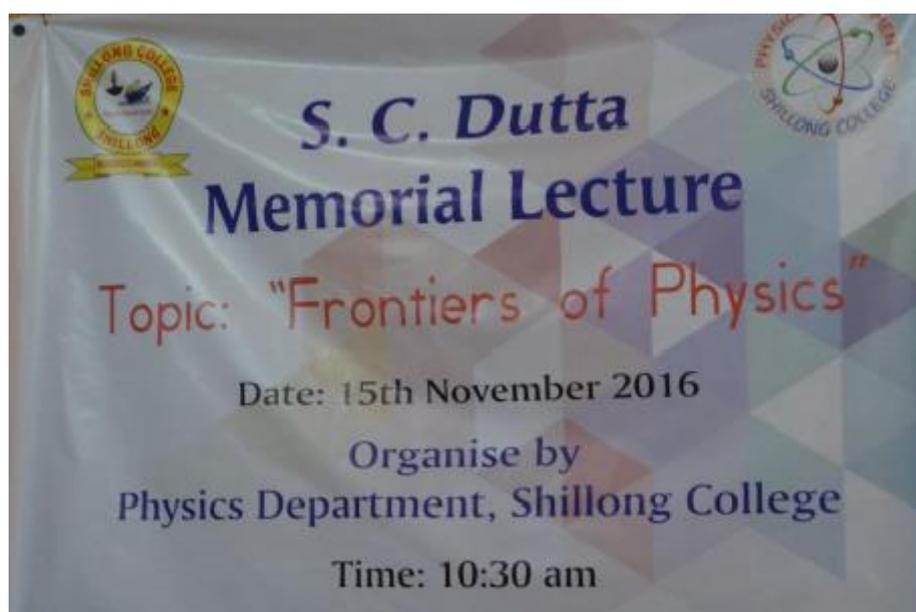


S.C. DUTTA MEMORIAL LECTURE: A REPORT

The fourth S. C. Dutta memorial lecture was entrusted upon the Department of Physics to organize the same and give a befitting tribute to the great but noble soul who had contributed immensely towards the very existence of the College. As the Department organized the memorial lecture on the theme “Frontiers of Physics”, it was intended, through the venture, to cherish and acknowledge all those noble souls who had played their part and contributed in making this college, as it stands today, one of the premiere institutions of the State. It was also hoped to inculcate in the tender and fertile minds of the students the spirit of love for fellow beings and encourage them to set their goals right so as to be able to contribute towards the development of the society and thus have a meaningful life. As we are living in a world and age with an ever increasing inclination towards materialism, the values such humanity, philanthropy and altruism are constantly eluding us day by day, and we are constantly being alienated from these basic human values. However, a reflection on the lives of these great individuals, who are no short of pioneers themselves, may hopefully instil in everyone the right spirit to work in right earnest with selfless dedication and sincerity in whatever we do small or big, and may we be reminded that, **‘the very purpose of life is a life of purpose’**.



The Physics Department organized the 4th S. C. Dutta memorial lecture on the 15th of November 2016 with two beautiful lectures delivered by two prominent persons in the field of Physics. The first lecture was delivered by Prof. M. C. Mahato, Professor North Eastern Hill University, Shillong who presented a simple but nonetheless very interesting lecture on Ohm’s law and other related problems. The lecture was mainly aimed at attracting the young minds on the importance of simple laws in Physics, such as the famous Ohm’s law, in applications such as studying ballistic transport phenomena etc., and thus highlights its applicability in higher learning and research. It was really a (very) thought provoking lecture and the students listened and paid all attention to the lecture given.

The second lecture was presented by Dr. Monojyoti Dey, Scientist SE at the Centre of Plasma Physics-Institute for Plasma Research, Assam who gave an insight into the possibility of

producing nuclear fusion and the important role played by India in one of the largest nuclear fusion reactor of the world at ITER. ITER (International Thermonuclear Experimental Reactor, which is also the Latin word for "the way") is an international nuclear fusion research and engineering megaproject, which will be the world's largest magnetic confinement plasma physics experiment. It is an experimental tokamak nuclear fusion reactor that is being built next to the Cadarache facility in Saint-Paul-lès-Durance, south of France.

The ITER project aims to make the long-awaited transition from experimental studies of plasma physics to full-scale electricity-producing fusion power stations. The ITER fusion reactor has been designed to produce 500 megawatts of output power for several seconds while needing 50 megawatts to operate. Thereby the machine aims to demonstrate the principle of producing more energy from the fusion process than is used to initiate it, something that has not yet been achieved in any fusion reactor.

The students were completely awe inspired by this wonderful project of which they were never aware before and they are greatly motivated by the idea that one day they may be part of such a magnificent project.

The lecture was attended by Physics students and teachers of almost all the colleges of Shillong having Science Stream and also from Mairang Science College. The programme was graced by the Principal of the College, Dr. K. D. Ramsiej, Vice Principal Professional Courses, Sri K. D. Roy, Vice Principal Higher Secondary Section, Dr. M. N. Bhattacharjee and other teaching staffs of the college. The programme organized was a grand success and everyone who attended thoroughly enjoyed the lectures and is also greatly benefitted from the lectures.

Apart from the above, the Department also could organize students' seminar for the 3rd Year Physics Honours students in September wherein the students were organized into ten different groups, each group forming a team of two, and each team was given the onus of presenting a paper of their choice from any of the varied topics of their syllabus. All the teams participated with great enthusiasm and presented their papers with the use of Power-point. It was really motivating to witness the spirit of competition that the students exhibited during the three days that the seminar was held. The students presented their papers on a wide array of topics from the different branches of Physics and made the seminar a success with their participation.

Another activity that was organized in the Department was in fact the work of the students, the 3rd Year, the 3rd semester and the 1st semester students, who together had planned and organized the Teachers Day celebration for the faculties of the Department. It was an overwhelming experience in which the students, in their own innocent way, had expressed their sincere gratitude to the teachers of the Department for all that they have received and experienced in the college and the Department in particular. The students also presented the teachers with mementoes and lit up the occasion with their beautiful renditions and their heart touching speeches. The students even took care of the refreshments that were served after the programme. It was really a wonderful and overwhelming experience for the faculties of the Department and one which would be remembered for a very long time.

