



Dr. K.V. RAO SCIENTIFIC SOCIETY

Dr. K.V.RAO Annual Memorial Oration & Research Awards - 2006



Dr.K.V.Rao
(1920-2002)

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- Dr.B.V.S.R.Murthy - President
He retired from Geological Survey of India. A close associate of Dr.Rao at GSI.
- Prof.T.Sunderaramiah – Vice President
Retired Professor, Chemistry Department, Osmania University, Hyderabad
- Dr.K.J.R.Murthy – Secretary
Senior Consultant, Chest Physician & Director, DOTS Programme, Mahaveer Hospital, Hyderabad.
- Dr.K.Ratna - Joint Secretary
Doctorate, I.I.T.Delhi
- K.A.Sastry – Founder Member
Director, KSK Energy Ventures Ltd., Hyderabad and son of late Dr.Rao

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About Dr.K.V.Rao

Dr.K.V.Rao was born on 21st March 1920. He had his earlier education at Rajahmundry and Hyderabad in the State of Andhra Pradesh, India. 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's active Scientific career started in 1947. He worked in the Department of Mines in the erst while Nizam state (1947 - 1952) and in the Geological Survey of India (1952 - 1978). 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. After retirement he joined Birlas (1978 - 1985) and established the Birla Archeological and Cultural Research Institute, a research institute for study of Archeological Monuments. Later he was interested in the environmental problems in and around Hyderabad.

Dr.Rao's research contributions are many and are on various subjects. Most important of them was his work on fluoride bearing waters in Andhra Pradesh, Rajasthan and Gujarat. The work related to incidence of fluorosis, defluoridation of waters by Serpentine (a naturally occurring mineral rejected as waste in asbestos mines), designing community defluoridation plants and portable family kits in fluorosis endemic villages.

His defluoridation work influenced medical specialists to successfully use serpentine as a medicine for the treatment of human fluorosis for which no medicine was known till then. Dr.K.J.R.Murthy is one of those pioneering physicians who did this work. Under Dr.Rao's influence work on fluorosis had been carried out in more and more scientific departments leading to the organisation of a multidisciplinary "Symposium on Fluorosis" in 1974.

Dr.Rao's work in Birla Archeological and Cultural Research Institute was stupendous. He started a research lab from scratch for chemical analysis of complex archeological materials. His studies covered many archeological materials such as stone sculptures, wooden carvings & frames, temple bells, palm leaf books, metallic coins, dating the period of archeological excavations using bone ash obtained from archeological excavations .

Dr.Rao studied the effect of SO₂ and NO_x on marble, environmental pollution on Taj Mahal, Charminar etc. and weathering profiles and preservation of monuments. Gomateswara Statue at Sravana Belahala (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.

Thus, throughout his scientific career, Dr Rao's work was splendid by any measure. His contributions are too many to narrate for any one of those who watched him at close quarters.

Dr.Rao was a man with laudable human qualities and feelings. Dr Rao was an intellectual with philosophical bent of mind. He attended some talks by Jiddu Krishnamurti in January 1974 and his interest in JK's teachings made him start a club by name "Listeners Club" with the objectives to provide a forum/avenue for the interested citizens of twin cities to hear his talks.

The Society

Dr. K.V.Rao Scientific Society was founded in 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 branches of Science.
- ◆ Assist research students either at doctoral or post doctoral level by ways of funds or equipment.
- ◆ Capacity building of local scientific talent
- ◆ An Annual Oration of Original Scientific Work by a Senior Scientist.
- ◆ Promoting Scientific temper in students at school level by way of research projects.

The Society had decided to honour the work of young scientists under the age of 30 years by presenting Annual Research Awards in various fields of science. The Research awards in each of the three categories includes a Silver Trophy and a Cash Award of Rs.10,000/= to one promising Young Scientist and Silver Trophies for two more candidates selected from final presentations. From this year, i.e., 2006, these two candidates shall also receive a cash award of Rs. 5,000/= each.

In order to have transparency in the selection, a panel of judges comprising of eminent scientists and personalities from various specialisations screen the research work in different stages for final award. The names of the candidates selected for the awards are announced on the day of the annual function.

From the year 2006, the Society has decided to present awards to scientists in the fields of Physics and Mathematics also.

The Society has also decided to honour school children for their scientific temper. In co-ordination with Andhra Pradesh State Council of Science and Technology (APCOST), the Society selects six students for these awards each year

It is hoped that the aims 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.

Annual Oration

The Society invites an eminent Scientist to deliver a memorial oration each year and presents the distinguished guest with a silver trophy. We are honoured to have the following personalities presenting the orations in our functions.

Year 2001: Prof.K.Subba Rao, Head of Biochemistry Department, School of Life Sciences, University of Hyderabad.

Year 2002: Dr.Seyed E.Hasnain, Director, Centre for DNA Fingerprinting and Diagnostics, Hyderabad.

Year 2003: Dr.K.V.Raghavan, Director, Indian Institute of Chemical Technology, Hyderabad.

