BRIEF REPORT OF THE SCIENCE ACADEMIES LECTURE WORKSHOP ON
'TIME AND AGAIN: CHALLENGING SCIENCE.'

Department of Life Sciences, Sophia College conducts undergraduate program with a strong research component in Life Sciences, postgraduate program with specialization in Neurosciences. The college is also recognized for Ph.D. program in Applied Biology. It has been of interest to expose undergraduate and post graduate students to science as they learn in class, scientific temper and social context of the science as it is practiced. It is necessary to understand the philosophical roots of science and its development, to do contemporary science. Tracing history of science is one way of understanding this. The curricula in basic sciences in most of Indian universities have paid little attention to this aspect and leaves the students feeling as if present day science is stand alone With a view of providing fruitful discussions on history of science that is relevant to the present Indian scenario we propose to conducted a two day lecture workshop and brought very eminent speakers of diverse specialities on a common platform. We have initiated a dialogue amongst the speakers, teachers and students which will last beyond the lecture workshop.

Dr. Tarala D. Nandedkar (Ex Deputy Director, NIIRH, and Fellow of the Indian Academy of Sciences) was the convener and Dr. Medha S. Rajadhyaksha (Associate Professor and Head, Department of Life Sciences) was the coordinator. The venue was Sumai Tulsiyani Convention Center on the Sophia College campus and the sessions extended from 9.30 am to 4.30 pm and more on 8th and 9th January 2016.

The inaugural session program started with a welcome address by Dr. Ananda Amritmahal, Principal, Sophia College. The inaugural address was given by Dr. V. Nanjundiah, (Fellow, IAS), IISc, Bangalore on ‘To what extent is biology an autonomous science?’ Natural scientists tend to view their sub-disciplines within a hierarchical framework. Physics is considered to be at the apex. Chemistry is thought of as a derivative science, entirely reducible to physics; in turn, biology is believed to be reducible to chemistry and physics. Theme of this talk was to analyse the latter belief.

The session continued after the lunch break with Dr. Tarala Nandedkar felicitating Dr. Vaidya for getting the prestigious Bhatnagar Award. This was followed by the talk given by Dr. Vidita Vaidya (Fellow, IAS), TIFR on ‘Neuroscience then and now: a Walk through the history of neuroscience,’ who totally engaged the audiences by discussing the ‘gharanas’ of the scientists who have and are contributing to neurosciences.

The next session was launch of the book by Dr. Meera Nanda, ‘Science in Saffron’ conducted by the Principal Dr. Ananda Amritmahal. This was followed by an enlightening and thought provoking talk Dr. Meera Nanda ‘Why science education needs history of science’. The talk initiated discussions which lasted way beyond in the evening. Dinner was served for the speakers on the campus.
The second day opened with an extraordinary presentation by Dr. Ankush Gupta on Scientific Breakthroughs and the Quantitative Tradition: Their validity versus Relevance to Society. He discussed that as students of science, we need to seek relevance of the knowledge we gain to our lives and to our society. He emphasized that we need to look at the actual problems of society and environment and compare to the nature of research questions being asked at the forefronts of scientific research as well as the research that is done in routine.

The next session was conducted by Dr. Veena Rao on 'Landmarks in early years of Biochemistry in India.' This talk highlighted some events that mark the growth of modern biology, and more so biochemistry, in India. She elaborated on contributions on British scientists who initiated research in modern biology in India and later of several young scientists who were trained abroad in biochemical research participated in biochemical research in India.

The last session was very innovative with two eminent scientists Dr. Neeraja Sankaran and Dr. John Mathew in conversation about 'Broader Implications of the History of Biology for Society.' In this valedictory presentation, historians of biology Dr. Neeraja Sankaran and Dr. John Mathew brought their individual perspectives to weigh in on issues of the implications of the discipline for different spheres of society. Mathew, who also holds a doctorate in ecology with included research in evolutionary biology to draw attention to his prosecution of faunal studies in Eurocolonial India in laying out what the changing face of natural history was in the subcontinent during the 19th century with the advent of Darwinism and the consequent treatment of evolution through natural selection. Coming from a background in microbiology and science writing, Sankaran discussed the wider relevance of Darwin and his theory today – both in academia and in society more broadly.

Dr. Medha S. Rajadhyaaksha gave a vote of thanks. A casual discussion, tea and a photograph session concluded the workshop. The audience of about 125 students, belonging to various colleges in Mumbai appeared to have been enriched on history of Sciences and its implications in modern society. All the talks were very well received and discussions which extended into lunch/tea time were lively. The students got ample opportunity to clear doubts and got information about trends in Indian science. In all, the lecture workshop appeared to achieve what it set out to do; it enthused and motivated the students to think like practicing scientists!!