further informed us the matter will be taken up in its GB Meeting and it is most likely that these items of scrap fixed assets shall be written off from the society's books. Hence provision for impairment could not be done as it is not measurable. Accordingly, the value of fixed assets as shown in Balance Sheet has been overstated to such extent and correspondingly provision for such impairment has not been made.
2. Legal expenses of Rs. 19,500/- was paid to Sri Anirban Guin for taking steps and attending hearing on 3 different dates in the case of Rabindra Nath Naskar - T.5. No., 439 of 2004. No details of court proceedings on those 3 dates or any legal opinion were available on record. According to management representation, the reporting society has vide application dated 10th March, 2015, have applied for dismissal of the case as the main applicant is not appearing for a long time and that the next date of hearing is still pending. In the absence of any other information, the contingent liability of the reporting society as on 31st March, 2015 is not ascertainable.
3. Unutilised Government Grant to the tune of Rs. 47,205.75, received from Ministry of Development of North Eastern Region, Govt. of India has been brought forward over the years. During the year under audit a sum of Rs. 61,106/- was added back to the above mentioned unutilised grant on account of "liabilities no longer required written back". The total unutilised grant under this head as on 31.03.2015 became Rs. 1,08,311.75. Another Unutilised Grant balance of Rs. 2,54,695.50 on account of Grant received from Dept. of Science & Technology, (FIST), Govt. of India has been carried forward since long after making an addition on account of interest each and every year. During the year under audit, after addition of Rs. 8,701.00 on account of interest the unutilised grant became Rs. 2,63,396.50 as on 31st March, 2015. In both the cases, intention of the management to utilise such grant money in the near future is uncertain. According to management representation, the society has very recently contacted with the respective Grant Authorities and that the money shall be refunded if decided upon by the respective Grant Authorities.

Place: Kolkata
Date: 4th day of August, 2015

For M. Saha & Co.
Chartered Accountants

Sd/-
CA DEBARSHI SAHA
Partner
(Mem No : 061398, FRN : 305135E)

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH

1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA 700107

BALANCE SHEET AS ON 31ST MARCH, 2015

PREVIOUS YEAR ₹.	SOURCES OF FUNDS	SCHEDULE	CURRENT YEAR ₹.
33,099,488.01	Funds	A	35,642,052.53
	Liability for Unutilised Grant:		
1,846,003.30	Deptt. of Higher Education, Govt. of West Bengal		1,981,657.42
593,939.49	Deptt. of Higher Education, Govt. of West Bengal(WBDS)		442,178.49
584.00	West Bengal Pollution Control Board, Govt. of West Bengal		—
2,831.75	Deptt. of Science and Technology, Govt. of West Bengal (WAST)		2,831.75
30,000.00	West Bengal Academy of Science & Technology		30,000.00
59,019.05	Deptt. of Science and Technology, Govt. of India		56,786.05
233,142.11	Council of Scientific and Industrial Research, Govt. of India		177,188.11
47,205.75	Ministry of Development of North Eastern Region, Govt. of India		108,311.75
89,586.50	Science & Engineering Research Bureau, DST, Govt. of India		325,230.00
254,695.50	Deptt. of Science and Technology, Govt. of India (FIST)		263,396.50
36,256,495.46			39,029,632.60
	APPLICATION OF FUNDS		
13,693,162.52	Fixed Assets	B	13,129,916.04
22,937,469.00	Investments	C	24,441,336.00
(374,136.06)	Net Current Assets:		
	Current Assets	D	4,792,068.06
	Less:Current Liabilities	E	3,333,687.50
36,256,495.46			39,029,632.60

Notes on accounts (Schedule - O) form an integral part of the Balance Sheet.

On behalf of the
Governing Body

In terms of our report of even date
attached herewith
For M. Saha & Co.
Chartered Accountants
FRN: 305135E

