Remembering Shanti Swaroop Bhatnagar on his 121st Birth Anniversary

Sir Shanti Swaroop Bhatnagar was born on 21 February 1894 in Bhera, Punjab region of British India, in a Hindu kayastha family. Bhatnagar passed the Intermediate Examination of the Punjab University in 1913 in first class, and joined the Forman Christian College from where he obtained B.Sc. with major in physics in 1916, and M.Sc. in chemistry in 1919. He earned his D.Sc. in 1921. In August 1921 he returned to India and immediately joined the newly established Banaras Hindu University (BHU) as a professor of chemistry, where he remained for three years. He wrote the 'Kulgeet' (University song) of BHU. He moved to Lahore as Professor of Physical Chemistry and Director of University Chemical Laboratories of the University of the Punjab. This career was the most active period of his life in original scientific work. His research interests included emulsions, colloids, and industrial chemistry, but his fundamental contributions were in the field of magneto-chemistry, the use of magnetism for the study of chemical reactions. In 1928 he and K.N. Mathur jointly invented what they called the Bhatnagar-Mathur Magnetic Interference Balance, which was one of the most sensitive instruments for measuring magnetic properties.

Bhatnagar did considerable work in applied and industrial chemistry. The first industrial problem undertaken by Bhatnagar was the development of a process to convert bagasse (peelings of sugarcane) into food cake for cattle. This was done for the Grand Old Man of Punjab, Sir Ganga Ram. He also solved industrial problems for Delhi Cloth Mills, J.K. Mills Ltd. of Kanpur, Ganesh Flour Mills Ltd. of Layallpur, Tata Oil Mills Ltd. of Bombay, and Steel Brothers & Co. Ltd. of London. One of the important achievements of Bhatnagar in applied and industrial chemistry was the work he did for Attock Oil Company at Rawalpindi (representative of Messrs Steel Brothers & Co London).

Bhatnagar played a significant part along with H. J. Bhabha, P. C. Mahalanobis, V. A. Sarabhai and others in building of post-independent S&T infrastructure and in the formulation of India's science and technology policies. Bhatnagar was the Founder Director of the Council of Scientific and Industrial Research (CSIR). He was the first Chairman of the University Grants Commission (UGC). He was Secretary, Ministry of Education and Educational Adviser to Government. Bhatnagar played an important role both in the constitution and deliberations of the Scientific Manpower Committee Report of 1948. In 1936 the British Government conferred on Bhatnagar the Order of British Empire (OBE) based on his excellent contribution to pure and applied chemistry. Bhatnagar was knighted in 1941 in recognition of his work for the war effort. In 1943 the Society of Chemical Industry, London, elected Bhatnagar as Honorary Member and later as Vice President. He was elected Fellow of Royal Society, London, in 1943. He was the President of the Indian Chemical Society, National Institute of Sciences of India and the Indian National Science Congress. He was awarded the title Padma Vibhusan by the President of India. Bhatnagar died on 1 January 1955.
ACADEMIC NEWS:

Publications:

Books:


Journals:


Conferences:


Conference Proceedings:
Innovation in Technologies Challenges of Basic Research, Narosa, ISBN-978-81-8487-441-9 held on May 4, 2013. Following papers have been published:


Esa Bose, Sudipta Pal, "Structural, magnetic, and transport properties of Gd0.7Ca0.3CrO3", pp. 37-41.


K. Prabakaran, "In Vitro evaluation of eggshell derived hydroxyapatite reinforced YTTRIA stabilized zirconia composite coatings on H3PO4 treated type 316L SS for implant applications", pp. 86-91.


Surajit Mandal, "Applications of a birefringent lens in infrared region", pp. 115-123.

INSTITUTIONAL NEWS:

Invited Lecture:
Dr. Arjit Saha, Associate Professor, ECE and Mr. Soumita Singh, STA ECE delivered lectures on various communication and signal processing tools of MATLAB in Faculty Development Programme on "Advanced Communication & Signal Processing" at Narula Institute of Technology, Agarpata, during 8-9 Jan 2015.

Completion of Doctorate Degree:
Soumya Pal, Associate Professor & HOD Department, MCA has been awarded Ph.D. from Bundelkhand University in 2014.

Participation

**Prosaron**
Dr. Ranjana Goswami, Associate Professor & HOD Dept. of Basic Science and Humanities; and Dr. Papri Saha, Assistant Professor, Dept. of Engineering Physics delivered talks on "Conductivity on the nano-composite of graphite and clay at low temperature", and "Extreme multi stability in a simple non-linear dynamical system" on 13th March 2015 respectively. 
Dr. Arijit Saha, Associate Professor; and Mr. Surajit Mandal, Assistant Professor, Dept. of ECE delivered talks on "Design of optical finite impulse response filter generating arbitrary spectrum output", and "Imaging characteristics of a birefringent lens with primary spherical aberration under broadband illumination" on 20th March 2015. 
Mr. Subhasis Mallick, Assistant Professor, Dept. of CA delivered a talk on "Automated test case generating using Genetic Algorithm for branch coverage" on 20th March 2015.

