



THE BPPIMT - NEWSLETTER

A Quarterly In-House Magazine

of

B.P. Poddar Institute of Management and Technology

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Issue - XXVIII, JULY 2015

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Late B.P. Poddar
(1920-1981)
Founder
B.P. Poddar Group

Remembering Sir Chandrasekhara Venkata Raman on his 127th Birth Anniversary



Chandrasekhara Venkata Raman, popularly known as C.V. Raman, was not only a great scientist but also believed in the promotion of human well being and human dignity. C.V. Raman was born on 7th November 1888 in Tiruchirapalli, in Tamil Nadu. His father was a professor of Physics and Mathematics. Even in his childhood, he was popular as a child genius.

He stood first in the Indian Audit and Accounts (IAAS) Examination and was appointed as Assistant Accountant General in the Finance Department in Calcutta at the age of nineteen. In 1917, Raman resigned from his government service after he was appointed the first Palit Professor of Physics at the University of Calcutta. At the same time, he continued doing research at the Indian Association for the Cultivation of Science (IACS), Calcutta, where he became the Honorary Secretary. Raman used to refer to this period as the golden era of his career. In 1924, he was made Fellow of the Royal Society.

On 28th February 1928, Raman led experiments at the IACS with collaborators, including K. S. Krishnan, on the scattering of light, when he discovered what now is called the Raman Effect. Raman spectroscopy came to be based on this phenomenon, and Ernest Rutherford referred to it in his presidential address to the Royal Society in 1929. Raman was President of the 16th session of the Indian Science Congress in 1929. He was conferred a knighthood, and medals and honorary doctorates by various universities.

He won the Nobel Prize in Physics for his work on the scattering of light and for the discovery of the Raman Effect in 1930. Besides this, Raman and Suri Bhagavantam discovered the quantum photon spin in 1932, which further confirmed the quantum nature of light. Raman also worked on the acoustics of musical instruments. He worked out the theory of transverse vibration of bowed strings, on the basis of superposition velocities. He was also the first to investigate the harmonic nature of the sound of the Indian drums such as the tabla and the mridangam. He was also interested in the properties of other musical instruments based on forced vibrations such as the violin. He also investigated the propagation of sound in whispering galleries. Raman and his student, Nagendra Nath, provided the correct theoretical explanation for the acousto-optic effect (light scattering by sound waves), in a series of articles resulting in the celebrated Raman-Nath theory. Modulators, and switching systems based on this effect have enabled optical communication components based on laser systems. In 1933, Raman left IACS to join Indian Institute of Science in Bangalore as its first Indian director. Raman retired from the Indian Institute of Science in 1948, and a year later established the Raman Research Institute in Bangalore, Karnataka. He served as its director and remained active there until his death in 1970, in Bangalore, at the age of 82.

ACADEMIC NEWS:

Publications:

Journals (with Impact Factor):

Soumya Paul, Sudipto Bhattacharyya, "Implementation of network security using neural network architecture", *International Journal of Computer Science and Mobile Computing*, **4** (6), pp. 815-821 (June 2015), Impact Factor (ISRA): 2.417, Impact Factor (IIFS): 2.136, Impact Factor (Ulfactor): 1.0148, ISSN-2320-088X.

Inadyuti Dutt, "Issues in delay tolerant networks: A comparative study", *International Journal of Advanced Research in Computer Science and Software Engineering*, **5** (6), pp. 534-542 (June 2015), Impact Factor: 2.5, ISSN: 2277-128X.

Surajit Mandal, Subhrajyoti Dutta, Soham Chatterjee, Subhadip Karar, Subhankar Banerjee, "A novel technique for image steganography using DWT", *International Journal of Advanced Research in Computer Science and Software Engineering*, **5** (6), pp. 854-858 (June 2015), Impact Factor: 2.5 ISSN: 2277 128X.

Papri Saha, D. C. Saha, A. Ray, A. R. Chowdhury, "Memristive non-linear system and hidden attractor", *The European Physical Journal Special Topics*, **224**, pp. 1563-1574 (2015), Impact Factor: 1.399, ISSN: 1951-6355 (Print) 1951-6401 (Online).



Journals (online):

Binoy K. Biswas, Asish Bandyopadhyay, Pradip K. Pal, "Microstructure and microhardness of fluxcored arc-welded joints for boiler quality steel", *The International Journal of Advanced Manufacturing Technology*, **78**, pp.5-8, (May 2015), Impact Factor: 2, ISSN 0268-3768 (online publication).

Dolon Champa Das, "Games & activities: techniques for teaching english in a fun-filled environment", *International Journal of Innovation Science and Research*, **4** (6), pp. 228-231, (June 2015), ISSN: 2319-9369 (online publication).

Conferences:

Sahabul Alam, Debashis De, **Anindita Ray**, "Analysis of Energy Consumption for IARP, RIP and STAR Routing Protocols in Wireless Sensor Networks", in *Proc. Second International Conference on Advances in Computing and Communication Engineering (ICACCE)*, 1-2 May 2015, Dehradun, India, pp.11-16, Publisher: IEEE, ISBN 978-1-4799-1734-1/15.



Debarati Dey, Pradipta Roy, Debashis De, "Molecular modelling of nano bio p-i-n FET", in *Proc. 19th International Symposium on VLSI Design and Test*, 26-29 June 2015, Ahmedabad, India, pp. 1-6, Publisher: IEEE, ISBN: 978-1-4799-1742-6..

INSTITUTIONAL NEWS:

Participation

Abhijit Bhattacharyya, "Stability of a perfectly conducting viscoelastic Maxwell fluid with continuous viscosity & density stratification in presence of a horizontal magnetic field", presented at International Conference on Recent Trends in Mathematics and its Applications (ICRTMA), 18-19th March, 2015, Midnapur, India.

Barnik Mandal, student of Department of ECE, and current President of SPIE Student Chapter, BPPIMT attended the SPIE Optics & Optoelectronics Conference 2015, at Prague this April.

Best Faculty Award

Dr. Arijit Saha, Associate Professor, ECE Dept. has been awarded the Best Faculty Award by Cognizant Technology Solutions for the year 2014-15.

Texas Instruments India Analog Design Contest 2015



To promote innovation among engineering students, Department of Electronics & Communication Engineering of B. P. Poddar Institute of Management and Technology, organized an Analog Circuit Maker Competition on 17th April, 2015 in association with Texas Instruments. The competition was open to different colleges where B. P. Poddar Institute of Management and Technology has



been selected for conducting the college level competition based on continued interest in university program activities. Total one hundred and fifty students participated in the competition this year. The competition was organized in the last year also.

