Indian Physical Society
2A & 2B, Raja Subodh Mullick Road, IACS Campus
Kolkata 700032, India

Notice
Fifth Prof. D N Kundu Memorial Lecture

Prof. Dhirendra Nath Kundu (1916 – 1999) did his PhD (1950) from the Ohio State University, USA. His area of specialization was nuclear physics. He was Professional Associate in Nuclear Physics, National Academy of Sciences and National Research, Washington (1955-57); and Professor (1958-80) and Director (1967-80), Saha Institute of Nuclear Physics, Kolkata. Initiating cyclotron irradiations with tritons as nuclear bombarding materials, Kundu investigated several nuclear reactions affected with two neutrons and ^{3}He. His method of introducing two neutrons into atomic nuclei through (t,p) reactions led to the synthesis and identification of several new radioactive nuclei. With cross-bombarding techniques he established the experimental basis of core-isomerism in a nucleus, viz. ^{93}Mo. His work on nuclear transmutations led to the discovery and mass assignment of many new radioisotopes and characterization of the disintegration modes of several others.

Title : Memories of underdevelopment: Higher Education and India's Universities
Speaker : Prof. Sabyasachi Bhattacharya
C.V. Raman University Professor, Ashoka University, Sonepat, Haryana
Date and Time : August 17, 2017 at 10:30 hrs
Venue : Auditorium Complex, Saha Institute of Nuclear Physics, Kolkata

Twenty third Prof. Shyamadas Chatterjee Endowment Lecture
(In collaboration with Department of Physics, Bangabasi College)

Prof. Shyamadas Chatterjee (1909-1995) was a nuclear physicist who worked in the Bose Institute, University of Calcutta, Jadavpur University, Davy-Faraday Laboratory of the Royal Institution, Technical University of Munich, Indian Association for the Cultivation of Science, *etc*. He set up the first radiocarbon dating laboratory in India. He was the first person to measure the half-life of uranium accurately and was also the first to observe spontaneous fission of uranium.

Title: Solving the Mystery of Mass
Speaker: Amitava Raychaudhuri
Emeritus Professor, Department of Physics, University of Calcutta, Kolkata
Date and Time: September 1, 2017 at 3 P.M.
Venue: Bangabasi College, Kolkata

All are cordially invited.
July 27, 2017
Gautam Gangopadhyay
General Secretary, IPS

ABSTRACTS

Memories of underdevelopment: Higher Education and India's Universities*

Sabyasachi Bhattacharya
C.V. raman University Professor, Ashoka University, Sonepat, Haryana

A consensus in academic circles in India seems to be that India's universities have not played – since Independence - as significant a role in higher education - most critically in science education - as was both needed and achievable. The state of higher education is widely criticized as a major policy failure of an uninformed and bumbling bureaucracy together with a misguided political and civic leadership. In this lecture, an alternate approach would propose a different, and primarily historical perspective, of a complex social, political and economic reality as well as foreign policy imperatives during India's independence. Rethinking India's pre-independence past, mostly centered in the city of "Calcutta", is useful in understanding the present and making guesses about the future. It appears unlikely that the educational framework – the institutions and their governance structure - can, or will, significantly improve anytime soon. Coherent, sustainable and pluralist policy alternatives are urgently needed to address the looming "human-climate" calamity in the country. One, among many such alternatives, may be an ideological return to a not-so-distant-past, with selective refinements.
("Anything you can rightly say about India, its opposite is also true."
Joan Robinson, Economist, University of Cambridge)
* "Memories of underdevelopment" is the title of a Cuban film, directed by Tomas Gutierrez Alea.

Solving the Mystery of Mass

Amitava Raychaudhuri
Emeritus Professor, Department of Physics, University of Calcutta, Kolkata

Mass is a very familiar property. Yet, do we really know what is the origin of mass? Obviously the mass of any object is determined by the masses of its constituents. But what about the masses of the most basic entities, such as the electron, which are structureless? There is an answer to this question which was proposed fifty years ago but has been experimentally verified only in this decade. Even then there remain several open frontiers. In this talk, aimed at non-experts, we consider several of these issues, pointing out the important role played by symmetries.