

Dr. B.V.S.R. Murty – “The Guiding Light” in the Formation and Development of KVRSS

Dr. Balajapally Venkata Sriramachandra Murty, a doctorate from Andhra University, is the son of Smt. Venkata Ramanamma and Sri Godavari Raju.

Dr. Murty started his career in the Salt Department (Government of India) before joining Geological survey of India in 1963. He served in various capacities in GSI and retired as Director (Geochemistry) in 1987. He also worked on deputation in Mineral Exploration Corporation, Hyderabad, where he set up Chemical Laboratory.

Dr. Murty is a person of high scientific temperament and has been a source of inspiration to his juniors. His main interest was “Studies on Diamond Bearing and non-Diamond Bearing Kimberlites”. His work on trace element studies on Kimberlite rocks and his contribution to several research projects like Mangampeta Barytes, complete analysis of Bauxites by Atomic Absorption Spectrometer earned him laurels in GSI.

After retirement Dr. Murty devoted himself towards spirituality. He did a lot of research on the life and teachings of Sri Sri Sri Vallabhacharya and wrote a commentary “Madhurastakam” and “Sri Purushottama Nama Sahasram” Telugu translation to “Nama Chandrika” by Srimadraghunadha which were published by TTD.

At GSI, Dr. Murty worked on many projects with Dr. K.V. Rao and the mutual professional respect brought them together and became family friends. Along with Dr. Rao, he started the initiative – “Listener’s Club”, to understand and propagate the teachings of the philosopher Dr. Jiddu Krsihnamurthy.

Dr. Murty, who understood the vision of Dr. Rao, enabled the formation of Dr. K.V. Rao Scientific Society in 2001. He guided the Society in its formative years and steered it to its present position. He served in the capacity of President all these years and health not permitting active participation, has expressed his wish to step down. All the members of the Society join me in expressing our thanks and gratitude to Dr. Murty for his contribution to the Society. We wish him a long and healthy life.



Dr. K.J.R. Murthy (1939-2011) – Our Thanks & Tribute to an Excellent Physician, Teacher & Researcher

Dr. KJR Murthy, a man of extraordinary vision, combined the qualities of an astute clinician and a researcher par excellence.

Born to Dr. KSN Murthy & Smt. Kamaladevi on 19th October, 1939, Dr. K.J.R. Murthy is remembered as doyen of Respiratory Medicine. He obtained his MD in Internal Medicine from Guntur Medical College A.P. He was awarded the Commonwealth fellowship in Respiratory Medicine MRC Unit, University of New Castle, U.K.

He developed the Operational Strategy for Hyderabad Urban DOTS. He was also involved as a Project Coordinator in the implementation strategy of HIV/AIDS– Andhra Pradesh State AIDS Control Society (APSACS) Hyderabad.

Dr. Murthy not only acted as a catalyst to the establishment of Critical Care Unit, Chest OP, Allergy and TB clinics in Mahavir Hospital, but also promoted research in various directions. His pioneering leadership made a long-lasting impact on the treatment of tuberculosis and was known the world-over as “Mahavir Hospital Model”. Dr. K.J.R. Murthy was instrumental for Bill Clinton’s visit to Mahavir Hospital which was an event in itself.

As the founder Secretary of Dr.K.V.Rao Society, Dr. K.J.R. Murthy was instrumental in guiding and formulating the Society’s objectives and giving direction in all its activities.

He was the main motivating force for many young upcoming scientists and stimulated their scientific curiosity and rekindled several scholars in innovative thinking.



Programmes conducted in the Year 2014-15

The Year 2014-15

The Society successfully conducted various events in the academic year 2014-15.

Science Quiz Awards

The 9th Annual Science quiz was successfully conducted in five major cities of Telangana and Andhra Pradesh, viz., Hyderabad, Warangal, Vijayawada, Visakhapatnam and Tirupati. The finals were conducted at Hyderabad.

