



Capsule 42

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The World Meets at Heureka

First Science Centre World Congress

For Science Centre professionals all over the world, all roads unmistakably led to Helsinki, the capital city of Finland, where the first ever Science Centre World Congress was held during June 14-17, 1996.

More than 500 science centre experts from 48 countries met and exchanged their views on different aspects of the science centres dotted all over the globe. The "First Science Centre World Congress", which came into being as a joint initiative of Association of Science Technology Centres (ASTC) and European Collaborative for Science, Industry and Technology Exhibitions (ECSITE), was hosted by Heureka, the Finnish Science Centre.

Located at Vantaa, only 10 minutes' drive from Helsinki International Airport, the centre has witnessed live discussions, valuable interactions of ideas and many future planning of development during these four days of the month of June. Workshops, contests, live science shows etc. were the other features of the Congress. The theme for the Congress was Learning For Tomorrow. The topic was meticulously selected keeping in mind the very important role the science centres will have to play in shaping the course of education in future. The challenge has been taken very seriously by the science centres all over the world and they

are all set to make a major contribution towards the global educational system.

The delegates discussed on the possibility of global partnership for developing a large network of science centres for science popularisation. They particularly discussed the problems of developing countries in Asia-Pacific region, Africa and Latin America and stressed on the need for collaboration in design of exhibits, training of personnel and use of electronic media like Internet for exchange of information. In view of the remarkable work done by National Council of Science Museums, India, the delegates hoped that India will assume a leading role in this global collaboration. The meeting also discussed various international collaborations, the challenges of 21st century, travelling exhibition, human resources etc.

The opening ceremony was held in the Grand Hall of University of Helsinki. Prof. Yash Pal, former chairman of the University Grants Commission of India and an eminent scientist, delivered the keynote address of the inaugural session. A five member delegate from India participated in the Congress. Indian delegates delivered special lectures on different aspects of science popularisation in India.

The professional sessions of the congress was suitably interspaced by excursions and a varied cultural programmes. The post-congress tour to different science centres was also enjoyed by the participants.

New honour for Dr Saroj Ghose

The delegates in the First Science Centre World Congress held recently in Helsinki, Finland, unanimously elected Dr Saroj Ghose, Director General, National



Dr Saroj Ghose conferring with delegates at Science Centre World Congress.

INTERNATIONAL

Council of Science Museums, India as the Chairman of the World Congress of Science Centres for a period of three years. The showering of this honour to Dr Ghose may be well considered as a mark of deep respect for and recognition of his leading role in spearheading the science centre movement in India and abroad.

Dr Ghose, the present incumbent for the chair of President, International Council of Museums (ICOM), Paris and a recipient of Padmashree, Indira Gandhi Award from Indian National Science Academy and Hari Om Trust award from

University Grants Commission, is known in the country and abroad for his pioneering role in popularising science through a large network of science centres. Incidentally, Dr Ghose has been holding the Presidentship of ICOM since 1992.

2nd World Congress at Science City, Calcutta

The 2nd Science Centre World Congress will be held at Science City, Calcutta from January 11 to 15, 1999. The delegates in the 1st World Congress unanimously accepted the invitation of the Mayor of Calcutta to hold the 2nd World Congress at Calcutta.



Prof Yash Pal delivering Inaugural address.

The emerging Science City on the E M By-pass will be the venue of the congress. In his invitation, Mayor hoped that the city of Calcutta, around which modern science and technology evolved in India during last two hundred years will spare no efforts to extend the maximum hospitality to the delegates of the congress. While Calcutta rejoices at the addition of this new feather to its cap of scientific heritage, the Science City, the first of its kind in India, starts preparation for the congress. With its most modern and the best equipped infrastructure, Science City is surely the right choice.



A view of Science City, Calcutta.

The King of the Dinosaurs comes alive at BITM

Tyrannosaurus Rex, the king of the dinosaurs, the gigantic reptiles that ruled the earth for nearly 160 million years, came alive again at Birla Industrial & Technological Museum, Calcutta on June 5, 1996. The life size robotic dinosaur, kept in the open and first of its kind in the world, was inaugurated by Prof Satyasadhan Chakraborty, Hon'ble Minister for Higher Education, Govt of West Bengal on the occasion of World Environment Day.

Tyrannosaurus Rex was the fiercest among the dinosaurs and fed on other giant reptiles. An adult T-Rex measured about 46 ft. in length, 18 ft. in height and weighed around 10 tonnes. Its head was immense with mighty jaws about 4 feet long and lined with a series of sharp and powerful teeth. The jaw could open extremely to swallow on enormous piece of its victims flesh.