**Wall Magazine**
To capture the creativity of the students, the Dept of ECE has published its wall magazine on February 28, 2015. The students took the opportunity to showcase their talents and creative skills and have carved a special niche for themselves. This year, the wall magazine committee thought of going a bit off the track and experimenting. Since it is a season of colours and to befit the spirit and fervor of the season, the students put a beautiful collage relating to the essence of Holi. The attempt ended up with the wall magazine-Wall-e, with the "spirit of colours" – Holi Hai.

**School Awareness Program**
SPIE Student Chapter of ECE Dept organized the first school awareness campaign by our college on February 6, 2015 at Netaji Shikshayatan, Aggarpara. The campaign was to evoke an interest in ELECTRONICS along with its peripheral technical parts. It is to be highlighted that 2015 was being announced as "International Year of Light". So, a special focus was made in the optical field. Lectures on basic electronics covering semiconductor, diode, transistors, LED, LASER, optical fiber, logic gate, Robotics and its application was delivered. Finally a Quiz session on basic science, optics and electronics was conducted.

**Abhigyan**
"Abhigyan" – the annual quiz competition of SPIE student chapter, Dept. of ECE, BPPIIMT was held on February 9, 2015 in the august presence of our Principal Prof. Dr. Sutapa Mukherjee, Registrar Dr. Sandip Ghosh, HOD of ECE Dept. Prof. Dr. Shilu Ghosh, and many faculty and staff members of BPPIIMT. Only ten teams were selected for Round II from hundred teams who took part in the Prelims. Finally six teams were selected for the final round. The final day quiz was conducted by Dr. Esha Bose, Assistant Professor, Engineering Physics dept. Team comprising of Aakash Ghosh, IT Dept. and Srija Sahu, CSE Dept. emerged as the champions.

**Saraswati Puja**
Like every year, the Saraswati Puja of the Institute, celebrated on January 24, 2015, was full of fun, frolic, colours and exuberance galore. The goddess of knowledge was offered the Puspanjali, the sacred flower offering by all present. It was followed by the distribution of 'Prasad' (blessing of the Goddess in the form of sweet and fruit offerings) and a sumptuous lunch. In a nutshell, the occasion was complete with active participation of the faculty and student members alike.

**E-Week 2015**
E-week 2015 was celebrated in our institute during 17-23 February, 2015. It was inaugurated on 17th February by our Principal Prof. (Dr.) Sutapa Mukherjee. Mr. Suparna Moitra, Former Regional Director of NASSCOM, was the Chief Guest in the occasion. Mr. Pramathesh Das, coordinator of the ED Cell spoke about the qualities of a good entrepreneur. Showcase- an event on product development by students was the prime attraction on 18th February. There was a business model competition "Canvas" on 19th February. The program wrapped up on 23rd February with website development competition "Webmania".

**Cricket Tournament**
The Intra-College Cricket tournament was held during 10-14 February 2015 at Sports Authority of India (SAI) Complex. Students from five departments of V.I.P. Road campus and two departments of second campus at Saltlake participated in the tournament. The final match was played between CSE and ECE on 14th February, 2015 at 12:00 noon and CSE became the champions. Aritra Banerjee of 4th yr CSE dept. became Man of the match and Aditya of 2nd yr CSE dept., became Man of the Tournament. A match among faculty and staff members of VIP road campus was also held. Mr. Arindrajit Chowdhury, Assistant Professor, ECE Dept. became the Man of the match.

**Annual Sports**
Annual Sports 2015 of our institute was held on February 21, 2015 at Sports Authority of India (SAI) Complex Athletic ground. Students as well as faculty and staff members of both campuses of BPPIIMT participated in this Annual Sports. The event was a grand success. All HODs, faculty members, staff members along with students were present to cheer all participants on the day. Different events took place like 100, 200, and 400 m relay race, long jump, shot put were the...
main attractions for the boys. For the girls the events were 100, and 200 m race, long jump, shut put, musical chair. There were also different events for the faculty. For male faculty there were 100 m race, long jump, shut put, hit the wicket, and kick off. The events for the female faculty and staff members were 50 m race, shut put, musical chair, and ball in the bucket.

Udbhav

The fourth issue of the institutional magazine UDBHAV was inaugurated on 21st March 2015. The magazine was inaugurated by our Principal Prof. Dr. Sutapa Mukherjee. The program was attended by the Dean (Academic Affairs) Prof. Dr. B. N. Chatterji, Registrar Dr. Sandip Ghosh, all HODs, faculty members, and administrative staff members. Contributions from the faculty members, administrative staff and from the students made the magazine a grand success.

