## **NEWS AND NOTES**

**Earth Day, 22<sup>nd</sup> April 2013** – **"Waste to Wealth"** – P. Krishnamurthy and K.S. Godhavari, Geological Society of India, Bangalore (*Email: gsocind@gmail.com*)

The awareness programmes on Earth and Environment was conducted in numerous schools in and around Bangalore and other district towns of Karnataka prior to this years' Earth Day celebrations. The programmes were conducted jointly by the Geological Society of India and the Centre for Human Resources Development (CHRD), Bangalore. The theme for the Earth Day-2013 was "Waste to Wealth: Urban and rural wastes and the challenges posed to the Earth and Eco-System due to improper waste disposal and opportunities for wealth generation."

A total of 33 schools (8 from Bangalore and 25 from outside Bangalore) participated in the awareness programmes. The activities included were essay writing, slogans, painting and objective tests with reference to the theme besides general themes that pertain to the challenges related to Earth and its environment. Selection of students for 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and consolation prizes were made at the individual school level and also at the all school level (selection from the prize winners of individual schools).

Resource persons from the Geological Society of India (R.H. Sawkar, P. Krishnamurthy, M.S. Rao, K.S. Godhavari), Geological Survey of India (S.P.Venkata Dasu) and CHRD (G.K. Jayasimha Rao and N.S. Natarajan) participated in the awareness programmes. S.P. Venkata Dasu covered most of the schools and gave lectures on 'Earth and Environment'. Lectures were followed by interactive sessions with both students and teachers. The culminating events included an excursion for teachers on the 21<sup>st</sup> April 2013 and the main function on Earth Day – 22 April 2013 at "Kengal Hanumanthiah Kala Bhavan" at Hanumanthanagar, Bangalore.

During the day-long excursion the teachers were taken to the Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA). Dr. Kavitha of the Centre gave a presentation on 'Yoga' and students of the Centre demonstrated simple stretching postures that effectively improve breathing and also activities that improve alertness. This was followed by a visit to the Smart School, Magadi Road where the teachers were exposed to the Earth's history through an open air museum of rock samples, ranging in age from 3 billion years from Karnataka and other states of India. The museum also had life-size models in fiberglass of numerous dinosaurian fossils. In addition the school has a collection of exotic trees, plants and herbs. The teachers were also shown as to how the garden waste can be converted into useful manure by composting in pits. This was followed by a visit to Lalbagh where they were provided

a historical account of the famous Botanical garden, the numerous species of trees, plants and others besides the water crisis the garden is facing due to urbanization and its impact on the lakes that supplied water to the garden. The next visit was to an Effluent Treatment Plant (ETP). The plant receives effluent water from a sewerage treatment plant from J.P. Nagar, that purifies about 1.5 MLD of water and supplies it to Lalbagh park to maintain the greenery. Dr. Krishna Raju, Dy. Director, Lalbagh Horticulture Dept., Govt. of Karnataka aptly demonstrated as to how the waste water from sewerage treatment Plant (STP) can be used for agricultural and drinking purposes and thus reused water can generate wealth. The excursion concluded with a visit to the Karnataka State Pollution Control Board office where a lecture was organized on environmental pollution and how the board effectively prevents pollution. The lecture highlighted the plastic menace and emphasized the need to eliminate the use of plastics as also its alternate use as a material in asphalting. The lecture was followed by a documentary on 'Controlling Pollution".

The Earth Day 2013 celebrations began with a walkathon by students, teachers and others (a large spectrum of people comprising scientists, engineers and others). The procession comprising students and



Walkathon by students, teachers and others. Dolu kunita by R.V. Girls High School, Bangalore.



Interactive session with students and teachers

teachers from participating schools, was led by a colourfully dressed, drum-beating dance group (*Dolu Kunita*) of RV Girls High School, Bangalore that attracted passersby. After the walkathon the interaction programme and lectures began at 10 a.m.

Dr. K.S. Godavari, Secretary, Geological Society of India formally welcomed the gathering and gave a brief account of the Earth day activities conducted by the Society since 2010. The first lecture was by Dr. Sudhir Deshpandey, Director, S-VYASA on 'Yoga Therapy'. Dr. Sudhir Deshpandey outlined the basic attributes of Yoga and how it is a holistic system for curing almost all ailments. This was followed by a lecture on 'Earth and Environment' by Dr. S.P. Venkata Dasu, wherein he dealt with the origin of the Earth, the solar system, followed by the evolution of life, the flora and fauna through geological time with the appearance of the humans in the last 2 million years and the degradation of the environment (land, air and water) through pollution. He also outlined briefly the generation of wealth from agricultural, domestic and other wastes by proper means such as composting, new products and other applications. Prof. K.R.Y. Simha of Indian Institute of Science conducted a brisk and brief interactive session with both students and teachers and emphasized the need to constantly keep in

mind the spirit of Earth Day and to perform ones' duties. A documentary on 'Environmental Pollution and Methods of Mitigation' produced by the Pollution Control Board of Karnataka was shown to the audience. This was followed by a brief session on feedback from students and teachers on the Earth Day awareness programmes since January 2013. There was much appreciation on the programmes conducted, especially the visit to the ETP at Lalbagh. There was also a request to conduct such programmes at the district level so that it benefits a larger section of rural and semi-urban students and teachers.

The main function of the day began at 2 p.m. with invocation and lighting of the lamp by the dignitaries. R.H. Sawkar, Secretary, Geological Society of India, welcomed the chief guest Dr. Y.N. Yellapa Reddy, IFS, Environmentalist, guest of honor K. Amaranarayana, IAS, Secretary, Commerce and Industries Department. Government of Karnataka and President of the function Dr. M. Sudhakar, Advisor, MoES and the guests including students and teachers. Sawkar also briefly dealt with the importance of the Earth Day programmes and the Society's mandate to conduct such programmes. P. Krishnamurthy gave an account of the theme chosen for the Earth Day 2013 which stemmed from the challenges faced by the Bangalore metropolitan area with regard to waste disposal and the many options of wealth generation from wastes of diverse types. Such approaches are inevitable considering the severe pollution problems of water bodies posed by improper disposal of wastes on the land, since it is extremely difficult to reclaim a highly polluted ground water system besides extinction of several species of flora and fauna from polluted surface waters.

After releasing the booklet on "Waste to Wealth: Urban and rural wastes and challenges posed by improper disposal on the Earth and Eco-system and opportunities for wealth generation", Y.N. Yellapa Reddy



Releasing of the booklet on Waste to Wealth.



spoke about the problems of plastics and other pesticides and insecticides in the domestic and agricultural sector and their side-effects on the humans and animals. He proposed to discontinue such practices so as to prevent further remedial treating afterwards. K. Amaranarayana provided an account of the case study of plastic menace in the forest areas of Western Ghats around Biligirirangana Hills and Himad Gopalaswamy Betta and how successfully clean-

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up activities were conducted. He called for such approaches involving all the stake holders from the area concerned.

In his Presidential address, Dr. M. Sudhakar pleaded for adopting a simple living style avoiding polluting substances such as plastic bags and bringing back the old cloth-bag culture during shopping. He also emphasized the needs for the 'Future Earth' namely, food, water and energy and the challenges in these three domains especially when climate change has become a reality in the context of food and water security. The dignitaries congratulated the winners of the competitions on the four themes held at the school level (339 students) and at the all school level (19 students) and distributed prizes. The function ended with a formal vote of thanks by G.K. Jayasimha Rao, Director, CHRD.