The present model is entirely an inhouse development of BITM and NCSM. It came into being as a result of painstaking research of the scientists and engineers of the museum. It has been kept in an open space in appropriate surroundings resembling that existed when the dinosaurs lived. The installation of the dino model on World Environment Day is a unique way to create environmental awareness.

INTERNATIONAL MUSEUM DAY

Every year, May 18 is celebrated as International Museum Day all over the world. The satellite units of NCSM also celebrated the day through different activity oriented programmes.

Birla Industrial and Technological Museum, Calcutta observed the occasion through various programmes conducted during May 17 to 23. Prof T K Roychowdhury delivered a popular lecture on "Glimpses of India's prehistoric animals through fossils". An exhibition of Museum Publications was organised which covered various museums in West Bengal. In this occasion, a seminar of Museum Management was organised which was inaugurated by Dr Saroj Ghose, DG, NCSM. Prof K K Das Gupta and many other eminent museologists spoke on this occasion.

International Museum Day was celebrated at **Regional Science Centre, Bhubaneswar**. A popular lecture on "Role of Museums in present day Society" was delivered by Dr G C Chauley, Supdt. Archaeologist, Archaeological Survey of India. Exhibit Hunt contest, open house science quiz and special film show were the other features of the celebration.

Regional Science Centre, Tirupati observed the occasion with a series of activity centred programmes for students, adults and even for housewives. The Museum week was inaugurated on May 18 by Prof S S Ramachandra Murthy of S V University, which was followed by a popular lecture on "Indus Valley Civilization" by Prof K P Rao, also of S V University.

Open house quiz on General Science, painting contest for school children, antisuperstition demonstration and "Rangoli" contest for housewives were conducted between May 18 and 22. Shri Sathyanarayana Rao, Jt Executive Officer, Tirumala Tirupati Devasthanam, delivered the valedictory address and gave away the prizes.

Regional Science Centre, Bhopal in its week long programme organised essay competitions on "Museum - for education and entertainment", science demonstration lecture on "Science Vs Miracles", open house quiz and science film shows. A special sky observation programme was also organised in which 150 people had glimpses of crescent of venus and Nebula through telescope.

International Museum Day assumed special significance in **Dhenkanal Science Centre** with the organisation of First Film Festival in which 17 beautiful films on different science topics were screened during May 18 to 25. The festival was attended by more than 1500 people. Among other programmes organised by



Science Demonstration Lecture at RSC, Tirupati.

the centre on this occasion were sit and draw competition on "Man and Forest", Science demonstration lecture, antisuperstition demonstration, special nature programme and special planetarium programme.

District Science Centre, Tirunelveli celebrated the occasion in style by organising a month long Summer School in which students were trained in electronics, computer science, astronomy, chemistry, health, AIDS and environment awareness, personality development, group dynamics etc. The centre also organised Museo Science Fiesta and science drama on this occasion. Shri V K Shanmugam, Dist. Revenue Officer was the Chief Guest of the closing ceremony and delivered valedictory address.



Seminar on 'Museum Management' at BITM, Calcutta.

WORLD ENVIRONMENT DAY

The entire human race, all over the world, reaffirms its determination to save and protect the environment on this earth where we live, every year on the June 5th on the occasion of World Environment Day. To remind the common people that the survival of the mankind is inseparably related with the future of our environment, various units of NCSM observed this day through different activities aimed at creating an awareness among the people towards environment and its various aspects.

Birla Industrial and Technological Museum observed World Environment Day in collaboration with Dept. of Environment, Govt. of West Bengal. 150 students from 38 different schools participated in various activities conducted by the centre. In the early morning a "Bird watching and insect identification" camp was conducted in Ballygunge Army Campus in collaboration with Prakriti Samsad and Bombay Natural History Society. It was followed by a costume parade by primary school children where the kids dressed in costumes

mimicking plants and animals, an open house quiz on 'Ecology and Wilderness' and a sit and draw competition for school children on "Me and my environment". An elocution contest was also organised on "Women and Environment" in which different environmental societies participated. Live snake show by Shri Dipak Mitra generated a lot of enthusiasm. In the afternoon, Shri Manab Mukhopadhyay, Hon'ble Minister for Environment and Forest, Govt. of West Bengal inaugurated the Open air drama on Environment and gave away prizes.