Kolkata
Date: 04/08/2015

Sd/-
Prof (Dr.) Maitree Bhattacharyya
Director

Sd/-
Debarshi Saha
Partner
Membership No. 061398

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA - 700 107

INCOME AND EXPENDITURE ACCOUNT (GRANT) FOR THE YEAR ENDED 31ST MARCH, 2015

Previous Year	Government of West Bengal (WBDS)	Government of India (DoNER)	Government of India (DST)	Government of India (DST) (SEATS)	Government of India (DST) (FIST)	Talent Enrichment Programme (CSIR)	Government of India (DST) (SERB)	Total
Sch	₹	₹	₹	₹	₹	₹	₹	₹
	Income							
	General:							
12,474,978.00	5,269,948.00	590,000.00	3,153,601.00				460,000.00	9,473,549.00
2,466,618.35	1,846,003.30	593,939.49	47,205.75	-	254,695.50	233,142.11	89,586.50	3,123,591.70
-	2,925,368.02	61,106.00	1,398.00		8,701.00			2,987,872.02
1,627.00								8,701.00
14,943,223.35	10,041,319.32	1,183,939.49	108,311.75	60,417.05	263,396.50	233,142.11	549,586.50	15,593,713.72
	Expenditure							
	General:							
5,872,057.00	F 5,360,993.00							5,360,993.00
5,276,623.50	N 614,241.00	741,761.00	-	3,631.00	3,153,601.00	55,954.00	243,241.00	4,812,429.00
715,325.15	G 2,084,427.90							2,084,427.90
11,864,005.65	8,059,661.90	741,761.00	-	3,631.00	3,153,601.00	55,954.00	243,241.00	12,257,849.90
3,079,217.70	1,981,657.42	442,178.49	108,311.75	56,786.05	263,396.50	177,188.11	306,345.50	3,335,863.82
-								
3,079,217.70	1,981,657.42	442,178.49	108,311.75	56,786.05	263,396.50	177,188.11	325,230.00	3,354,748.32

Notes on accounts (Schedule - O) form an integral part of the Income and Expenditure Account.

In terms of our report of even date attached herewith

For M. Saha & Co.
Chartered Accountants
FRN: 305135E

Sd/-
Prof. (Dr.) Maitree Bhattacharyya
Director

Sd/-
Debarshi Saha
Partner
Membership No. 061398

Kolkata
Date:04.08.2015



JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAIDANGA MAIN ROAD,KASBA,KOLKATA - 700 107

INCOME AND EXPENDITURE ACCOUNT (FUND) FOR THE YEAR ENDED 31ST MARCH, 2015.

Previous Year	Schedule	Scholars' Reserve Fund	Development Fund	Laboratory Fund	JBNSTS-Own Gen. Fund	Staff Welfare & Medical Fund	Infrastructural Development Fund	Total
₹	₹	₹	₹	₹	₹	₹	₹	₹
	Income:							
	General:							
	Scholars' Reserve Fund							
225,000.00	Grant	212,500.00						212,500.00
257,000.00	Donation	331,000.00						331,000.00
958,768.43	Interest on Investment	1,116,666.75						1,116,666.75
41,259.00	Liabilities no longer required written back							
181,601.00	Miscellaneous Receipts	58,041.00						58,041.00
	Development Fund:							
	Grant		500,000.00					500,000.00
300.00	Donation		1,500.00					1,500.00
586,062.70	Interest on Investment		579,843.43					579,843.43
	Liabilities no longer required written back							
	Laboratory Fund:							
1,700.00	Donation			4,000.00				4,000.00
140,592.87	Interest on investment			143,575.73				143,575.73
	Overhead			25,000.00				25,000.00
	Misc Receipts			3,150.00				3,150.00
	JBNSTS-Own Generation Fund:							
339,690.00	Rent Earned				127,050.00			127,050.00
563,159.00	Accommodation				655,855.10			655,855.10
100,000.00	Overhead				75,000.00			75,000.00
251,832.65	Interest on Investment				308,243.79			308,243.79
	Staff Welfare & Medical Fund:							
23,015.15	Interest on Investment					37,299.43		37,299.43
	Infrastructural Development Fund:							
25,572.39	Interest on Investment						40,807.37	40,807.37
3,693,543.19	Total Income	1,893,023.75	1,094,654.43	175,725.73	1,166,148.89	37,299.43	40,807.37	4,409,659.60
	Expenditure:							
	General:							
934,838.00	Scholars' Reserve Fund							934,838.00
694,330.00	Development Fund		648,760.23					648,760.23
152,542.92	Laboratory Fund			135,382.97				135,382.97
362,228.65	JBNSTS-Own Generation Fund				410,315.38			410,315.38
20,000.00	Staff Welfare & Medical Fund					5,430.00		5,430.00
2,163,939.57	Total Expenditure	1,157,817.00	648,760.23	135,382.97	410,315.38	5,430.00	-	2,357,705.58
1,531,603.62	Balance	737,206.75	445,894.20	40,342.76	755,833.51	31,869.43	40,807.37	2,051,954.02
	Less: Expenditure made from Govt. Grant, now adjusted out of own fund							18,884.50
1,531,603.62	Excess of income/(expenses) transferred to specific fund	737,206.75	445,894.20	40,342.76	736,949.01	31,869.43	40,807.37	2,033,069.52

Notes on accounts (Schedule - O) form an integral part of the Income and Expenditure Account.

