



# **Dr.K.V.RAO SCIENTIFIC SOCIETY**

## **Annual Report-2000-2001**

### **About the Society**

Dr. K.V.Rao Scientific Society was founded in January 2001 by forming a corpus from the donations from friends and family of Dr.K.V.Rao. The passion of Dr.Rao by taking part actively in promotion and encouragement of young scientists in pursuit of their research activities has been instrumental in bringing about this society.

#### ***The aims and objectives of the Society are to:***

- Undertake programs for advancement of research in the field of chemistry and/or chemistry applied to any branch of science
- Assist research students either at doctoral or post doctoral level by ways of funds or equipment.
- Capacity building of local scientific talent

The Society has decided to honour the work of an young scientist under the age of 30 years, by presenting an annual Research Award. In order to have transparency in the selection, a panel of judges screened the research work of the three candidates who applied. The judges at this function announced the best candidate after the selected three candidate's final presentations.

As a part of its programs, the Society also decided to institute an Annual Oration Award for presentation of Original Scientific Work by a Senior Scientist.

It is hoped that the aim and objectives of the Society, will be largely fulfilled in order to carry out the primary efforts of Dr.K.V.Rao in this direction during his days of active research, who is well known for his scientific temper, even in adverse situations, and for his forthright and hardworking nature.

## **About K.V.RAO**

Dr.K.V.Rao was born on 21st March 1920. He had his earlier education at Rajahmundry and Hyderabad. He did his post graduation in Chemistry and research for his D.Sc. degree at the Banaras Hindu University under Prof. S.S.Joshi on “Active Nitrogen”, an intermediary in the synthesis of Ammonia.

Dr Rao career started in 1947 when he joined the Department of Mines (1947 – 1952) and in the Geological Survey of India (1952-1978). After retirement, he joined Birlas on invitation from them to start and establish the Birla Archeological and Cultural Research Institute in 1978. After seven years of active research, he retired. Later he was interested in the environmental problems in and around Hyderabad.

Dr Rao’s work in the Department of Mines in the Nizam State and later in the GSI related to the chemical analysis of diverse Geological materials and the Geochemistry of rocks, ores, water, etc.

Among the important research contributions of Dr. Rao was his work on fluoride bearing waters in A.P., Rajasthan and Gujarat and the work related to incidence of fluorosis, defluoridation of waters by Serpentine (a naturally occurring mineral rejected as waste in asbestos mines) and designing community defluoridation plants and portable family kits in fluorosis endemic villages.

Dr Rao’s work in Birla Archeological and Cultural Research Institute was stupendous. He started a research lab for chemical analysis of complex archeological materials. He studied the effect of SO<sub>2</sub> and Nox on marble environmental pollution on Taj Mahal and Charminar etc. and weathering profiles and preservation of monuments . Gomateswara Statue at Sravana Belgola (Karnataka) Buddhist monuments in Sankaram, Madhukeswara Temple at Mukhalingam, Thousand pillar Temple at Hanumakonda, the famous Ramappa Temple near Warangal (in Andhra Pradesh ) are some such monuments studied. His old Geologist friends collaborated with him in these later studies. He not only published papers in Indian and international journals of repute but started publication of a bulletin and later journal of Archeological chemistry .

Dr.Rao was a man with laudable human qualities and an intellectual with philosophical bent of mind. His interest in Jiddu Krishnamurti’s teachings made him start the “Listeners Club” with the objectives to provide a forum/avenue for the interested citizens of twin cities to hear his talks and his discussions with the well known scientists and intellectuals .

## About The Society's Programs

**The Society is conducting its first annual function in the first year of its formation, i.e., on March 24, 2001.**

The Society had received just a few applications for the Research Award this year. The three candidates will present their research papers in presence of a panel of judges and the august audience. The candidates are:

- Mr. Ch. Venkata Reddy, Indian Institute of Chemical Technology, Hyderabad. (Supervisor - Dr. B M Choudhary)

Paper Presented:

"The First Example of Molecular Oxygen in Ni-Al Hydrotalcite: A Novel Protocol for Selective Oxidation of Alcohols"

- Mr. Ram Thaimattan, University of Hyderabad, Hyderabad. (Supervisor - Prof. Goutham R Desiraju)

Paper Presented:

"Organic Network Structures: Crystal Engineering & Supramolecular Synthesis"

- Mr. J. Krishna Murthy, Indian Institute of Chemical Technology , Hyderabad. . (Supervisor - Prof. Dr. K S Rama Rao)

Paper Presented:

"Catalytic Hydrodechlorination of Dichlorodifluoroethane: Development of New Generation pd based Catalysts."

The panel of judges will select the candidate for the Award after the presentation by the candidates.

The annual Oration award this year will be presented to Prof.K.Subba Rao , Head of Biochemistry Department, School of Life Sciences, University of Hyderabad. He will be presenting the talk on "**The Chemistry and Molecular Biology of Aging**"

## Future Programs of the Society

The Society, apart from its annual awards function is planning to hold seminars and workshops on a regular basis.