The biggest attraction of the day was, however, the inauguration of India's largest Robotic Dinosaur, a life size T-Rex, by Shri Satya Sadhan Chakraborty, Hon'ble Minister for Higher Education, Govt. of West Bengal.

Shrikrishna Science Centre, Patna observed the day through programmes spanning June 4th and 5th. An exhibition on "Garden without soil" was inaugurated on June 4th by Dr. Vishnu Jain which was followed on the next day by a popular science lecture on "Soilless Garden now for all" by Shri

Manzar Alam. Among other major programmes conducted on this occasion were sit and draw competition on "Environment and challenges of population growth" and a workshop on "Aquaculture plants". Dr Dharendra Prasad was the Chief Guest of the valedictory function.

World Environment Day was also observed in **Regional Science Centre, Tirupati**. A popular talk on "Environmental pollution and control" by Shri M. Siva Reddy of A. P. Pollution Control Board was followed by an open house quiz on Environment.

Raman Science Centre, Nagpur organised a series of programmes on this occasion. A temporary exhibition titled "Importance of Tree" was organised in which 31 panels were displayed. Along with this, 16 captions conveying the message of consequence of deforestation were also displayed.

Two popular lectures on "Environment: Contribution of Naturopathy" and on "Vrishgatha" were delivered by Dr R R Mote and Shri Shyam Dhond respectively during the day. The visitors also enjoyed a series of science films, special science demonstration lecture and special planetarium programmes organised on this occasion.

Painting competition for school students, science films for general public and open house quiz on Environment marked the World Environment Day in **Regional Science Centre, Bhopal**. While 28 students participated in the painting competition, 60 people took part in the open house quiz.



Computer Demonstration at Dhenkanal Science Centre.

WORLD ENVIRONMENT DAY

Dhenkanal Science Centre combined World Environment Day with the centre's 1st anniversary, which incidentally falls on the same day, to make the occasion a grand festival. The centre organised a series of popular programmes in collaboration with **APTECH Computer Education and Forest Dept. Govt. of Orissa**. A sit and draw competition on "If trees survive, we survive" and an open house science quiz were organised for little children. The main attraction of the programme was, of course, demonstration of computer application by **APTECH Computers**. Two computers were specially installed which supplied the visitors data about **NCSM** and **Dhenkanal Science Centre** with charts and graphics.

In the evening a function was organised which was addressed by **Shri N C Kanungo, DFO (Retd.)** and **Dr S N Mohapatra, Principal, Dhenkanal College**. The speakers dwelt on environmental awareness and the role of science centre. **Dr Mohapatra** distributed prizes at the end.

District Science Centre, Tirunelveli organised a week long programme from June 5 to 10 in collaboration with the various government and non-government organisations of the district. The inaugural functions were presided over by **Shri A. Krishnamoorthy, Dist. Environmental Engineer**. **Shri V. Palani, IFS, DFO** inaugurated a poster exhibition on Environment. During June 7 and 8, the centre had taken out an Environmental Kala Jatha in Sankarancoil area which touched at



Training Camp on Nursery Technique at DSC, Tirunelveli.

4 schools and 6 villages. The centre also organised special film and video show on environment and a workshop on environment for students during the week.

World Environment Day was celebrated in **District Science Centre, Purulia** through a series of programmes conducted from June 5 to 11. Little children were thrilled to watch fascinating birds, identified trees and leaves hitherto unknown to them and observed the behaviours of Deers, Snakes, Birds, Rabbits and Monkeys in the Life Science Corner. On June 7 a popular lecture on "Environment and role of forest" was delivered by **Shri G D Mukherjee, IFS, DFO**. Two quiz contests on environment, ecology and wildlife, special film and video shows on nature and wildlife were the other features of the celebration.

District Science Centre, Dharampur celebrated the occasion in a unique way by planting altogether 400 saplings of indoor and outdoor ornamental plants and different varieties of bamboo. 67 students participated in the plantation programme. A guidance session for unemployed

tribal youth on "vocational and small scale enterprunership development" was attended by 62 tribal youth and was addressed by eminent speakers from **Enterprunership Development Institute of India, Ahmedabad**.

The centre's Life Science Club also commenced its activities from this day 37 students of Dharampur block were enroled as the member of the club. A meeting was also held to chalk out the plan of activities of the club. **Nehru Yuva Kendra, Valsad** was the collaborator.