Year 2004: Dr.K.P.C.Gandhi, Director, Andhra Pradesh Forensic Science Laboratory, Hyderabad.

Year 2005: Padma Shri Dr.Gullapalli N.Rao, Distinguished Chair of Eye Health, L.V. Prasad Eye Hospital, Hyderabad

ANNUAL AWARDS AND SELECTION PROCEDURE

YOUNG SCIENTIST AWARD

Dr.K.V.Rao Scientific Society had invited Applications for the Annual Research Awards for the year 2006 from young research scientists working in the fields of

- **Chemistry and Allied Sciences** (which includes Biochemistry, Pharmaceutical Sciences, Genetics, Medicine, Chemical membranes, Agriculture, Nutrition, Geochemistry, Plant Chemistry, Marine Chemistry, Industrial Chemistry, Cellular Chemistry, Environmental Sciences, Microbiology, Polymers, etc.),
- **Physics** (which includes Material Science, Solid State Physics, Nano Technology, Computational Physics, Particle Physics, etc.) **and**
- **Mathematics** (which includes Algebra, Geometry, Applied Mathematics, Complex Analysis, Calculus, Statistics and Probability, etc.)

➤ **Eligibility Criteria for the Candidates:**

The Candidate applying for the Research Award :

- ❖ Should have carried out or should be carrying out research work in any of the universities/deemed universities/other research institutions situated in the state of Andhra Pradesh and registered anywhere in India.

and/or

Should have been registered for the Ph.D. degree in any of the Universities/deemed universities in Andhra Pradesh and carried out or carrying out research work anywhere in India.

- ❖ Should have completed at least one year Research after the date of registration.
- ❖ Should be under 30 years as on 31/12/2005.

➤ **Procedure for Evaluation of the Research Work of the Candidates**

- ❖ The candidates are required to make a power point presentation of their work before a panel of judges (a total of 10 minutes is given for each presentation another 5 minutes for question/answer session).
- ❖ The said panel of judges appointed for evaluation shall select three candidates for the presentation of the awards after the preliminary and final round of presentations in each category.
- ❖ The panel of judges shall announce the names of the Candidates selected for the awards on the day of the annual function to be held in the month of March 2006.

The decision of the panel of judges is final in recommending the candidates for the Research awards.

➤ **Awardees**

Year 2001: Mr.Ch.Venkata Reddy, Indian Institute of Chemical Technology, Hyderabad.

Year 2002: Mr.Radha Kishan Motukori, Indian Institute of Chemical Technology, Hyderabad.

Year 2003: Ms.J.Subbalakshmi, School of Chemistry, University of Hyderabad.

Year 2004: 1. Mr. K.V.S.Ranganath, Indian Institute of Chemical Technology, Hyderabad.

2. Mr.I.Jayakumar, Centre for Environment, Jawaharlal Nehru Technological University, Hyderabad.

3. M.Satish Kumar, Department of Biochemistry, National Institute of Nutrition, Hyderabad.

- Year 2005:**
1. **Ms.Shanti Kalipatnapu**, Centre for Cellular & Molecular Biology, Hyderabad
 2. **Mr. A.Prabhakar**, Indian Institute of Chemical Technology, Hyderabad.
 3. **Mr.Sarat Chandra**, School of Chemistry, University of Hyderabad.

SCHOOL TALENT AWARDS

The Society has started conducting a programme for School Children in collaboration with APCOST (Andhra Pradesh State Council of Science and Technology) from the year 2004. APCOST conducts competitions based on a Topic given by Department of Science and Technology (DST) and selects at least one student from each of the districts from the State of Andhra Pradesh. In all about thirty students are selected for participation from State for the National Children Science Congress, an event conducted annually.

The children evaluated by APCOST are further screened by our Society. The final list of children is prepared by a panel of judges drawn from the scientific community and child psychologists. The Society recognizes six candidates for the awards. This is an effort to encourage scientific temper at school level and also to adopt a few projects of relevance to the society at large.

Awardees:

Year 2004:

1. J.Ravi Chandrika (ZPHS, Nellore District)
2. A.Subbaiah (MPUP School, Krishna District)
3. A.Shanti (SKVTEM High School, Rajahmundry)
4. Y.Rahul Krishna (Triveni School, Khammam District)
5. Kum. Kadambari Sridhar (DAV Public School, Hyderabad)
6. Kum.Afreen Sharief (DAV Public School, Hyderabad)

Year 2005:

1. C.P.Varun, SFS School, Seethammadhara, Visakhapatnam
2. Soumya Iyengar, DAV Public School, Safilguda, Hyderabad
3. Jatin Puri, RBVRR High School, Mubarak Nagar, Nizamabad
4. P.Raveendra, MPUP School, Bhattuvari Palem, Kaligiri, Nellore
5. K.Tejaswini, J.M.J.High School, Nakkalakutta, Hanumakonda, Warangal
6. Bhushra, St.Josephs High School, Near Fly Over, Guntur

Year 2006:

1. B.Sethuram (Montessori School, Vidyanagar, Kurnool)
2. B.Sukesh (Century High School, Khammam)
3. Sri Sai Saketh (Krishnaveni Talent School, Manchiryal, Adilabad)
4. Ch.Srivalli Lavanya (N.K.V.High School, Rajahmundry, East Godavari)
5. N.Ramu Naidu (ZP High School, Vavilpadu, Vizianagaram)
6. K.Anjani (Rotary (E/M) High School, Rachanapally, Anantapur)

PANEL OF JUDGES

Young Scientist Awards

A panel of judges consisting of experts from various fields of research from various universities, research laboratories and industry are appointed to select the candidates for the awards. The panel of judges is different for the preliminary and final rounds of selection. Our panel consists of :

- Prof. G.Srimannarayana, Retired Professor, Department of Chemistry, Osmania University
- Prof. B.Sethuram, Retired Professor, Department of Chemistry, Osmania University
- Prof. G.David Krupanandam, Professor, Department of Chemistry, Osmania University
- Prof.V.Jaya Thyagaraju, Professor, Department of Chemistry, Osmania University
- Dr.Amitabha Chattopadhyaya, Scientist, Centre for Cellular and Molecular Biology, Hyderabad.
- Mr.M. R.Krishnaiah, Chemical Engineer and Industrialist
- Dr.Ch.Mohan Rao, Scientist, Centre for Cellular and Molecular Biology, Hyderabad.
- Dr.J.Gowrisankar, Deputy Director, Centre for DNA Fingerprinting and Diagnostics, Hyderabad.
- Dr.N.Madhusudhan Rao, Scientist, Centre for Cellular and Molecular Biology, Hyderabad.
- Dr.J.Arunachalam, Scientist, Nuclear Fuel Complex, Hyderabad.
- Prof.T.Sunderaramiah, Retired Professor, Department of Chemistry, Osmania University
- Dr.K.V.A.Ramiah, Department of Biochemistry University of Hyderabad
- Prof.P.K.Dubey, Head, Department of Chemistry, JNTU, Hyderabad.
- Prof.S.Satyanarayana, Professor, Department of Chemistry, Osmania University
- Prof.Ch.Anajaneyulu, Professor, Department of Chemistry, Osmania University
- Dr.T.Malati, Head, Department of Biochemistry, Nizam's Institute of Medical Sciences, Hyderabad
- Prof. P.V.Subba Rao, Retired Professor, Department of Chemistry, Andhra University, Visakhapatnam
- Prof.K.Veera Reddy, Professor, Department of Chemistry, Osmania University
- Prof. J.Shobanaditya, Head, Department of Biochemistry, Osmania University
- Dr. M.Raghunath, Deputy Director & Head, Division of Endocrinology and Metabolism, National Institute of Nutrition, Hyderabad.
- Dr.Jagannadham, Department of Chemistry, Osmania University
- Dr.Basavaiah, School of Chemistry, University of Hyderabad
- Dr.Raveendra Reddy, College of Pharmacy, Osmania University
- Dr.Nageswara Rao, Osmania University
- Dr.P.Sarah, CRV College of Engineering, Osmania University
- Prof.T.Radhakrishna, Department of Physics, JNTU, Hyderabad
- Dr.G.Prasad, Osmania University

School Talent Awards

- Dr. L. Srinivasa Rao, President, Dr.A.S.Rao Awards Council, Hyderabad
- Dr.B. Dinesh Kumar, Sr. Scientist, National Institute of Nutrition, Hyderabad
- Dr. K.Sridhar Rao, Scientist, Centre for Cellular &.Molecular.Biology, Hyderabad
- Dr. T Sundararamaiah, Vice President of the Society
- Mr.Seshu, Principal, Sherwood Academy of Education, Hyderabad
- Mrs Anita Gupta, Teacher, Sherwood Academy of Education, Hyderabad
- Dr. Niranjana, Child Psychologist, Niloufer Hospital, Hyderabad.
- Dr.Gauri, Child Psychologist, Niloufer Hospital, Hyderabad
- Dr. K.Niranjana Reddy, Child Psychologist, Hyderabad.

Enrolment Form for Membership
To
Dr.K.V.Rao Scientific Society
(Regn. No.: 85/2001)

To,
Jt. Secretary
Dr.K.V.Rao Scientific Society
8-2-293/82/A/431/A,
Road No. 22, Jubilee Hills
Hyderabad – 500 033

Name - ----- Age - -----

Residential Address - -----

Organisation Name - -----

Occupation/Designation - -----

Address of Office - -----

I am interested in becoming a member of your organisation as an Associate/Life/Patron Member.

(Signature)

For Patrons:

On behalf of our organisation Mr/Ms _____ is nominated to become the member.

(Signature)

• Membership Fees for:

- | | | | |
|-------|------------------|---|-------------------------|
| (i) | Associate Member | - | Rs.500/= only per annum |
| (ii) | Life Member | - | Rs.5,000/= only |
| (iii) | Patron Member | - | Rs.10,000/= only |

For details contact the following:

**The Secretary
Dr.K.V.Rao Scientific Society,
8-2-293/82/A/431/A,
Road No. 22, Jubilee Hills
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