On behalf of the
Governing Body

Sd/-
Prof. (Dr.) Maitree Bhattacharyya
Director

Kolkata
Date:04.08.2015

In terms of our report of even date
attached herewith

For **M. Saha & Co.**
Chartered Accountants
FRN: 305135E
Sd/-

Debarshi Saha
Partner
Membership No. 061398

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA 700107

Schedule-A

FUNDS		Schedule-A		
PREVIOUS YEAR		CURRENT YEAR		
₹		₹	₹	₹
10,388,871.54	SCHOLARS' RESERVE FUND			
	As per last year	10,388,871.54		
	Add: Donation (Corpus)	-		
	Add: Excess of Scholars' Reserve Fund as per Income & Expenditure Account	737,206.75		11,126,078.29
15,787,638.05	DEVELOPMENT FUND			
	As per last year	15,787,638.05		
	Add: Donation (Corpus)	57,500.00		
	Add: Surplus of Development Fund as per Income & Expenditure Account	445,894.20		16,291,032.25
1,995,926.37	LABORATORY FUND			
	As per last year	1,995,926.37		
	Add: Donation (Corpus)	-		
	Less: Surplus of Laboratory Fund as per Income & Expenditure Account	40,342.76		2,036,269.13
40,524.43	SPECIAL RESERVE FUND			
	As per last year	40,524.43		
	Less: Assets Written Off	(12,159.34)		28,365.09
1,353,582.72	CAPITAL FUND			
	As per last year	1,353,582.72		
	Less: Depreciation	(224,378.66)		1,129,204.06
1,000,000.00	CONTINGENCY FUND			1,000,000.00
2,726,822.14	JBNSTS- OWN GENERATION FUND			
	As per last year	2,726,822.14		
	Add: Surplus of Own-Generation Fund as per Income & Expenditure Account	736,949.01		
		3,463,771.15		
	Less: Transferred to Staff Welfare & Medical Fund	(100,000.00)		
	Less: Transferred to Infrastructural Dev Fund	(100,000.00)		3,263,771.15
203,015.15	STAFF WELFARE & MEDICAL FUND			
	As per last year	203,015.15		
	Add: Surplus of Staff Welfare & Medical Fund as per Income & Expenditure Account	31,869.43		
	Transferred from JBNSTS- Own Generation Fund	100,000.00		334,884.58
225,572.39	INFRASTRUCTURAL DEVELOPMENT FUND			
	As per last year	225,572.39		
	Add: Surplus of Infrastructural Fund as per Income & Expenditure Account	40,807.37		
	Transferred from JBNSTS- Own Generation Fund	100,000.00		366,379.76
7,874.22	RETIREMENT BENEFIT FUND			
	(Provident Fund)			
	As per last year	7,874.22		
	Add: Interest earned	313.00		
	Less: Expenses	(26.00)		8,161.22
(630,339.00)	ICGM			
	Donation	1,524,927.00		
	Less:			
	Last year's overspent met out of current year's donation	630,339.00		
	Add: Current Year's Expenses (Schedule -M)	836,681.00	1,467,020.00	57,907.00
33,099,488.01				35,642,052.53