District Science Centre, Gulbarga collaborated with **Karnataka State Pollution Control Board** to make the World Environment Day celebration a success. **Shri N. Nagraj Hampole, IFS, Dy. Conservator of Forest** inaugurated the function. Two popular lectures, "Our Earth, our habitat, our home" by **Prof. C. K. Mruthyunjojiya of Govt. Polytechnic, Gulbarga** and "Automobile Pollution" by **Shri Sivraj Patil, RTO, Gulbarga** were delivered. An open house quiz on ecology and environment was also organised.

Like other periods of the year, during this quarter also science museums and centres under NCSM brimmed with activities. Despite this being an examination session, there were dearth of neither programmes nor visitors. The highlights of the period are Dinosaurs Alive Exhibition at Lucknow, Cyberskool at Delhi and 37th anniversary of BITM. Calcutta. But other centres also did not lag far behind.

The inauguration of Cyberskool at National Science Centre, Delhi set up in collaboration with Intel Corporation, Bangalore was certainly a prized gift for the visitors to the centre. This interactive multimedia computer learning centre was inaugurated at a function held on May 3, 1996 by Dr Crong Barrett, Chief Operating Officer, Intel Corporation, USA and was attended by various principals, teachers and students of different schools of Delhi.

Ten multimedia computers have been installed in a separate enclosure where 20 participants can interact with computers. The facility is for an organised group of 20 people. Provision for a 40 minute training session for school group and common

visitors has also been kept inside the enclosure. One of the machines of the Cyberskool has been provided with Internet connection. In addition, there are three multimedia computers displayed in the computer users area for the benefit of common visitors. A unique panel exhibition on fabrication of microprocessor chip in different steps (From sand to silicon) has also been set up alongwith.

The hardware and software required for Cyberskool including IBM compatible pentium based Multimedia work station with CD-ROM, Modem, multimedia colour monitors, HP Laser jet printers, MICROSOFT mouse pad with mouse, Interactive CDS etc. have been donated by M/s Intel Corporation, Bangalore.

Nehru Science Centre, Mumbai, organised different creative activities for children during the summer vacation. Among these were creative science workshop on Physics, Chemistry, Life Science and Electronics, creative arts and crafts programme, computer training programme, telescope making and aeromodelling programme. The unique feature



'Dinosaurs Alive' exhibition at RSC, Lucknow.

of this year's vacation hobby programmes were special toy making workshop and soap bubble workshop. Little children developed interesting toys out of scrap and inexpensive materials and carried them home as souvenir. Altogether 135 students participated in these programmes and 485 kits were developed.

Birla Industrial and Technological Museum, Calcutta celebrated its 37th anniversary on May 2, 1996 through a series of popular programmes. The Science demonstration lecture on Electromagnetism, which was earlier developed in the museum, was finally launched in this occasion.

A demonstration on science and superstitions and a live snake show were among the other programmes. The year round Museum quiz contest, for both primary and secondary students, culminated on this day. A total of 870 students from 10 different schools attended the above programmes.

Earlier, on April 16, the museum arranged, in collaboration with WWF India, two film shows for Nature study circle and pet club members. The show was attended by 85 people.



Inauguration of Cyberskool at NSC, Delhi.

SCIENCE CENTRE NEWS

The Dinosaurs Alive Exhibition, which generated tremendous enthusiasms in Calcutta and Delhi, finally landed in Lucknow in the month of February. The giant reptiles of yesteryears came alive in an exhibition held at **Regional Science Centre, Lucknow**

February 8 to March 24. A total of fourteen different varieties of robotic dinosaurs were the attraction of the exhibition. This was complemented by two more exhibitions. The first one, panel exhibition on "A to Z of Dinos" can be regarded as an instant encyclopaedia of dinosaurs and dealt with the physical structure, food habit, habitat, so icability and many other aspects of dinos. The second one, "Global changes" dealt with climatic and ecological changes that have been taking place due to follies of man, which is posing a serious threat to the survival of life on this earth. Along with this, a multi-screen show depicted evolution of each species and the ultimate extinction of these giant reptiles.

The exhibition received wide media publicity and generated deep curiosity among the people Lucknowites had thronged the **Regional Science Centre** with queries much before the exhibition was inaugurated. Schools even sent advanced booking. Around 2.50 lacs of people from different parts of Uttar Pradesh visited and appreciated the exhibition.

Regional Science Centre, Bhubaneswar organised a "Meet the press" on June 30, 1996 in which Dr U. N. Dev, Director, Bihang Institute of Ornithology and Mass Ecodevelopment (BIOME) introduced, to the

public the "summer waterfowl wetlands and Asian Nests survey" through colourful slides.

