

DST-INSPIRE INTERNSHIP SCIENCE CAMP - 2014



Department of Science & Technology
Govt. of India

In association with



Jagadis Bose National Science Talent Search
Govt. of West Bengal

40th Science Camp Entitled:

“বিজ্ঞানের অভিজ্ঞতা”

January 7 - 11, 2014

At JB Centre of Excellence for Student – Scientists



Jagadis Bose National Science Talent Search,

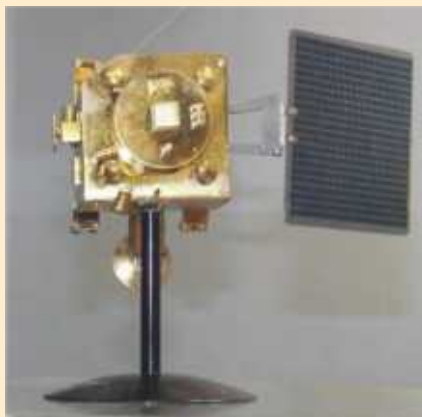
1300, Rajdanga Main Road, Kasba, Kolkata – 700 107

Phone : 2441 7542, 2442 8270 Fax : (033) 2442 8267

E-mail: jbnsts@vsnl.com; Website : <http://www.jbnsts.org>

About JBNSTS

Jagadis Bose National Science Talent Search (JBNSTS), Kolkata was conceptualized in 1958 by visionaries such as Dr. B C Roy, Sir J J Ghandy and others to commemorate the Birth Centenary Celebration of India's first modern scientist, Acharya J C Bose. The program was inaugurated by Pandit Jawaharlal Nehru. JBNSTS is an autonomous institute promoted by the Department of Higher Education, Government of West Bengal. It is administered by a Governing Body with representatives from the State Government, academia and industry. Since 1961, JBNSTS is awarding the prestigious Jagadis Bose Scholarships to selected group of undergraduate students of science, engineering and medicine.



In the last five decades, JBNSTS has grown to become a premiere institute of non-formal science education in the eastern and northeastern States of India with the objective towards pursuit of excellence through motivation, identification and nurture of young talented science students. It helps students to realize the importance of excellence in the scientific world and try to cultivate this in their own lives as students of science. JBNSTS also encourages students towards the learning of basic sciences and inculcates scientific spirit in the minds of young high school and undergraduate students. Focus has been given on unconventional and dynamic methods of non-formal accelerated learning through “out-of-class” activities, which have led to the recognition of intellectually sensitive and inquisitive minds. Since 2004, JBNSTS has launched an innovative middle school science Teachers Training Program which has brought into its ambit motivated teachers from the districts of West Bengal. JBNSTS has developed science kits and

distributed to the teachers for demonstrating scientific principles to the middle school students in the classroom. The financial support for most of the activities of JBNSTS is provided by the Department of Higher Education & Department of Science & Technology, Government of West Bengal. In addition, Council of Scientific & Industrial Research (CSIR), Department of Science & Technology (DST), Government of India & Industries also collaborates with JBNSTS activities.

About DST-INSPIRE Program



Innovation in Science Pursuit for Inspired Research (INSPIRE) is one of the innovative programs developed by the Department of Science & Technology for attraction of talent to Science. The basic objective of INSPIRE is to attract talent to the study of science at an early age and thus build the required critical human resource pool for strengthening and expanding the Science & Technology system and Research & Development base. It is a program with a long term foresight. A striking feature of the program is that it does not believe in conducting competitive exams for identification of talent at any level. It believes in and relies on the efficacy of the existing educational structure for identification of talent.

INSPIRE Program has 3 schemes:

I. Scheme for Early Attraction of Talent for Science: It aims to attract talented youth to study science by providing INSPIRE award of Rs.5,000/- to one million young learners in the age group 10-15 years for a duration of five years and arrange summer and winter camps for youth in various locations for top 1% in Class X board examinations with global leaders in science to experience the joy of innovations on an annual basis through INSPIRE internship.

➤ INSPIREAWARD

In order to seed and experience the joy of innovation, every year two lakh school children in the age-group of 10 to 15 years i.e., 6th to 10th standards are being identified for the INSPIRE Award. Each INSPIRE Award envisions an investment of Rs.5,000/- per child. The scheme plans to reach at least two students per secondary school during the next five years.