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA 700107

Schedule-B

FIXED ASSETS

Item	Value as on 01.04.2014	Adjustments/ Written off	Addition during the year	Value as on 31.03.2015	Rate of Depreciation	Depreciation	Written Down Value as on 31.03.2015
	₹	₹	₹	₹		₹	₹
Leasehold Land (Dev. Fund)	2,075,669.00			2,075,669.00	-	-	2,075,669.00
Building (Dev. Fund)	7,695,574.49		198,097.00	7,893,671.49	5%	389,731.15	7,503,940.34
Rain Water Harvesting System (Dev. Fund)	62,557.72			62,557.72	5%	3,127.89	59,429.83
Mural (Dev. Fund)	39,419.30			39,419.30	5%	1,970.96	37,448.34
Electrical Equipment (Dev. Fund)	285,941.42		1,500.00	287,441.42	15%	43,116.21	244,325.21
Electrical Fittings (Dev. Fund)	213,119.78			213,119.78	10%	21,311.98	191,807.80
Furniture (Dev. Fund)	325,505.97		6,995.00	332,500.97	10%	32,900.35	299,600.62
Office Equipment (Dev. Fund)	10,481.44		6,485.00	16,966.44	15%	2,058.59	14,907.85
Science Indoor Exhibits (Dev Fund)	-		65,078.00	65,078.00	15%	9,599.10	55,478.90
Computer (Dev Fund)	-		2,100.00	2,100.00	60%	1,260.00	840.00
Sub-total (Development Fund)	10,708,269.12	-	280,255.00	10,988,524.12		505,076.23	10,483,447.89
Furniture (Lab. Fund)	198,017.37			198,017.37	10%	19,801.74	178,215.63
Lab. Equipment (Lab Fund)	610,748.26		-	610,748.26	15%	91,612.23	519,136.03
Sub-total (Laboratory Fund)	808,765.63	-	-	808,765.63		111,413.97	697,351.66
Office Equipment (GOWB)	4.17			4.17	15%	0.63	3.54
Furniture (GOWB)	2,109.68			2,109.68	10%	208.27	1,901.41
Sub-total (DHE, GOWB)	2,113.85	-	-	2,113.85		208.90	1,904.95
Lab. Equipment (JB-Own Gen. Fund)	724,413.35		-	724,413.35	15%	108,662.00	615,751.35
Computer (JB-Own Gen. Fund)	-		15,986.00	15,986.00	60%	9,591.60	6,394.40
Office Equipment (JB Own Gen.Fund)	-		48,763.00	48,763.00	15%	3,657.23	45,105.77
Electrical Equipment (JB Own Gen. Fund)	-		50,754.00	50,754.00	15%	3,806.55	46,947.45
Furniture (JB own Gen Fund)	-		21,000.00	21,000.00	10%	1,050.00	19,950.00
Sub-total (JB-Own Gen. Fund)	724,413.35	-	136,503.00	860,916.35		126,767.38	734,148.97
Lab. Equipment (Capital Fund)	1,306,157.72			1,306,157.72	15%	195,923.66	1,110,234.06
Computer (Capital Fund)	47,425.00			47,425.00	60%	28,455.00	18,970.00
Sub-total (Capital Fund)	1,353,582.72	-	-	1,353,582.72		224,378.66	1,129,204.06
Furniture & Fittings (Spl. Reserve Fund)	31,725.46	595.09		31,130.37			31,130.37
Computer (Spl. Reserve Fund)	15,072.46	10,080.00		4,992.46			4,992.46
Electrical Equipment (Spl. Reserve Fund)	39,088.83	1,484.25		37,604.58			37,604.58
Electrical Fittings (Spl. Reserve Fund)	6,731.10			6,731.10			6,731.10
Office Equipment (Spl. Reserve Fund)	3,400.00			3,400.00			3,400.00
Sub-total (Special Reserve Fund)	96,017.85	12,159.34	-	83,858.51	-	-	83,858.51
Total	13,693,162.52	12,159.34	416,758.00	14,097,761.18		967,845.14	13,129,916.04
Previous Year	12,997,817.52	403,111.00	2,065,891.00	14,660,597.52		967,435.00	13,693,162.52

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA 700107

Schedule-C

INVESTMENTS

PREVIOUS YEAR ₹		CURRENT YEAR ₹	₹
	CURRENT INVESTMENT:		
	FIXED DEPOSITS:		
1,463,469.00	State Bank of India,Kasba		1,967,336.00
	LONG TERM INVESTMENT:		
	FIXED DEPOSITS:		
17,500,000.00	State Bank of India,Kasba	18,500,000.00	
1,100,000.00	State Bank of India,Jeevan Deep Branch	1,100,000.00	
30,000.00	UCO Bank,Brabourne Road Branch	30,000.00	
2,044,000.00	Housing Development Finance Corporation Ltd	2,044,000.00	
800,000.00	State Bank of India(FC),Salt Lake Branch	800,000.00	22,474,000.00
22,937,469.00			24,441,336.00

