A brief report of the lecture sessions workshop on Recent trends in Nanotechnology and Material science, held at Vijaya College on 22nd and 23rd March 2017 sponsored by Indian Academy of Sciences.

The lecture workshop was inaugurated on 22nd march 2017 at 10.00 am. The keynote address was delivered by Prof. S. Vasudevan, Solid-State Structural Chemistry Unit, Indian Institute of Science, Bangalore and the guests of honour were Prof. S. Natarajan, Solid State Structural Chemistry Unit, Indian Institute of Science, Bangalore and Dr. T D Mahabaleswara Coordinator, Lecture workshop and Refresher course, Science Education panel, Bangalore and the presidential address was given by Dr. Ananth K Atre, Joint Secretary, BHS Higher Education Society.

The first session was delivered by Prof. S.Vasudevan on Functional layered compounds. He started from the basics and developed the subject to the recent research that is taking place in the nano materials.

In the second session Prof. G.U.Kulkarni, Chemistry and Physics of Materials Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore spoke on Graphene – The wonder Material which is a monolayer. He started his talk with a pencil lead as a nanolayer and developed the subject interacting with the students.

The third and fourth sessions were delivered by Prof. S.Sampath, Inorganic and Physical Chemistry Unit, Indian Institute of Science, Bangalore. His first talk was on Self – Assembled Monolayers. He continued the talk of Prof. G. U. Kulkarni and his second talk was on Nanomaterial’s for Batteries.

The next day, in the first session, there was a talk on New battery cathode Materials by Prof. S.Natarajan, Solid State Structural Chemistry Unit, Indian Institute of Science, Bangalore. He gave a brief introduction of the function of a battery and later explained how lithium is widely used as the cathode material.

The second session and the third session were delivered by Prof. A Sundareshan, Chemistry and Physics of Materials Unit, Jawaharlal Nehru Centre
for Advanced Scientific Research on Superconductivity. He explained the basic laws of superconductivity and the applications in detail. He demonstrated the phenomenon of superconductivity and magnetic levitation principles.

Prof. N Chandrabhas, Chairman, Chemistry and Physics of Materials Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore delivered a lecture on Raman Scattering studies on Nano materials. He explained the Raman Effect in a simple way and how it is applicable at the nanoscale.

The last session was delivered by Prof. A.M.Umarji Chairman, Materials Research Centre, Indian Institute of Science, Bangalore on thermoelectric materials. He discussed in detail which are the materials used as thermoelectric materials in the nanoscale.

We had 218 participants (199 students and 19 faculties). All the lectures were very well appreciated by the participants and interaction with the resource persons was very good. All the professors were very patient in clearing the doubts of the students. They invited the participants to their labs in small numbers.

The lecture workshop was a great success. A feedback session was conducted and participants expressed their opinions. Their comments were very positive. The session concluded with the valedictory function. The chief guest of the valedictory function was Prof. A.M.Umarji and the president was Prof.R.V.Prabhakara, Joint Secretary, BHS Higher Education Society.

The general opinion of all the participants was that such workshops must be conducted periodically for the benefit of students and staff.