➤ INSPIRE INTERNSHIP

Motivating talented youth to take-up research as a personal undertaking by rubbing shoulders with global icons of science including Nobel Prize Winners, is the objective of INSPIRE Internship. This component of the program aims at working as a life-long catalyzing experience for the 11th graders in science stream.

II. Scholarship for Higher Education: Scholarship for Higher Education (SHE) aims at attracting talented youth into undertaking higher education in science intensive programs, by providing scholarships and mentoring through summer attachment to performing researchers. The scheme offers 10,000 scholarships every year @ Rs 0.80 lakh per year to talented youth in the age group 17-22 years, for undertaking Bachelor and Masters level education in Natural and Basic Sciences. However, the 18 Science subject such as (1) Physics, (2) Chemistry, (3) Mathematics, (4) Biology, (5) Statistics, (6) Geology, (7) Astrophysics, (8) Astronomy, (9) Electronics, (10) Botany, (11) Zoology, (12) Bio-chemistry, (13) Anthropology, (14) Microbiology, (15) Geophysics, (16) Geochemistry, (17) Atmospheric Sciences and (18) Oceanic Sciences, either as major/honors or their combination in BSc/Integrated MSc/Integrated MS course will be under the scope of INSPIRE Scholarship. The main feature of the scheme is mentorship support being planned for every scholar through INSPIRE scholarship.

This scheme offers 10,000 scholarships every year @ Rs.80,000/- each for undertaking Bachelor and Masters level education in the Natural & Basic sciences, possessing any of the following criteria:

- Students who happen to be among the top 1% in 12th standard at their respective Board Examinations and are pursuing courses in Natural and Basic sciences at the B.Sc. or Integrated M.Sc. levels. Courses are not included other than Natural and Basic sciences in the current scheme in view of the focus on research in Basic sciences.
- Students who have secured in the Joint Entrance Examination of JEE-Advance top 10,000 ranks, JEE-Main (top 10,000 ranks) plus those clearing NEET (top 10,000 ranks), and who also opt to study Natural and Basic sciences in any academic institute or university leading to graduate and post-graduate degree, would be eligible for scholarship.
- Students admitted to Indian Institute of Science Education and Research (IISER), National Institute of Science Education and Research (NISER), Department of Atomic Energy Centre for Basic Sciences (DAE-CBS) at the University of Mumbai or happen to be Kishore Vaigyanik Protsahan Yojana (KVPY), National Talent Search Examination (NTSE), Jagadis Bose National Science Talent Search (JBNSTS) scholars and Science Olympiad Medalists, opting to undertake courses in the Natural & Basic sciences leading to B.Sc. and M.Sc. degrees are eligible for “SHE” scholarship.

III. Assured Opportunity for Research Careers: Assured Opportunity for Research Careers (AORC) aims at attracting, attaching, retaining and nourishing talented young scientific Human Resource to strengthened the R&D foundation and base by offering doctoral INSPIRE Fellowship in the age group 22-27 years, in both Basic and Applied sciences (including engineering and medicine). It also aims at assuring opportunities for post-doctoral researchers through a scheme (similar to the New Blood program of the Royal Society of UK) through contractual and tenure track positions for five years in both Basic and Applied sciences areas through an INSPIRE Faculty Scheme.

➤ INSPIRE FELLOWSHIP

INSPIRE fellowship aims at enhancing research fellowships for doctoral studies and opening up partnerships with private sector for topping the Government’s efforts in nurturing talents for scientific research. This scheme is applicable to Basic and Applied sciences as well as Medicine, Agriculture etc. with provision of multiple entries. The fellowship will be offered to (1) University 1st Ranker in a particular subject at PG level examination in Basic and Applied Science courses as well as (2) INSPIRE scholar, who have secured aggregate marks of 65 % or above at the 2 year MSc or 5 year Integrated MSc/MS.

➤ INSPIRE FACULTY SCHEME

INSPIRE Faculty Scheme opens up an ‘Assured Opportunity for Research Career (AORC)’ for young researchers in the age group of 27-32 years. It is expected to augment high quality scientific manpower in scientific and educational institutions. It provides attractive opportunities to young achievers for developing independent scientific profiles and intends helping them emerge as S&T leaders in the long term. The Scheme offers contractual research positions. It provides career opportunities, but it is not a guarantee for tenure positions after 5 years.