Schedule-D

CURRENT ASSETS, LOANS AND ADVANCES

PREVIOUS YEAR ₹		CURRENT YEAR ₹	₹
26,258.00	Cash in hand		36,898.00
	Cash at Bank :		
174,741.35	State Bank of India,Kasba (A/c No 10415825348)	219,253.35	
296,920.88	State Bank of India,Kasba (A/c No 10415825360)	125,906.88	
7,823.67	United Bank of India,Bosepukur Rajdanga (PF) (A/c No 5657)	7,910.67	
158,565.96	State Bank of India,Kasba (A/c No 10415825359)	998,474.06	
3,384,012.03	United Bank of India,Bosepukur Rajdanga (A/c No 5486)	581,039.03	
785,599.00	State Bank of India, Kasba Branch (Current Account No. 33224282758)	458,248.00	
107,311.52	State Bank of India,Saltlake (A/c No 10836429242)	170,985.52	
272,074.00	Union Bank of India, Ballygunge Branch (A/c No 301202010009819)	263,396.50	2,825,214.01
	Security Deposits:		
13,000.00	For Telephone	13,000.00	
12,810.10	For Electricity	13,578.10	26,578.10
	Loans & Advances:		
1,600.00	For Advance against Salary	1,500.00	
-	For Advance against Tour/Program (Staff)	7,295.00	
1,696.95	For Office Expenses	1,688.95	
4,800.00	To Others	-	10,483.95
	Receivables (Grants):		
42,420.00	From Deptt of Higher Education, Govt of West Bengal	1,849,215.00	
500,000.00	From Council of Scientific & Industrial Research, Govt. of India	-	1,849,215.00
	Receivables (Others):		
512.00	From Veekay Tourist Home, B'lore	-	
27,359.00	From TDS Refundable	43,679.00	43,679.00
5,817,504.46			4,792,068.06

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA 700107

Schedule-E

CURRENT LIABILITIES AND PROVISION

PREVIOUS YEAR ₹		CURRENT YEAR ₹
	Liabilities for :	
1,517,271.00	Scholarship	1,697,271.00
318,196.50	Book Grant	298,962.50
12,907.00	Project Presentation Award	7,475.00
400.00	Talent Search Test (GOWB)	-
16,854.00	Audit Fee	17,100.00
25,090.00	Best School Award	15,000.00
14,385.00	TDS (Staff)	-
43,231.00	TDS (Others)	19,035.00
4,394.00	TDS (W. C. Tax)	26,956.00
2,330.00	Profession Tax	2,060.00
13,311.00	Security Deposit by Electrical Contractor	-
4,198.00	Security Agency	14,850.00
32,590.00	Remuneration Payable to Project Staff	23,200.00
-	Security Deposit by Civil Contractor	74,801.00
-	Tep Expenses	33,149.00
13,791.00	DST (SEATS) Expenses	258,800.00
67,742.00	Development Fund Expenses	9,900.00
-	Repair & Maintenance (General)	109,333.00
-	Contingency	26,250.00
-	Printing & Stationery	1,732.00
-	Postage	918.00
-	WBDS Programme Expenses	6,704.00
19,493.00	City Conveyance	25,684.00
-	Repair & Maintenance (Building)	254,833.00
-	Lab Equipment (Lab. Fund)	48,825.00
368,879.00	ICGM Expenses	-
36,441.00	DST (GOI) Expenses	-
55,809.00	DST (SERB) Expenses	50,000.00
714,450.00	Refundable to DST(SEATS), Govt. of India	310,849.00
	Provision for:	
2,909,878.02	Leave Salary	-
6,191,640.52	Total	3,333,687.50

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA 700107

Schedule-F

ESTABLISHMENT

PREVIOUS YEAR ₹		CURRENT YEAR ₹
5,522,745.00	Salary & Allowances	5,360,993.00
	Provision for Retirement Benefit:	
349,312.00	Leave Salary	-
5,872,057.00		5,360,993.00

Schedule - G

OFFICE EXPENSES

PREVIOUS YEAR ₹		CURRENT YEAR ₹
43,072.00	Postage,Telegram & Telephone	86,713.00
11,030.00	Audit Fee	11,276.00
159,350.00	Contingency	128,115.00
126,670.00	Electricity	143,880.00
46,769.00	Printing & Stationery	45,766.00
210,328.00	City Conveyance	233,651.00
15,200.00	Property Tax	15,200.00
260.00	Repairs and Maintenance(Computer & other equipments)	29,503.00
33,032.00	Repairs and Maintenance(General)	271,204.00
55,582.00	Repairs and Maintenance(Building)	863,766.00
13,800.00	Legal Fees	19,500.00
-	Security Expenses	186,167.00
-	Cleaning Expenses	49,478.00
232.15	Depreciation	208.90
715,325.15		2,084,427.90

