Department of Physics, Center of Advanced Study Panjab University, Chandigarh

Fourth Prof. B.M. Anand Memorial Lecture



Prof. B.M. Anand 1905-1998 Prof. Bal Mokand Anand was born in 1905 at village, Domel, in the Bannu district of Pakistan. He passed his B.Sc. with Honours in Physics from Government College, Lahore, in 1926; and M.Sc. in 1928, from Panjab University, Lahore. He worked for his doctorate under the supervision of Prof. C.F. Powell in the 1950s. In 1934, Anand was appointed a Lecturer. He served as the head of the Physics department from 1949-1967. He established nuclear emulsion laboratory for high energy physics research at Hoshiarpur and Chandigarh. This lecture series was initiated in 2015. First three lectures were delivered by Prof. Yashpal, former UGC chairman, Prof. V.C. Sahni, former DAE Homi Bhabha chair professor and Prof. Ajay K. Sood, FRS IISc. Banglore. The Panjab University Physics Department today enjoys a world class reputation because of strong base set during Prof. Anand's Era.

SPEAKER

Prof. Jagdish K. Vij.

Trinity College, The University of Dublin, Ireland

Speaks on



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"Revolution in the Display of information in the 21st century"

Talk will cover the physical principles of liquid crystal displays (LCDs). These displays have revolutionized the information technology industry of the 21st century and will continue to do so in the foreseeable future. Briefly the LCDs have provided us with two much needed improvements to our old bulky cathode ray tube (CRT) based displays in having a small size with a lower power consumption. This has resulted in unbelievably powerful flat screen displays that mimic and exceed the power of the bulky and immovable desk based electronics of the past. Communication, information and entertainment can now be carried in our pockets with results available to us in brilliant crisp colors, thanks to the LCDs, smaller, brighter, and individually relevant gadgetry of our new age. Come and join me, if you will, in this journey of the LCDs development since 1970s and let me show you a vision of the future displays -involving a combination of LCDs and OLEDs (Organic Light-Emitting Diodes). A future TV would be battery operated and will not only pick up the signal through wireless networking as it does in some cases at present but will be powered by little power consumption.

About the Speaker:

Prof. Jagdish K. Vij was educated in Panjab University Chandigarh. He was a post-doctoral research Fellow in Trinity College Dublin (TCD) from 1971-74 and researched in the dielectric properties of materials at high pressures with Professors Garrett and Brendan Scaife. They were one of the first groups to be able to measure both complex permittivity and density of fluids under high hydrostatic pressures at the same time. He was appointed to the chair of Electronic Materials in the Department of Electronic and Electrical Engineering in 1999. He was elected as a Member of the Royal Irish Academy as one out of four in Sciences in 1999. He was awarded the degree of Doctor of Science of the University of Dublin in 1990. He has published some 330 papers on Electronic Materials, liquid crystals and related instrumentation. He moved on to the field of liquid crystals in the early 1990s where he and his group made many seminal contributions in almost all areas of liquid crystals science and technology. Recently they discovered a twist-bend nematic phase as well as discovered a number of new dynamic modes and a large number subphases in antiferroelectric liquid crystals. He holds two patents on the applications of liquid crystals with two members of his research group. He was a member of the Editorial Board of Liquid Crystals for 10 years 1998-2008. He is an Associate Editor of Journal of Information Displays (Taylor and Francis).

Venue: Prof. B.M. Anand Auditorium, Dept. of Physics, Panjab University.Date: 12th April 2018Time: 10:00 am