Organizing Committee

Academic Committee:

Prof. (Dr.) Papiya Nandy, Hony. Director, JBNSTS

Dr. Paromita Roy, Dy. Director, JBNSTS

Dr. Abhijit Kar, Scientific Officer, JBNSTS

Dr. Smarajit Manna, Student Advisor, JBNSTS

Camp Coordinators:

Shri Joydip Das, Asst. Director (Admin), JBNSTS

Ms. Sucharita Kundu

Mentors

Prof. Abhijit Chakrabarti

Vice Chancellor

Jadavpur University, Kolkata

Prof. Milan K. Sanyal

Director

Saha Institute of Nuclear Physics, Kolkata

Dr. Anjan Ghosh

Vice President

Total Quality Management

Exide Industries Ltd, Kolkata

Dr. D. P. Duari

Director, Research & Academics

M.P.Birla Institute of Fundamental Research

M.P Birla Planetarium, Kolkata

Dr. Subhrangsu Aditya

School of Bio Science & Engineering &

School of Cognitive Science

Jadavpur University, Kolkata

Shri Samar Bagchi

President

Kishore Bharati Development Society, Kolkata

Ms Anuradha Mitra, IDAS

Joint Secretary and Financial Adviser (JS&FA)

Dept. of Sc. & Technology (DST) and Dept. of Bio-

Technology (DBT)

Government of India



Prof. Soumen Basak

Professor

Chemical Science Division

Saha Institute of Nuclear Physics, Kolkata

Prof. Partha Deb Ghosh

Senior Professor

Department of Botany, Kalyani University, Nadia

Dr. Gopal Chakrabarti

Associate Professor, WBES

Jt. DPI (S&S), Education Directorate,

Govt. of West Bengal

Prof Amitava Gupta

Professor, Department of Power Engineering &

Director, School of Nuclear Studies & Application

Jadavpur University, Kolkata

Dr. Arindam Rana

Associate Professor

Dept. of Chemistry, City College, Kolkata

Prof. Kalyan Kumar Mukherjee

Former Professor

Dept. of Botany, Bose Institute, Kolkata

Dr. Kallol Paul

Associate Professor

Dept. of Mathematics, Jadavpur University

Kolkata

Dr. Paromita Roy

Deputy Director

JBNSTS, Kolkata

CAMP RULES

Welcome to the Science Camp “বিজ্ঞানের অভিজ্ঞতা”

Here you will have a unique experience of learning science through active interaction with esteemed scientists and be encouraged to share your ideas with others. No test/grade – only learning science in a different way.

Please note the following points carefully:

1. The camp hours are from **09:00 a.m. to 6:00 p.m.** In order to get Participation Certificate, you are required to attend all the sessions. You are to come in your school uniform.
2. You are required to submit an attested copy of your X- Standard Board Examination Mark Sheet, held in 2013 during the morning registration on **8th January, 2014** at registration desk.
You are required to fill up the STUDENT'S INFORMATION SHEET & submit it with one Passport Size Photograph on **8th January, 2014** during morning registration at registration desk. You are also required to fill up the FEED BACK SHEET & submit it on **11th January, 2014 between 01.00 p.m. to 02.00 p.m.**
3. **TRAVEL BILL :**
 - Residential Students & Accompanying Teachers: Travel bills (bus, auto and / or train fare only) are to be submitted along with relevant documents (tickets) on **6th / 7th January, 2014** as the case may be by the escorting teachers. Your reimbursement will be made on **11th January, 2014**. In case, any assistance / clarification are needed, you may contact our accounts section.
 - Non-residential Students: Travel bills (bus, auto and / or train fare only) are to be submitted on **10th January, 2014** during morning registration at registration desk. Your reimbursement will be made on **11th January, 2014 between 01.00 p.m. to 02.00 p.m.**
4. **BOOKGRANT :** You will get a book grant of Rs. 1,500/-. For that you have to purchase books and submit the original bills at JBNSTS office.
 - Residential Students: Book bill(s), authorized by respective Headmaster/ Headmistress, are to be submitted on **9th January, 2014**. Your reimbursement will be made on **10th January, 2014 between 01.00 p.m. to 02.00 p.m.**
 - Non-residential Students: Book bill(s), authorized by respective Headmaster/ Headmistress, are to be submitted on **9th January, 2014** during morning registration at registration desk. Your reimbursement will be made on **11th January, 2014 between 01.00 p.m. to 02.00 p.m.**
5. All the participants will be divided into teams. There will be a team leader for each team *selected by team members of each team*.
6. You will not be given any home work, but you are expected to interact freely with the experts, your team members and other teams. On the last day i.e. **11th January, 2014** you will receive the Participation Certificate.