Each of the zonal rounds has a preliminary round from which six teams are selected for the final round and two teams each are selected for the Finals. One wild card entry was selected from among the finalists of the zonal rounds based on its performance.

The Winners and Runners-up at the zonal competitions were:



Winners

Mr. E Sai Gopal & Mr. G Laxman Varma,
Kavitha Junior College, Chilukur, Khammam.
Warangal Zonal Round



Runner-up - I

Mr. P Ruthvik Aditya & Mr. T Siddharth,
Sparkrill International School, Anantha Sagar, Hasanparthy.
Warangal Zonal Round



Winners

Mr. G Lokesh Shady & B Anudeep Reddy,
Little Angels High School, Bhavani Nagar, Tirupati.
Tirupati Zonal Round



Runner-up - I

Mr. B Sahit Reddy & Mr. D Yeswanth Reddy,
St. Joseph's English School, N R Peta, Kurnool.
Tirupati Zonal Round

Programmes conducted in the Year 2014-15



Winners

Mr. V Samul Sudheer & Mr. K Sai Rohit,
Sri Prakash Vidyaniketan, Seetammadhara, Visakhapatnam.
Visakhapatnam Zonal Round



Runner-up - I

Mr. S Mrinal & Ms. Nikhat Sabnam,
Sri Prakash Vidyaniketan, Uplands, Visakhapatnam.
Visakhapatnam Zonal Round



Winners

Mr. N Tarun & Mr. G A Vikas,
Sri Gayatri Junior College, Mogalrajpuram, Vijayawada.
Vijayawada Zonal Round



Runner-up - I

Mr. E Sai Nived & Ms. K Chandra Lalita,
V P S Public School, Mogalrajpuram, Vijayawada.
Vijayawada Zonal Round



Winners

Mr. V Dhanush & Ms. G Vennela,
Teja Vidyalaya, Kodada, Nalgonda.
Hyderabad Zonal Round



Runner-up - I

Mr. Pranav Mihir Kandada & Mr. Arjun S Kallapur,
Hyderabad Public School, Begumpet, Hyderabad.
Hyderabad Zonal Round

Programmes conducted in the Year 2014-15



Vijayawada Finalists

Each year the format of the finals is designed uniquely to test the Scientific knowledge of the students in totality, and is highly appreciated by the students. The various rounds included experiment round, buzzer round, pounce and bounce rounds, etc., and kept not only the students on their edges but also the audience spell bound. One round was based on a talk was presented by Dr. Sushil Alimchandani, Scientist and consultant to Biotechnology companies. He spoke on “ Ebola Virus”. The team from Hyderabad Public School, Hyderabad, edged past the team from Narayana Olympiad School, Vijayawada, to emerge winners.



Winners

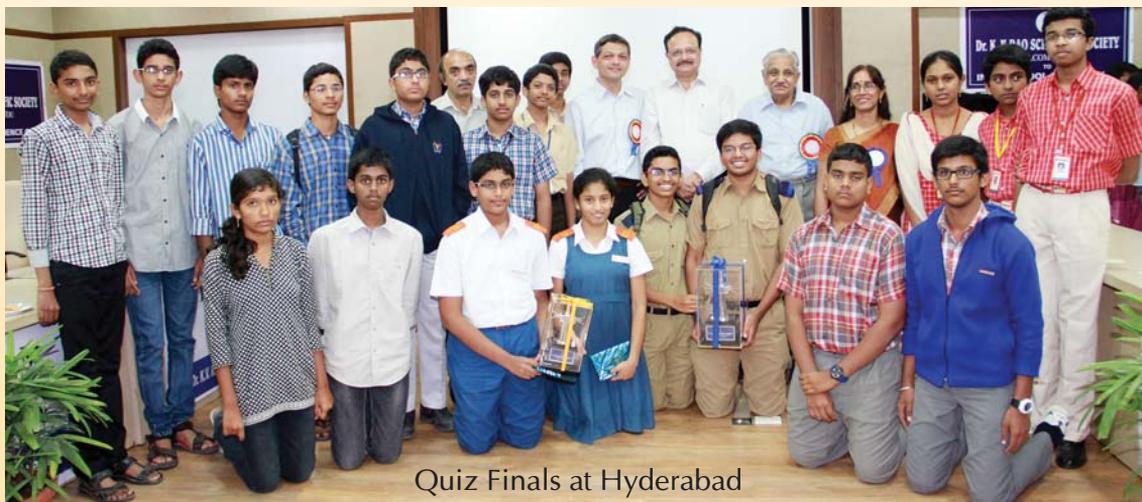
Mr. Pranav Mihir Kandada & Mr. Arjun S Kallapur,
Hyderabad Public School, Begumpet, Hyderabad.
Finals at Hyderabad