Schedule- H

EXPENSES UNDER SCHOLARS' RESERVE FUND

PREVIOUS YEAR ₹		CURRENT YEAR ₹
1,054,000.00	Scholarship	1,022,000.00
92,000.00	Book Grant	93,000.00
6,000.00	Science Project Presentation Award	6,000.00
27,838.00	Workshop on Science & Scientist	36,817.00
1,179,838.00		1,157,817.00

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA 700107

Schedule- I

EXPENSES UNDER DEVELOPMENT FUND

PREVIOUS YEAR ₹		CURRENT YEAR ₹
125,392.00	Repair & Maintenance	124,973.00
-	Library Development Expenses	16,560.00
2,247.00	Audit Fees	-
44,303.00	Receivable written off	-
-	Advance to others written off	2,000.00
-	Misc. Expnses	151.00
522,388.00	Depreciation	505,076.23
694,330.00		648,760.23

Schedule- J

EXPENSES UNDER LABORATORY FUND

PREVIOUS YEAR ₹		CURRENT YEAR ₹
11,973.00	Laboratory Fund Expenses	23,969.00
13,500.00	Security Expenses	-
127,069.92	Depreciation	111,413.97
152,542.92		135,382.97

Schedule- K

EXPENSES UNDER JBNSTS-OWN GENERATION FUND

PREVIOUS YEAR ₹		CURRENT YEAR ₹
190,000.00	Honorarium to Hony. Director	283,548.00
25,400.00	Remuneration to Staff	-
18,991.00	Receivable Written Off	-
127,837.65	Depreciation	126,767.38
362,228.65		410,315.38

Schedule- L

EXPENSES UNDER STAFF WELFARE & MEDICAL FUND

PREVIOUS YEAR ₹		CURRENT YEAR ₹
20,000.00	Staff Medical Expenses	5,430.00

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA 700107

Schedule- M

EXPENSES UNDER ICGM & RESEARCH ACTIVITY

	Expenses for Conference:	
1,220,355.00	Air fare	-
8,125.00	Computer Peripherals	-
1,849,490.00	Food & Accommodation	-
24,566.00	Gifts	-
444,174.00	Honorarium	65,838.00
20,927.00	Manpower	-
97,267.00	Postage & Telephone	-
77,001.00	Printing & Stationery	-
674,160.00	Professional fees	26,654.00
635,085.00	Publicity	-
189,087.00	Rental Charges (IIC Venue)	-
5,000.00	Auditor's Fee	-
28,090.00	Website Charges	-
20,478.00	Books & Journals	-
134,260.00	Contingency	2,093.00
301,654.00	City Conveyance	997.00
5,729,719.00	Sub-total	95,582.00
	Expenses for Research Activity:	
-	Furniture	3,250.00
-	Laboratory & Electrical Equipment	266,847.00
-	Books & Journals	4,266.00
-	Travel & Conveyance	87,153.00
-	Workshop & Seminar	249,371.00
-	Contingency	3,847.00
25,855.00	Remuneration	79,000.00
-	Postage	5,935.00
25,855.00	Sub-total	699,669.00
	Expenses for Research Activity (Nuremberg):	
-	Meeting Expenses	1,362.00
-	Honorarium	2,000.00
-	Printing & Stationery	37,668.00
-	Postage	400.00
-	Sub-total	41,430.00
5,755,574.00	Total	836,681.00