Name of the participating schools:

- Sarisha Ramkrishna Mission Siksha Mandir, South 24 Parganas
- Kakdwip Birendra Vidyaniketan, South 24 Parganas
- Debnagar Mokshada Dinda Higher Secondary School, South 24 Parganas
- Barasat M G M High School, North 24 Parganas
- Ballygunge Government High School (Boys'), Kolkata
- Taki House Govt. Spons. Multipurpose Boys' School, Kolkata
- Barisha High School, Kolkata
- Dum Dum Kishor Bharati, Kolkata
- Naktala High School, Kolkata
- Kamala Girls' High School, Kolkata
- Lake School For Girls, Kolkata
- Beltala Girls' High School, Kolkata



BRIEF INTRODUCTION TO THE EXPERTS

DR. PAPIYA NANDY

Prof. Papiya Nandy received her Masters degrees in Physics from University of Calcutta and University of California at Santa Barbara and Ph.D. on Liquid Crystals from Kent State University, USA. Her post-doctoral work was in Experimental Biophysics from Max Planck Institute, Gottingen, Germany. Later she was Associate Professor of Physics in University of Ulm, Germany. After coming back to India, she joined Physics department in Jadavpur University. Her field of research encompasses membrane biophysics. She is currently the Hony. Director of JBNSTS, of which she is a scholar from the first batch in 1960. Here her objective is to make JBNSTS a vibrant and dynamic institute and to motivate, identify and nurture young talented science students and establish the base of Scientific enquiry and culture of tomorrow.

DR. ABHIJIT CHAKRABARTI

Prof. Chakrabarti presently is the Vice Chancellor of Jadavpur University, Kolkata. He was the Senior Professor and HOD of Dept. of Electrical Engineering at Bengal Engineering and Science University, Shibpur, Howrah. He has received various prestigious awards and has more than hundred research publications in national and international journals.

DR. MILAN K. SANYAL

Prof. Milan K. Sanyal is a physicist, active in the fields of surface physics, nanoscience and nanotechnology. Prof. Sanyal is the director of the Saha Institute of Nuclear Physics. He received his Ph.D from Bhabha Atomic Research Centre, Bombay. During his professional career, Prof. Sanyal was associated with Bhabha Atomic Research Centre, Brookhaven National Laboratory, Indian National Science Academy, Indian Academy of Science, National Academy of Science and Saha Institute of Nuclear Physics. His field of research encompasses structure-property correlation in low-dimensional systems, scattering study of structural/magnetic correlations, structure and morphology of solid and liquid interfaces, charge ordering and electronic transport in nano-structured materials, synchrotron x-ray scattering techniques, growth mechanism of multilayer structures. He has received various prestigious awards and has more than hundred research publications in peer reviewed journals.

DR. ANJAN GHOSH

Dr. Anjan Ghosh, a JBNSTS Scholar of 1970, got the Senior Cambridge degree from Calcutta Boys' School in 1969. He did his B.Sc. with Physics honors and B.Tech. in Instrumentation and Electronics Engineering from Jadavpur University and M.B.A. from Indian Institute of Social Welfare and Business Management. Then he turned into science journalism. He was the author of the science column of the Sunday Miscellany supplement of The Statesman. He is presently the Vice President, Total Quality Management, Exide Industries Limited, Kolkata.

DR. DEBIPRASAD DUARI

Dr. D P Duari is presently the Director, Research & Academic of M. P. Birla Institute of Fundamental Research, M. P. Birla Planetarium, Kolkata and Honorary Faculty, Physics Department, Presidency University. He did his B.Sc. & M.Sc. in Physics from Jadavpur University and Ph.D. from Inter University Centre for Astronomy & Astrophysics, Pune. He was a Post Doctoral Fellow of Tata Institute of Fundamental Research. He was associated with a number of distinguished academic institutions including Institute for Advanced Studies, Iran, University of Cambridge, U. K., and Manchester Institute of Science & Technology, U. K. He is a fellow of Royal Astronomical Society and a member of International Astronomical Union.