Runner-up - I

Mr. E Sai Nived & Ms. K Chandra Lalita,
V P S Public School, Mogalrajpuram, Vijayawada.
Finals at Hyderabad

Programmes conducted in the Year 2014-15



Quiz Finals at Hyderabad

Programmes conducted in the Year 2014-15

School Talent Awards

The Society conducts an interactive programme for school students selected by APCOST to represent Andhra Pradesh in National Children Science Congress. Since bifurcation, the Society had the opportunity to serve two states, viz., Telangana and Andhra Pradesh. The teams present their work based on a theme and sub-themes given by Department of Science & Technology. A panel of eminent educationists and scientists who while evaluating their work also guide them on the important points in both subject and presentation. A total of six candidates were selected for scholarships.



Ms. B Suma,
Z P S School, Nagaram, Palvancha, Khammam, Telangana.
Presented project entitled
"Impact of Stone Crusher on Environment"



Mr. Shaik Muzammil Pasha,
Castle Town High School, Rajeev Nagar, Hyderabad, Telangana.
Presented project entitled
"Electro Magnetic Radiation Shield"



Ms. T Divya,
St. Johns E M High School, Vijayawada, Krishna. AP.
Presented project entitled
"Green World - Through Sustainable Practices"



Mr. A Hari Sri Jayanth,
Z P High School, B.J Puram, Vizianagaram. AP.
Presented project entitled
"Conservation of Agriculture for Sustainable Land Use"

Programmes conducted in the Year 2014-15



Ms. L. Geethika Patnaik,
Sri Kakatiya E M High School, Bhimavaram, W. Godavari, AP.
Presented project entitled
"Ants too Understand Weather and Climate"



Mr. Ch Vishnu Priya,
Sri Gowthami Smart School, Rajamandry, E. Godavari, AP
Presented project entitled
"Extinction of Dragonflies due to Climatic Changes"



Programmes conducted in the Year 2014-15

SPARK - Science Fair Awards

This event was conducted for the fourth consecutive year and has started attracting quality scientific work by the school students. More than ninety projects from various schools, including some from Tamil Nadu, were received for initial scrutiny from which thirty eight projects were selected for the competition held on 3rd January 2015. A panel of eminent scientists and science teachers judged the projects and a total of six awards were given in two categories. A few projects which showed promise were also presented with consolation awards. The awardees are as follows:

Category-I / Classes 7th to 9th



Winners

Mr. K Tarun Reddy, Mr. G Vishal & Mr. B Snehit Reddy

Sherwood Public School, Hyderabad.

Presented project entitled
"Automatic Level Crossing Gates by Using Sensors"



Runner-up - I

Ms. A Manasa & Ms. S Sathya Veni

Government High School, Zamistanpur, Hyderabad.

Presented project entitled
"Rekheeya Samaasaala Gunakaara Keli"



Runner-up - II

Ms. N Ahladita, Ms. J V Medhana

Sri Prakash Vidyaniketan, Seetammadhara, Visakhapatnam.

Presented project entitled
"Automatic Wheel Chair using Gesture Recognition"

Programmes conducted in the Year 2014-15

Category-II / Classes 10th to 12th



Winners

**Mr. S Dharun Kumar, Mr. J Mothilal Rathnam,
Mr. S Saravanan & Mr. S V Sriram**

SMB Matriculation School, Dundigul, Tamilnadu.