At Wardha near Nagpur the **Raman Science Centre, Nagpur** organised an overnight scientific programme in collaboration with Wardha Sewagram Junior Chambers on May 18, 1996. The main features of the programme were a popular lecture on "Introduction to astronomy", overnight sky observation through telescope in which several constellations and bright stars were identified, an open question-answer session on astronomy and screening of three science films. The programme was attended and enjoyed by 150 people including students.

Regional Science Centre, Bhopal organised a vacation hobby camp from May 28 to June 8 in which 18 students of class IX and X participated. Eight projects on physics and electronics were completed during the camp. In addition, some chemistry experiments were also shown to the participants.

The 12th anniversary of **District Science Centre, Dharampur** was celebrated during April 23 to 27 through different mass oriented programmes. Nearly 168 school



Creative Ability Programme at RSC, Tirupati

and college students participated in different programmes. In a three day Magic Education Camp organised in this occasion, 62 students participated. A vacation hobby camp on Life Science, Chemistry and Electronics attracted another 75 students. A computer awareness programme was also organised in which 26 students participated.

A special 10 day vocational training camp under Prime Minister Rojgar Yojana, was organised by the centre during this period in which 12 participants sponsored by District Industries Centre participated. Nehru Yuva Kendra, Valsad collaborated in the programme. A sit and draw competition on "Living with nature", an open house guest programme on "We and our



Nature Study Programme at BITM, Calcutta.

health", a popular lecture on "Total quality management" by Shri R. B. Suthar, Dist Youth Coordinator, NYK, special film shows and special sky observation programmes were the other highlights of the celebrations. The anniversary function was inaugurated by Shri M. J. Parmov, Manager, DIC, Valsad.

On June 15, **District Science Centre Purulia** in collaboration with "Awaz" group of publications, organised a seminar on "Journalism the saviour of democracy" Shri Satya Ranjan Mahato, Hon'ble minister of relief, Govt. of West Bengal was the chief guest and Shri P. Neerajnanan, S. P. Purulia was the special guest. Shri Brahmdo Singh Sharma, a noted journalist and Chief Editor of the Awaz group presided over the function. Shri Basudev Acharya, M. P. Shri Tarakesh Chatterjee, Chairman Purulia Municipality and Shri Gurudas Mukherjee, IFS, DFO, Purulia were the other dignitaries present in the seminar.

School Science Centres spread all over India remained fairly active during the month of April-June, 1996. In the District Science Fair, Guntur, Andhra Pradesh, the student participants of the **School Science Centre at Lions Montessori High School, Pedanandipaddu** presented five models, namely: Pollution of water, Pollution of land, Pollution of air, Depletion of Ozone layer and Poultry form of Japanese Koel. The models were made of low cost materials and the project on water pollution won the first prize in the District Science Fair. The projects also won the first prize in the pollution group at the Young Scientist Competition organised by the Guntur district authority.

School Science Centre at Bokakhat Higher Secondary School in Assam conducted two investigative type projects during this period. In the first project a group of ten students collected drinking water samples from 15 different places of Bokakhat sub-division and estimated the presence of iron in it. They have found high iron content in the drinking water. Remedial measures have been suggested to the Public Health Engineering Department. In the second project 6 students surveyed 15 villages and towns and collected statistics about nature of fuel used by common people. They concluded that most people still use rice husk as fuel though cooking gas is slowly being accepted by the rural people also. The students also demonstrated the use of solar stove.

School Science Centre at the Govt. High School, Akhara, in the Ludhiana district of Punjab, which has started functioning recently, conducted a hobby camp during this period in which 8 projects, mostly on properties

of air, have been completed. The school also organised a community training programme on introduction to Generator in which participants were shown and given idea on running and repairing of diesel generator sets. Twenty students and forty villagers participated in the programme.

Ten school science centres have started functioning recently in different schools of Rajasthan. The centres came into being as a joint initiative of NCSM and Dept. of Science and Technology, Govt. of Rajasthan. Rajasthan became the third state, after Haryana and Punjab, in northern India to have such school science centres.

Award for NCSM publication

'My Dino', a pop-up book designed and published by NCSM during the exhibition 'Dinosaurs Alive', has bagged the 2nd prize in the children's category of the West Bengal Master Printers Association's Silver Jubilee Competition.

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* I heard you had provision for ritually clean and unclean animals in your ark, but what about us?*