DR. SUBHRANGSU ADITYA

Subhrangsu Aditya, M.B.B.S. from NRS Medical College (2000), senior JBNSTS scholar (1995) is currently pursuing his research at School of Bio Science & Engineering, Jadavpur University and he is a guest faculty for the M. Phil. Course in Cognitive Science in the School of Cognitive Science, Jadavpur University. He is also a guest faculty for the Advanced Diploma Course in Stress Management in the Center for Counseling Services and Studies in Self-Development, Jadavpur University (CCSSS-JU). He is an associate member of SAMIKSHANI Centre for Psychoanalytical Studies and Mental Therapy. He has publications in various international journals, conference proceedings and book chapters. His current areas of interest are Cognitive Neuroscience, Biosignal Processing, Artificial Intelligence, Psychological Counselling, Stress Management, Cyber-relationship etc.

SHRI SAMAR BAGCHI

Shri Bagchi is presently the President of Kishore Bharati Development Society. He is the former Director of Birla Industrial & Technological Museum and at that time another 5 science museums in eastern India were under his jurisdiction. He is connected with science popularization and is a board member of several educational institutions. Shri Bagchi has organized the popular science quiz program “Quest” in Doordarshan from 1983 – 88. In 1992, he has got National Award for his contribution in Science Popularization through Mass Medium. He is a member of the Advisory Committee in NCERT and Council of Science & Technology, Govt. of W. Bengal. He is also an environmental & social activist.

MS. ANURADHA MITRA

Ms. Anuradha Mitra did her graduation in Humanities from Presidency College, Kolkata, Masters from Delhi University and MBA from All India Management Association, Delhi. Ms. Mitra joined the Indian Defense Accounts Services in 1984 and worked in different capacities in the Ministry of Defence, notably as Deputy Financial Adviser (Navy), Director in the Ministry of Finance and in the last assignment as Controller of Defense Accounts in Chennai. Ms. Anuradha Mitra has attended the Advanced Professional Program in Public Administration from IIPA, Delhi in 2006-07 and obtained Masters in Public Policy from Punjab University. She has attended several other training programs such as ‘Governance, Democratization and Public Policy’ in Institute of Social Studies, Hague; ‘Government Integrity’ in International Law Institute, Washington and ‘Local Government’ under Commonwealth Program in University of Birmingham. Presently Ms. Mitra is the Joint Secretary and Financial Adviser (JS&FA) in DST/DBT with additional charge of CSIR/DSIR.

DR. SOUMEN BASAK

Prof. Soumen Basak is the Senior Professor at Chemical Science Division, Saha Institute of Nuclear Physics, Kolkata. He received his Ph.D on Experimental Condensed Matter Physics from University of Chicago. His field of research encompasses spectroscopic studies of protein folding and aggregation, use of FCS and single-molecule methods in the study of structural dynamics of proteins, emergence of chirality in nanosystems synthesized on biomolecular scaffolds, development of chemo sensors for metal detection and imaging in live cell environment. He has received various prestigious awards and has more than fifty research publications in peer reviewed journals. Prof. Basak is one of the founder mentors of “Shodh Ganga”, a repository of Indian Research Theses and “IndCat”, online library catalogues of books, theses, journals available in major university libraries in India.

DR. PARTHA DEB GHOSH

Prof. Partha Deb Ghosh is the Senior Professor of Botany at the Department of Botany, University of Kalyani, West Bengal and worked in the field of plant genetics and Biotechnology. He has done extensive work on in vitro culture, genetic transformation of plants, molecular markers and supervised research of Masters and Doctoral students. He has published 3 books/ manuals on plant genetics and biotechnological aspects and published more than 270 research papers in different national and international journals. Prof. Ghosh has availed fellowship offered by UGC Indo-Uk exchange programme (1977-78), DST young scientist awards(1984), DBT training programme. He is fellow of Linnean Society (London), Association of Plant Tissue Culture and Biotechnology (India). Prof. Ghosh has been awarded the INSA gold medal for outstanding contribution of plant tissue culture and mutation research, life time achievement Award by DST and honoured by different universities.

DR. GOPAL CHAKRABARTI

Dr. Gopal Chakrabarti is the Associate Professor in Geology, officiating as Joint DPI (Scholarship & Stipend) under Education Directorate, Government of West Bengal. Dr. Chakrabarti received his Ph.D from Jadavpur University. During his professional career, Dr. Chakrabarti was associated with University of Calcutta, J. K. College, Purulia, Durgapur Govt. College etc. His field of research encompasses different areas of Sedimentology. Dr. Chakrabarti has received National Scholarship and many other awards during his academic career. He has lots of research publications in different national and international journals. Dr. Chakrabarti has been invited as the committee member of different International Geological Organizations.