Presented project entitled

“PC for D² – Personalised Computer for Deaf and Dumb”



Runner-up - I

**Mr. Mohammad Nasear Ahmed, Mr. V Roshan Raju,
Mr. Saaketh Buddhiraju & Mr. Prashanth Nikhil**

Bharatiya Vidya Bhavans, RC Puram, BHEL, Hyderabad.

Presented project entitled

“Road Safety Using Weight Dectectors in Blind U Turns”



Runner-up - II

Mr. P Dheeraj & Mr. Ayush Chauhan,

Defence Laboratories School, RCI, Rajendra Nagar, Hyderabad.

Presented project entitled

“Tapping Energy from Footsteps”



Programmes conducted in the Year 2014-15



Programmes conducted in the Year 2014-15

Other projects which were appreciated by the panel received special mention awards and are as follows:

Special Consideration Awardee

Mr. B Naga Sai Rishi

Johnson Grammar High School, ICSE.

Presented project entitled

“Density Based Traffic Signal System using Infrared Sensors and Micro Controller”

Special Consideration Awardee

Mr. Shaik Muzammil Pasha,

Castle Town High School, Rajeev Nagar, Hyderabad.

Presented project entitled

“Electro Magnetic Radiation Shield”

Special Consideration Awardee

Mr. A Bhuvindra,

Z P P H School, Pasivedala, West Godavari.

Presented project entitled

“Gas Leak Detector Works on the Principle of “Purity of the Air”

Science Debates

A new event, Science Debates was started in this academic year. The first one in this series was held on 13th December, 2014 and the topic was “The Advantages of Genetically Modified Crops Outweighs its Disadvantages”. Students from three schools were invited to participate. The participants from the six teams showed the level of research done to put forward their points of view. The event was held with the help of inputs from Young Orators Club team. The judges, while assessing the arguments, also provided knowledge to the students on various aspects of debating, policies governing GM foods and the current research aspects. The Society will be conducting debates on various scientific topics on a regular basis.



Programmes conducted in the Year 2014-15



Science Debate



Programmes conducted in the Year 2014-15

Research Awards

These awards are given to scientists working in basic sciences under the broad fields of Physics, Chemistry, Biology and Mathematics. Specifically students below thirty years and actively involved in research in the state of Andhra Pradesh were being given these awards. From the academic year 2014-15, as a part of extending the reach of the Society, the competition has been conducted for researchers from the states of Telangana, Andhra Pradesh, Tamil Nadu and Karnataka.

The awardee candidates shall be announced during the annual function of the Society.



Annual Memorial Oration Award

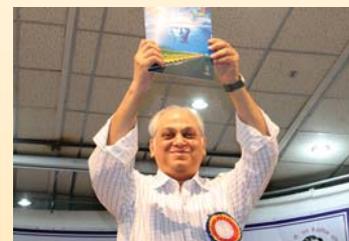
Every year the Annual function of the Society is graced by an eminent Scientist who presents the Dr. K.V. Rao Memorial Oration for the year. This year we have Dr. Sourav Pal, Director, CSIR-National Chemical laboratory, Pune presenting the oration. The Director of Indian Institute of Chemical Technology (IICT), Hyderabad, Dr. Ahmed Kamal is the Guest of Honour.

Programmes conducted in the Year 2014-15

Issue of Special Postage Cover On Dr. K.V. Rao

To commemorate 15 years of service to science by Dr. K.V. Rao Scientific Society the Department of Posts, A.P. Circle, Hyderabad issued a Special Postage Cover on Dr K.V. Rao (in whose honour the Society has been formed on March 21, 2015).

