

## **SEMINAR NOTICE**

### ***Science and Arts of Physics Experiments***

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***5'th March and 6'th March from 3pm and 7'th March from 2pm  
C.V.Raman Lecture Hall, Department of Physics, University of Calcutta***

### **Abstract**

Physics like some other branches of Science is driven by experiments, observation and phenomena. Doing experiments is thus an integral part of Physics research as well as education. Physics experiments can be fun if they are driven by curiosity and an underlying idea. Doing the experiment is as much of an art where ingenuity of the experimenter can convert an otherwise difficult situation to a solvable problem.

In this three part lecture I will develop on the central theme that doing experiments in Physics can be fun as well as educative if it is driven by ideas. Experiments can sometimes become even more attractive when it is driven by an unknown and unexpected observation, which we often refer to as serendipity. I will start with simple experiments where one may not need much of an equipment or infrastructure and then gradually develop into areas and experiments where some degree of instrumentation is needed. I will also take examples of some very well known experiments in modern science and will end up discussing some modern experiments. I will discuss in the last part of the talk some experiments based on our work where we used innovative ideas and simple ideas. This will not be an advanced research talk but will play with ideas and questions that should be understandable to a person with a B.Sc (Honours) degree or may be with first year M.Sc education. The sessions will be interactive where the students are encouraged to participate. The experiments discussed will range from general physics to experiments in biophysics, optics and condensed matter physics with reference to other areas.