DR. AMITAVA GUPTA

Prof. Amitava Gupta is presently the Professor, Dept. of Power Engineering and Director, School of Nuclear Studies & Applications, Jadavpur University. After completed his graduation in Electrical Engineering from Jadavpur University, he did his Master of Technology from IIT Kanpur and received his Ph.D. from Dept. of Computer Sc. & Engg., Jadavpur University. During his professional career, he was also associated with Centre for Development of Advanced Computing and Nuclear Power Corporation of India. Prof. Gupta has received various awards & honors. Prof Gupta is the reviewer of several international journals and was nominated as course expert for CSE and IT. He has more than 40 research publications in peer reviewed journals. He has guided 8 Ph.D. Thesis and 20 Masters Thesis. He is the founder of Microprocessors & Digital Systems Laboratory and Simulator Laboratory of Jadavpur University.

DR. ARINDAM RANA

Dr. Arindam Rana is presently Associate Professor of Chemistry at City College, Kolkata. He did his M.Sc from Calcutta University, Ph.D. research at IACS, Kolkata and received Ph. D degree from Jadavpur University. He went to Univ. of Notre Dame, Indiana, USA for post doctoral research. He has 6 papers in International journals. In his academic career he occupied several positions such as honorary guest faculty in chemistry at the HS section of St. Lawrence High School & Mahadevi Birla Sisu Vihar. Dr. Rana is actively engaged in science Outreach programmes of Ratnasagar Pvt. Ltd. and recognized by TIFR as one of the most inspiring teachers on the occasion of the birth centenary of Homi J. Bhabha in 2009.

DR. KALYAN KUMAR MUKHERJEE

Prof. Kalyan K. Mukherjee was the Senior Professor at Department of Botany, Bose Institute, Kolkata. He received his Ph.D from University of Calcutta. His field of research encompasses resource survey analysis of wild gene pool for isolation and characterization of novel chemical compounds and / or useful traits for subsequent introgression into the existing cultigen either through conventional breeding or biotechnological approach. Understanding species relationship & the mode of speciation and evolution of chenopodiaceous plants was his another field of research. He has received various prestigious awards and has more than fifty research publications in peer reviewed journals.

DR. KALLOL PAUL

Dr. Paul, a renowned mathematician, is now attached with Department of Mathematics, Jadavpur University as the Associate Professor. His principle research interests are Real Analysis, Functional Analysis, Linear Algebra, Operator Theory and Operator Inequalities. During his academic career he has been awarded by different prestigious awards. He has organized and participated in various national and international seminars and workshops. He has numbers of publications in different reputed science daily and journals.

DR. PAROMITA ROY

Dr. Paromita Roy did her Bachelors in Psychology (with special paper in family counseling), as well as in Masters in Industrial Psychology and Organizational Behavior from Delhi University. She received her PhD from Delhi University in Clinical Psychology and worked in the field of cognitive deficits in schizophrenia from Delhi University. Dr. Roy has extensive field experience in the area of clinical psychology. Her expertise is in educational psychology, soft skill training, human resource development, curriculum planning, strategy development, pedagogy, teacher training and student counseling. She has been with JBNSTS since 1993. Her focus is on educational paradigms with a socio-holistic view. With her long experience with creative science students and teachers, she has been instrumental in designing tailor made science enrichment programs.

Day to Day Program

Day 1: Tuesday, January 7, 2014

- 09:00 a.m. – 10:00 a.m. Registration
10:00 a.m. – 11:00 a.m. **Welcome Address by the Hony. Director, JBNSTS and Orientation**
11:00 a.m. – 11:30 a.m. **Interactive Session**
Prof. Abhijit Chakrabarti, Vice Chancellor, Jadavpur University, Kolkata
11:30 a.m. – 01:00 p.m. **Motivational Lecture**
Prof. Milan K. Sanyal, Director, Saha Institute of Nuclear Physics, Kolkata
01:00 p.m. – 02:00 p.m. Lunch & Interaction
02:00 p.m. – 05:00 p.m. **“Creativity & Innovation – Learning from Nature”**
Dr. Anjan Ghosh, Vice President, Total Quality Management, Exide Industries Ltd, Kolkata
05:00 p.m. – 06:00 p.m. **Summing up Session**