CCTV Installation

CCTV installation throughout the campus was completed during December 2014 to January 2015.

Matri Bhasha Divas

Matri Bhasha Divas has been observed in our Institute on February 21, 2015.

Book Exhibition

A two-day book exhibition was organized by BPPIMT Central Library during 24-25 March, 2015 at Central Library Reading Room. The exhibition was inaugurated by our Director Dr. Subir Choudhury in presence of the Principal Prof. (Dr.) Sutapa Mukherjee, HODs of different departments, faculty and staff members. Many renowned publishers, viz Elsevier, Asian Books, Vikas Publishing, Penram International, PHI Learning, Shroff Publishers, Platinum Publishers, Scitech Publication etc. participated in the event.

TECHSTORM 2.15

Techstorm 2.15, a mélange of technology, innovation, evolution and art once again sent ripples amongst the budding technocrats and technopreneurs, computer geeks and the creative genius who put their ingenuity and acumen to litmus test through the grinding rounds of quizzing, coding and intricate circuit designs.

A scintillating inauguration ceremony marked by the striking presence of the crème-de-la-crème of the erudite fraternity was in true sense an apt start to the propitious occasion. The auspicious Lamp Lighting ceremony and a pious dancerendered were followed by addresses of dignitaries. Prof. Bhabani Prasad Sinha of ISI Kolkata graced the occasion with his midas touch. Adorning the other seats on the dais were Mr. Indranil Sengupta, retired IAS Officer, our Dean, Academics, Prof. B. N. Chatterji, the respected Principal Prof. Sutapa Mukherjee. Robotics, the flagship event of Techstorm 2.15 was divided into seven wings namely Ro-Combat, Ro-Navigator, Ro-Terrance, Ro-Soccer, Ro-

Constitute, Ro-Blitz and Ro-Splash. Students from St. Thomas College of Engineering, Heritage Institute of Technology, Techno India College of Engineering, Koolgat AOT, FIEM and BPPIMT took part in the events.

CONCEPT subdivided into two categories TECHNOMANIA and enNOVATION garnered a lot of attention and popularity amongst the student fraternity. The creative corner SRILONI comprised five sub-events namely THE UNTOLD STORY (creative writing), 35 MMLIVE (photography), OBJET D’ART (handicrafts), PASSION WITH REELS (movie-making) and SPOTLIGHT (elocution). On the second day of the techno fiesta, the Annual Quiz contest ARCANIA was conducted by CONSCIENTIA in association with the Alumni Association of the Institute by Quizmaster Mr. Suvendu Dey. Teams from IIT, Techno-India and IEEEST were amongst the lucky winners. The colossal presence of Mr. Nipun Choudhuri, Director, NASSCOM was an added feather to the cap of the fest. The Math Quiz OMENATRIX invoked huge craze amongst the students who were much too eager to put their wits to test and strike back with the most orthodox solutions to the most ingenious problems of nature.

FANTA-C (C-coding) was yet another avenue for the students to task their grey cells and render a new dimension to their fine programming skills. Events like NFS, FIFA and KHET gave the students enough space to unwind. The three day techstravaganza culminated into immaculate exuberance in the form of applauses and standing ovations with the Seminar Hall of the Institute bursting at its seams as the audience were enthralled by the scintillating performance of the students mesmerising them with their soulful music, witty theatres and well-crafted dance recitals.

The theme of SPHURAN was aptly chosen as Woman Empowerment expressing solidarity with the spirit of ensuing International Women’s Day on the 8th of March.

The last episode called for the time for the Laurels and the Accolades as the trophies were being given away by the Director, Principal and the IET, Chairman, Kolkata YP Network. The programme was wrapped up with the Vote of Thanks by faculty coordinator Ms. Sudipta Chakraborty. The entire event was covered by Telegraph (T2).

- Editorial Committee: The Editorial Committee consists of a team of Faculty Members headed by Prof. (Dr.) N. K. Datta, with Prof. (Dr.) B.N. Chatterji, Dean Academics as Chief Editor, Prof. (Dr.) Sutapa Mukherjee, Principal as the Chief Advisor and Dr. Arjit Saha Associate Professor as Editor of the Newsletter.
- Call for Contributions: Contribution for the Newsletter on the global and national news related to technical, economical, philosophical and general science etc. is solicited from all the members of the BPPIMT family and the students. The prospective contributors are requested to send their writings in about 200 words electronically to the mail address: bpptimtnewsletter@bpptimt.ac.in. Publication in the Newsletter is at the full discretion of the Editorial Committee.