JAGADIS BOSE NATIONAL SCIENCE TALENT SEARCH
1300,RAJDANGA MAIN ROAD,KASBA,KOLKATA 700107

Schedule- N

PROGRAMME EXPENSES

**I. Expenses funded by Deptt of Higher Education,
Govt. of West Bengal**

PREVIOUS YEAR ₹		CURRENT YEAR ₹
432,704.00	Talent Search Test	516,029.00
1,702.00	Awareness Program	27,438.00
5,000.00	Best School Award	5,000.00
7,621.00	Books & Journals	16,798.00
98,567.00	Annual Award Ceremony	48,976.00
545,594.00	Sub Total	614,241.00
	II. Expenses funded by Deptt of Higher Education, Govt. of West Bengal (WBDS)	
<u>13,976.00</u>	Science Workshop	<u>741,761.00</u>
	III. Expenses under Govt. of West Bengal (DST-WAST)	
<u>274,264.00</u>	Teacher Training Program	<u>—</u>
	IV. Expenses under Govt. of India (DST)	
<u>249,260.00</u>	Science Workshop for Contact Program	<u>3,631.00</u>
	V. Expenses under Govt. of India (DST-SEATS)	
<u>3,424,167.00</u>	Science Camp (INSPIRE)	<u>3,153,601.00</u>
	VI. Expenses funded by CSIR, Govt. of India	
<u>370,006.00</u>	Talent Enrichment Programme	<u>55,954.00</u>
	VII. Expenses funded by ONGC	
<u>128,943.00</u>	Science Orientation Workshop	<u>—</u>
	VIII. Expenses under Govt. of India (DST-SERB)	
<u>270,413.50</u>	Research Activities	<u>243,241.00</u>
5,276,623.50	Grand Total	4,812,429.00

NOTES ON ACCOUNTS

1. Significant Accounting Policies:

i) Basis of Accounting:

The financial statements are prepared under historical cost convention, in accordance with applicable accounting standards in India and on accrual basis.

ii) Fixed Assets and Depreciation :

Fixed Assets are stated at written down value. Depreciation is calculated and provided in the accounts on the basis of written down value of the Fixed Assets at the rates specified under the Income Tax Act, 1961. However Assets under Special Reserve Fund are stated at their cost less depreciation upto the date of considering the same as assets of the institute. No depreciation is charged on assets received under programme or other old and used assets taken into account under Special Reserve Fund.

iii) Investments:

Current Investments are stated at lower of cost and Fair value. Long-term investments are stated at costs and inclusive of accrued interest wherever applicable.

iv) Grants-in-aid:

Grants-in-aid are recognized in accounts as and when sanctioned for the same is received.

v) Retirement Benefit:

No provisions for gratuity and pension are made in the accounts as the same are paid to the eligible retiring employees directly by the Government of West Bengal. Till the financial year 2013-14, provision for terminal leave encashment salary payable to the eligible staff members was made against the maintenance grant. As the Department of Higher Education, Govt. of West Bengal is not making the amount available in advance and leave encashment expense is allowable under Income Tax Act, 1961 on actual payment basis, hence creating a provision and acknowledging it as a liability of the society becomes redundant. Further, the liability already provided for and existing as on 01.04.2014 of Rs. 29,09,878/- is not required as the same shall be available to the society by Department of Higher Education, Government of West Bengal in the form of maintenance Grant (Salary) as and when need arises.

2. Since there is no specific investment against any fund, interest on Investments and interest on Savings Accounts have been allocated proportionately to different funds except the Special Reserve Fund, Capital Fund and ICGM Fund not having any interest earning investment under these funds. Interest of Rs. 1,08,000/- and Rs.313/- being specific earnings of Scholars Reserve fund and Retirement Benefit Fund respectively have been directly allocated to the these funds. Interest amounting to Rs.79,482/- on investments and savings account out of Foreign Contribution being specific earnings of Scholars' Reserve Fund and Development Fund the same has been apportioned to these funds.



3. Fixed Assets namely Sound System for auditorium, PH Meter, Incubator Shaker , Furniture etc amounting to Rs.2,70,097/- have been purchased out of fund received under ICGM fund. Cost of the said fixed assets has been charged off to Programme expenses account. Although these expenses for fixed assets are Capital Nature, these have been treated as Revenue expenditure because these fixed assets have been purchased for carrying out the programmes for which funds are received from the above funding authorities.
4. Liabilities shown in Schedule "E" include Rs. 20,03,708/- as dues for Scholarship, Book grant, Best School Award and Project Presentation Award which includes Scholarship, Award etc. for this year and several earlier years.
5. Previous year's figures have been regrouped and rearranged wherever necessary.

On behalf of the Governing Body

Sd/-

Prof. (Dr.) Maitree Bhattacharyya

Director

Place: Kolkata

Date: 04.08.2015



Developing human resource for the future of the nation



Issued by
Director
Jagadis Bose National Science Talent Search
1300, Rajdanga Main Road, Kasba, Kolkata 700 107
Phone : (033) 2442 8267 / 8269 / 8270 / 2441 7542
E-mail : jbnsts@vsnl.com
Website : www.jbnsts.org