Day 2: Wednesday, January 8, 2014

- 09:00 a.m. – 10:00 a.m. Registration
10:00 a.m. – 11:30 a.m. **“Recent Concepts in Astronomy and Astrophysics”**
Dr. D. P. Duari, Director, Research & Academics, M.P. Birla Planetarium, Kolkata
11:30 a.m. – 01:00 p.m. **“How to choose your career?”**
Dr. Subhrangshu Aditya, School of Bio-sc. & Eng. and School of Cognitive Sc., Jadavpur University
01:00 p.m. – 02:00 p.m. Lunch & Interaction
02:00 p.m. – 05:00 p.m. **“Demonstration of Science Experiments”**
Shri Samar Bagchi, President, Kishore Bharati Development Society, Kolkata
05:00 p.m. – 06:00 p.m. **Summing up Session**

Day 3: Thursday, January 9, 2014

- 09:00 a.m. – 10:00 a.m. Registration
10:00 a.m. – 11:30 a.m. **Interactive Lecture**
Ms Anuradha Mitra, IDAS, Joint Secretary and Financial Adviser, DST, Govt. of India
11:30 a.m. – 01:00 p.m. **“Interdisciplinary Nature of Today’s Science”**
Prof. Soumen Basak, Chemical Science Division, Saha Institute of Nuclear Physics, Kolkata
01:00 p.m. – 02:00 p.m. Lunch & Interaction
02:00 p.m. – 05:00 p.m. **“Importance of Genome Project in Medical Science and Agriculture”**
Prof. Partha Deb Ghosh, Department of Botany, Kalyani University, Nadia
05:00 p.m. – 06:00 p.m. **Summing up Session**

Day 4: Friday, January 10, 2014

- 09:00 a.m. – 10:00 a.m. Registration
10:00 a.m. – 11:30 p.m. **“Earth Science - An Introduction”**
Dr. Gopal Chakrabarti, Jt. DPI (S&S), Education Directorate, Govt. of West Bengal
11:30 a.m. – 01:00 p.m. **“Sensing beyond Senses - The Frontiers of Modern Science”**
Prof. Amitava Gupta, Dept. of Power Engineering, Jadavpur University, Kolkata
01:00 p.m. – 02:00 p.m. Lunch & Interaction
02:00 p.m. – 05:00 p.m. **“An Appreciation of Science Through Activities in Chemistry”**
Dr. Arindam Rana, Dept. of Chemistry, City College, Kolkata
05:00 p.m. – 06:00 p.m. **Summing up Session**

Day 5: Saturday, January 11, 2014

- 09:00 a.m. – 10:00 a.m. Registration
10:00 a.m. – 11:30 a.m. **“Demonstrative Lecture”**
Prof. Kalyan Kumar Mukherjee, Formerly of Dept. of Botany, Bose Institute, Kolkata
11:30 a.m. – 01:00 p.m. **Interactive Lecture**
Dr. Kallol Paul, Dept. of Mathematics, Jadavpur University, Kolkata
01:00 p.m. – 01:30 p.m. Lunch & Interaction
01:30 p.m. – 05:00 p.m. **Project Presentation**
02:00 p.m. – 05:00 p.m. **“Parents’ Counseling”**
Dr. Paromita Roy, Deputy Director, JBNSTS, Kolkata
05:00 p.m. – 06:00 p.m. **Summing up Session**

A DST-JBNSTS Science Camp

40th DST-INSPIRE SCIENCE CAMP

“বিজ্ঞানের অভিজ্ঞতা”

(7th – 11th January, 2014)

JB Centre of Excellence for Student-Scientists,
1300, Rajdanga Main Road, Kasba, Kolkata 700 107

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Photograph
here

STUDENT'S INFORMATION SHEET

Name of the student (in block letters):

Permanent address with contact number and e-mail Id(mandatory):

School's name (in block letters) & Address with pin code & phone no.:

Percentage of marks obtained in the 10th standard Board examination held in 2011:

Percentage of marks obtained in science subjects:

Favorite subject:

Who is your role model in science?

Would you like to pursue a career in science?

What is your expectation from a science camp?

स जीवति मनो यस्य मननेन हि जीवति

Have you heard about JBNSTS before the camp? How?