The Chief Guest for the occasion was Sri GMN Sastry, Deputy Director General (Chemistry), Geological Survey of India, Hyderabad. Most part of Dr. K.V.Rao's career was at GSI and we are very happy that Sri Sastry has consented to grace the occasion. Col. M. Eleesha, Post Master General, Hyderabad Region and the other officials from the Department of Posts, India were present. The Special Cover was released by Col. Eleesha and Sri G.M.N. Sastry. Prof. Amitabha Chatopadhyay, Outstanding Scientist, CCMB, who has been associated with the Society since 2002 and extending support in various capacities as judge, mentor and supervisor was the Guest of Honour. With the wishes from scientific community and all the well-wishers we expect to have the opportunity to have many more such milestones in our journey.



Programmes conducted in the Year 2014-15

विशेष आवरण SPECIAL COVER



एक वैज्ञानिक को श्रद्धांजलि
डॉ. के. वी. राव (1920-2002)
जिनके सम्मान में
डॉ. के. वी. राव वैज्ञानिक समिति
2001 में स्थापित की गई।



Tribute to a Scientist
Dr. K. V. Rao (1920-2002)
in whose honour
Dr. K. V. Rao Scientific Society
was formed in 2001



21-3-2015
हैदराबाद - 500 063
Hyderabad - 500 063



Programmes conducted in the Year 2014-15

Activities in Progress

This year marks 15 years of functioning of the Society. The Society plans to contribute in a larger scale and in the process identify and encourage the students with good scientific aptitude. Also the Society wishes to become one-stop forum for any scientific activity in the city of Hyderabad. Towards this goal the Society has started developing infrastructure at its premises and has simultaneously been conducting some activities.

We present here some of the activities that the Society has started and would like to consolidate in the coming years:

- ❖ **Science Laboratory (during school hours):** For school children in the premises to cater to the requirement for those schools in the vicinity that do not have the basic facility for science experiments. The infrastructure is being developed and should start function in the coming academic year.



- ❖ **Science Club (during and/or after school hours):** To set up a Science Club equipped with basic equipment so that creative students could develop projects / conduct experiments etc. for any feasible idea.
- ❖ **A Lecture Theatre** has been created and lectures on popular science subjects and debates will be held at regular intervals.

A model of self-sustainability is being planned around the above ideas.

- ❖ **Involvement of awardees with KVRSS :** Awardees of the Society have been doing very well in their careers and many have achieved high positions in various Institutions and Organizations. It is clear that this is a huge resource that must be harnessed to further improve the functioning of the Society.

The Society has already started inviting them as judges and for guest lectures, however, we plan to harness their intellect for mentoring young students and as resource persons for the Society.

A detailed profile of each awardee is being compiled and will be posted on the net and these awardees may be requested to mentor students who have interest in the subjects of specialization of the awardees.

Programmes conducted in the Year 2014-15

- ❖ **Create a KVRSS Awardees and Associates Group:** For sharing information, debates and discussion, and above all – for helping each other. The plan is to develop a KVRSS honour-code – that one member goes out of his way to help another and develop a system of recognizing such help within the group.
- ❖ **Interaction with Institutions for Children Awardees:** Through its activities including the distinguished Scientist Oration Lectures, KVRSS has developed excellent contacts with the Heads of Institutions of International repute like CCMB, IICT, NIN, University of Hyderabad, Osmania University, etc. A suggestion is to capitalize on the goodwill generated and use it to get the KVRSS awardees to have access to these institutes of learning. An understanding has to be discussed with interested organisations.
- ❖ **Recognizing Teachers:** Teachers are the single most important agents for developing love for science among students. Some suggestions are:
Develop/collect teaching aids with contributions from teachers.

Institute an annual award to teachers who have contributed significantly to develop interest resulting in the pursuit of science by students.

Facilitate training of science teachers.

Our Society proposes to take the suggestions from Senior Scientists and Young Scientists also in this regard to help us develop into an institution.

Recap of Annual Function - 2013-14

Annual Dr. K. V. Rao Memorial Oration

Prof. Uday B. Desai, Director, Indian Institute of Technology - Hyderabad presented the 15th Annual Memorial Oration. He spoke on “Innovations in Science and Technology” The talk brought forth the importance of.



