July 16-20, 2018

The five days DST INSPIRE SCIENCE CAMP 2018 (Non-residential) was successfully organized by Shivaji College, University of Delhi from July 16-20, 2018. The purpose of the INSPIRE CAMP was to expose bright and meritorious students to the exciting world of Science & Research and motivate them to pursue science as a future career. It was fully sponsored by the **Department of** Science and Technology (DST), Govt. of India to help the country build the required critical resource pool for strengthening and expanding the Science & Technology.

The camp received an overwhelming response and was attended by over 225 students from 45 Schools from Delhi NCR. The aim was to motivate the talented youth to take-up research as a future career and this was facilitated by interacting with globally renowned Scientists, Shanti Swarup Bhatnagar Awardees and Science Fellows of various academies. The camp provided the students a platform, which will act as a life-long catalysing experience for pursuing Science.

The following eminent mentors were invited as a part of the camp for lecture and interaction with the students to motivate them to pursue research in sciences.



Dr. Mohan D Sharma

Department of Mathematics

Kurukshetra University, India - 136119

ivered talk on "INSPIRING MATHEMATICS"



Prof. B. Jayaram (Department of Chemistry & School of Biological Sciences, IIT Delhi, Coordinator, Supercomputing Facility for Bioinformatics and Computational Biology-SCFBio, IT Delhi)

Delivered talk on "Genomes to Hit MoleculesInSilico - An Update Integrating Chemistrty with Biology & IT: Towards a Disease-Free Planet"



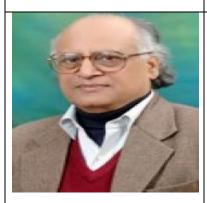
Prof. Annapoorni Subramanian

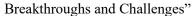
Department of Physics & Astrophysics,

University of Delhi,

Delhi-110007

Delivered talk on "Nanoscience and Nanotechnology:





Prof. Karmeshu

Distinguished Professor, Department of Computer Science and Engineering

School of Engineering (SoE), Shiv Nadar University, India

Delivered talk on "Introduction to Probability and Monte-Carlo Methods"



Dr Shiv Kumar Sarin, Senior Professor and Head, Department ofHepatology

Director, Institute of Liver and Biliary Science (ILBS)

Adjunct Prof. Molecular Medicine, Jawahar Lal Nehru Univ. New Delhi

Delivered talk on "Fatty liver is the first part of development of other systemic problems"



Dr. G.S Sodhi

Department of Chemistry

Shri Guru TeghBahadurKhalsa College, University Of Delhi (North Campus), New Delhi

Delivered talk on "Forensic chemistry: An aid to combat crime"



SumanKundu, Ph.D

Professor, Department of Biochemistry

University of Delhi South Campus, Benito Juarez Road,

DhaulaKuan, New Delhi, India

Delivered talk on "The Red Goldmine: Story of an Amazing Protein".



Prof. Devesh K Sinha
Department of Geology
University of Delhi, Delhi

Delivered talk on "Earth Ocean and Climate: Connections in Past, Present and Future"

The camp also included **Hands on Training** sessions in all the Science Departments of the college viz., Biology (Biochemistry, Botany & Zoology), Chemistry, Computer Sciences, Physics and Mathematics. The students were provided with a Lab Manual. The above experiments were designed to give participating **students an opportunity to study SCIENCE from a new and exciting vantage**.

On the third day (ie., July 18, 2018) of the DST Inspire Camp, the students were engaged in the thinking process on the issues of national importance, They were given the following topics for writing new and innovative ideas:

- 1. Second Green Revolution
- 2. Renewable and non Renewable energy
- 3. Clean energy
- 4. Natural resources utilization for sustainability
- 5. Make in India
- 6. Swachh Bharat\
- 7. Ganga Rejuvenation
- 8. Energy conservation efficiency and sustainability
- 9. Harnessing Modern Technology for second green revolution\
- 10. Dairy and Livestock Sector
- 11. Solid & Liquid Waste Management

The screening and selection was done by the Mentors/ Resource persons and the seven students were felicitated by prize and an appreciation certificate in the valedictory function.

On the fourth day of the camp students were taken on educational trip to the different institutes of eminence. The students studying Biology were given a glimpse of research work occurring in the frontiers of science at **Regional Centre of Biotechnology** (RCB), an academic institution established by the Department of Biotechnology, Govt. of India with regional and global partnerships synergizing with the programmes of UNESCO as a Category II Centre. The second group of the students were taken to the **Institute of Liver & Biliary Sciences** (ILBS, a dedicated centre of excellence in healthcare, teaching/training and research), they were shown the "state of the art" facilities existing at the Institute. The students got the opportunity to interact with doctors/scientists at ILBS. The third group of the PCM students got the opportunity to visit CSIR **-National Physical Laboratory NPL- India**). The multidisciplinary R & D work carried out at NPL to establish the futuristic standards and upcoming technologies so that India remains at par with international measurement

laboratories and development of sophisticated analytical equipments under "MAKE IN INDIA PROGRAMME" really stimulated the young minds.

I am grateful to **Dr. ShashiNijhawan** (**Principal, Shivaji College, University of Delhi**) and **Dr. A. Mukhopadhyay** (**Head/Scientist 'G' Department of Science and Technology**) for giving the opportunity to organize this camp. I also appreciate all the hard work the Science Departments teaching and non-teaching faculty members have put in during these five days of the camp.

REGISTRATION SESSION



INAUGURAL SESSION





NTERACTION SESSION



LUNCH SESSION



Hands on Training Sessions (PHYSICS LAB.)



Hands on Training Sessions (COMPUTER SCIENCES LAB.)



Hands on Training Sessions (BOTANY LAB.)



Hands on Training Sessions (ZOOLOGY LAB.)



Hands on Training Sessions (BIOCHEMISTRY LAB.)





EDUCATIONAL TRIP (ILBS, NEW DELHI)





EDUCATIONAL TRIP (RCB, FARIDABAD)







EDUCATIONAL TRIP (NPL, NEW DELHI)





VALEDICTORY SESSION