Signature of Student

A DST-JBNSTS Science Camp

40th DST-INSPIRE SCIENCE CAMP

“বিজ্ঞানের অভিজ্ঞতা”

(7th – 11th January, 2014)

JB Centre of Excellence for Student-Scientists,
1300, Rajdanga Main Road, Kasba, Kolkata 700 107

INSPIRE INTERN'S FEED BACK FORM

1. Name and Address of the Host Institute:
2. Date/Duration of the INSPIRE Internship Camp:
3. Name and Address of the student (With school name, e-mail address & Mob. No.):
4. Comments about the Infrastructural capacity of the organizing Institute:
5. Comments on the boarding and lodging facilities made available:
6. Comments about the Payment of Traveling cost to the participating students:
7. Comments on the interactive talks delivered by the Mentors

A DST-JBNSTS Science Camp

40th DST-INSPIRE SCIENCE CAMP

“বিজ্ঞানের অভিজ্ঞতা”

(7th – 11th January, 2014)

JB Centre of Excellence for Student-Scientists,
1300, Rajdanga Main Road, Kasba, Kolkata 700 107

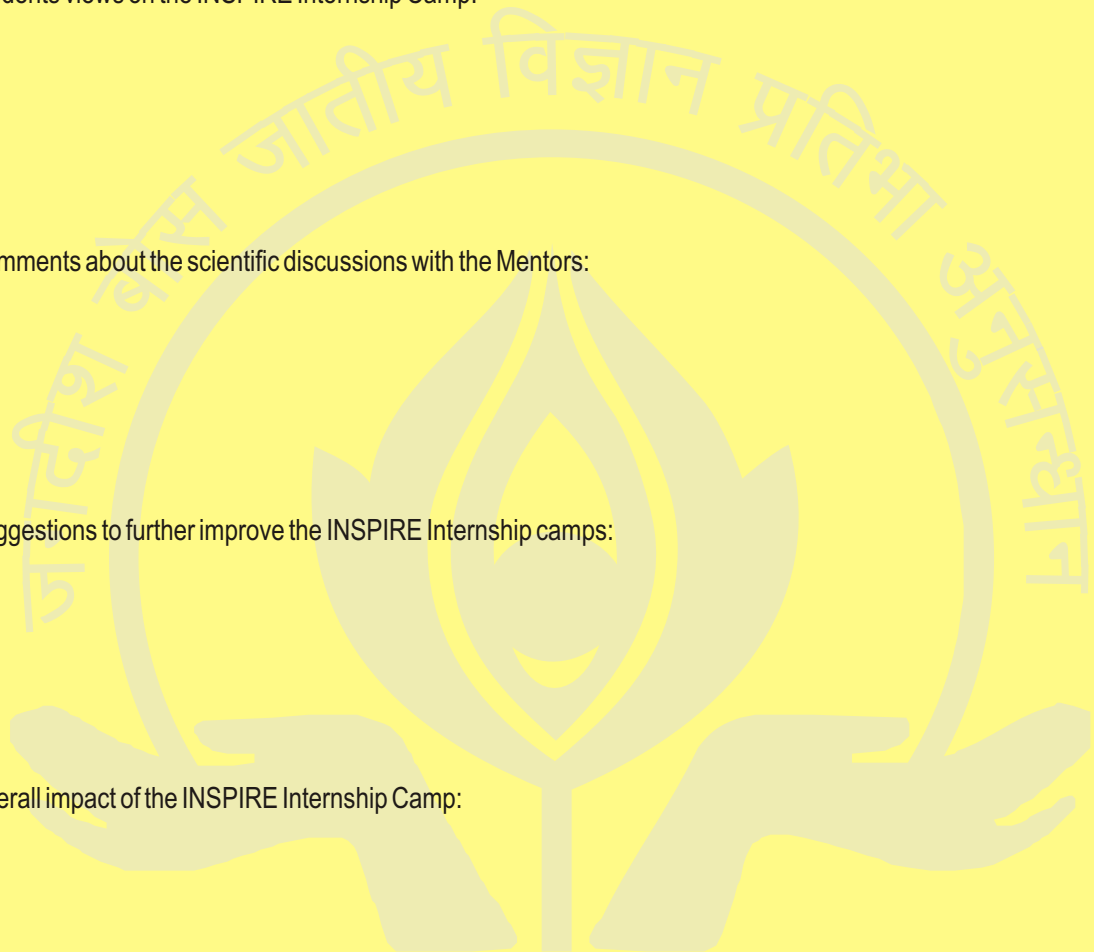
8. Comments on the practical demonstrations/hands on experience:

9. Students views on the INSPIRE Internship Camp:

10. Comments about the scientific discussions with the Mentors:

11. Suggestions to further improve the INSPIRE Internship camps:

12. Overall impact of the INSPIRE Internship Camp:



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(Signature of the Student)