Prof. Uday B Desai,
Director, Indian Institute of Technology - Hyderabad,
delivering the **Memorial Oration**



Prof. Uday B Desai,
Director, Indian Institute of Technology - Hyderabad,
receiving the **Memorial Oration Award** from our
Vice-President **Prof. T Sundararamaiah**

Recap of Annual Function - 2013-14

Young Scientist Awards

The following are the research students who received the awards in the Year 2013-14

Mathematics



Winner

Mr. P Chiranjeevi,

University of Hyderabad, Hyderabad.
(Supervisor: Prof. V Kannan).

“Dynamics on Locally Compact Hausdorff Spaces.”

Mathematics



Runner-up - I

Mr. K Bhargav Kumar,

University of Hyderabad, Hyderabad.
(Supervisor: Dr. T Suman Kumar).

“Nonlinear McKendrick -
von Foerster equation with diffusion”

Mathematics



Special Consideration Awardee

Ms. K Rajya Lakshmi,

Acharya Nagarjuna University, Guntur.
(Supervisor: Prof. B. Re. Victorbabu)

On second order slope rotatable designs under tri-
diagonal correlation structure of errors

Physics



Winner

Mr. T Karthik,

Indian Institute of Technology, Hyderabad.
(Supervisor: Dr. Saket Asthana)

Evidence for the suppression of intermediate
antiferroelectric ordering and their Structure property
correlation in Cobalt substituted
 $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ ceramics

Recap of Annual Function - 2013-14

Physics



Runner-up - I

Mr. M Pradyumna,

Sri Sathya Sai Institute of Higher Learning, Puttaparthi.
(Supervisor: Prof. K Venkataramanaiah)

“Graphene as a Smart Spacer Material on Engineered Thin Film Hybrids for the Amplification of Surface Plasmon Coupled Emission Towards Sensing”

Physics



Runner-up - II

Mr. P Suresh,

University of Hyderabad, Hyderabad.
(Supervisor: Dr. S Srinath)

“Structural, Electrical, and Magnetic Properties of Pure and Rare Earth Doped BiFeO₃”

Biology



Winner

Ms. G Narmadha Reddy,

Centre for DNA Fingerprinting and Diagnostics, Hyderabad.
(Supervisor: Dr. Maddika Subbareddy)

“Identification and Characterization of PHLPP Associated Proteins in Regulation of Cell Survival”.

Biology



Runner-up - I

Mr. S Santhi Kumar,

National Institute of Pharmaceutical Education and Research (NIPER), Hyderabad.
(Supervisor: Dr. N. Satheesh Kumar)

“Quantitation and Pharmacokinetics of an Active Metabolite and Dopamine Antagonist – Paliperidone in Rats using LC-MS/MS”.

Recap of Annual Function - 2013-14

Biology



Runner-up - II

Ms. Manasi,

BITS-Pilani, Hyderabad campus, Hyderabad.
(Supervisor: Dr. Vidya Rajesh)

"Biosorption of Cadmium using a Novel Microbe Isolated from an Electronic Industry Effluent".

Biology



Special Consideration Awardee

Mr. P Shiva Krishna,

Kakatiya University, Warangal.
(Supervisor: Prof. M A Singaracharya)

"Extraction, Purification, Characterization and Biological Activities of Red Pigment (Prodigiosin) from Marine Bacterium Vibrio sp".

Chemistry



Winner

Ms. Pramiti Hui,

University of Hyderabad, Hyderabad.
(Supervisor: Prof. R Chandrasekar)

"Functional (Photonic and Magnetic) Nano/Micro Scale Solids for Memory/Opto-Electronic/Sensing Devices".

Chemistry



Runner-up - I

Mr. D Srinivas,

(ACRHEM), University of Hyderabad, Hyderabad.
(Supervisor: Dr. K Muralidharan)

"Design and Synthesis of Nitrogen-rich Energetic Materials"