



# SPECTRUM

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## 98<sup>th</sup> ISC – The crowning glory for SRM

*We will play a more pro-active role soon: Chancellor*

**Ratnika Sharma**

Expressing the hope that those who had come to the 98th Indian Science Congress at SRM would have gone away realising the potential of private universities and the effective roles they can play in nation building in the field of education.

“This clearly indicates our quest for benchmarking and excellence. The infrastructure, faculty, students and above all the commitment we have will certainly see us playing a more pro-active role in not so distant future,” the Chancellor remarked.

Dr. Pachamuthu delivered the Valedictory Address at the conclusion of the five-day 98th Indian Science Congress, a mega event that was the largest ever gathering of more than 10,400 delegates from India and abroad including six Nobel Laureates. The Congress was formally inaugurated by Prime Minister Dr. Manmohan Singh on January 3, 2011.

Speaking about the various plenary sessions, the Chancellor observed the deliberations of the conventions, the involvement of the private sector held out the

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*Out going President Prof. Pandey handing over the Vigyan Jyot to the incoming President of ISCA, Dr. Geetha Bali flanked by Dr. Narayana Rao, Dr. Vijayalakshmi Saxena, Dr. Ponnavigo, Chancellor, Dr. Muthamizhselvan and Vice Chancellor*

# Availability, adequacy and accessibility vital for food security

**Prashanti Ganesh**

With constant warning from the Food and Agriculture Organisation, United Nations, about scarcity in the supply of food grains from 2011, the concern over food security in India has increased.

“Agriculture and issues pertaining to food security and water availability is at the centre of society’s most important debates today,” said Dr. Shanthu Shanthanam, Executive Director, Association

of Biotechnology Led Enterprises (ABLE) – Agriculture Group (AG).

Chairing the session on future of modern biotechnology, Dr. Shanthanam discussed ways in which the level of food production can be increased - bringing more land under cultivation, reducing wastage of food grains during transportation, improving agronomic practices, and genetically modifying crops.

About 40 different genetically modified crops that will be

made available to the Indian farmers and consumers in the near future, he said.

Dr. P. Anand Kumar, National Research Centre of Plant Biotechnology spoke about three essential components pertaining to food security. “Availability, adequacy and accessibility are vital for food security,” adding that some of the impediments of food security are urbanisation, soil erosion and salinization, and climate change.

“There are also some specific problems in developing countries like India such as under-nourishment and strict consumer preferences,” continued Dr. Kumar. Echoing what his colleagues said, Mr K. K. Narayan, managing director of a private biotechnology company, laid importance to agriculture’s role in the overall economic growth of India. “Last year’s bumper harvest led to 4 percent increase in agricultural production and that has contributed to the

bounce-back of the GDP,” he explained.

Mr. Mittur Jagdish from Avesthagen Limited explained the positive impact of biodiversity on food crops. “Genetically modified crops can help farmers sell non-infested crops to the vendors,” he said.

C Kameswara Rao, Foundation of Biotechnology Awareness and Education (FBAE), traced the transition of Indian Agriculture from Green Revolution to Genetically Modified Crops.

## ...the crowning glory for SRM

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hope that they would all have a lasting impact not only on education but also on society.

“The provision of education to the private sector has increased enrolment manifold. But there appears to be a concern, especially among the government quarters, about the quality and excellence of research. I am sure that this concern has been well addressed. Practical and effective solutions can be found in the deliberations held at this Congress. The fruits of which will reach the common man, leading to the betterment of our society,” Dr. Pachamuthu said.

The Chancellor paid rich tributes to all those involved in the organisation of the Congress, which has been hosted at an estimated expenditure of Rs 12 crores. “Each and every one of us has gone beyond the normal call of duty to ensure

that SRM University played a perfect host,” the Chancellor remarked.

“In the past, SRM University has organised numerous international and national conferences, seminars, but we consider it our crowning glory to have hosted this Congress,” he said.

In his Presidential Address, Prof K. C. Pandey, General President, Indian Science Congress Association, lavished praise on SRM University, its top management and officials for hosting the ‘best’ Science Congress he has ever attended.

“I have been to so many Indian Science Congresses. I have never seen such enthusiasm as that of your Chancellor,” Prof Pandey said.

“I am impressed by the Vice Chancellor for his smiling face and for his quick decisions,” he said, adding “I have heard

from hundreds of delegates that they have never seen such an Indian Science Congress.”

The Vice Chancellor Prof P. Sathyanarayanan said that he was honoured and privileged to be giving the welcome address at the Valedictory function. Prof Narayana Rao proposed a Vote of Thanks.

Later, Prof Pandey honoured the Editors and contributors of the book *Ayurveda for Diabetes Mellitus*. Those honoured included: Dr. Dubey, Dr. M. Ponnavaiko, Dr. Aruna Agarwal, Dr. Elango, Dr. Elanngovan, Dr. Paneerselvam, Dr. Balasubramanian, Dr. Thyagarajan, Dr. Lakshmi, Dr. Mohamed Ali, Dr. Parani and Dr. Thangavel.

Also, honoured was Dr. N. P. Kochupillai for his work *Endocrine and Metabolic Disorders in Peninsular India*. The Chancellor gave away the prizes for the best posters with Prof Pandey giving away the Pride of India Exhibition awards. For the second year in succession, the best Exhibit of the Year Award was won by the Defence Research and Development Organisation (DRDO).

The Vigyan Jyot was handed over to the incoming President of ISCA, Dr. Geetha Bali.

Four mementos were presented to the Chancellor, SRM University, Prof Pandey, to Mr. Shiva from Thanjavur who carried out the task of putting up the main pandal, to the Superintendent of Police, Kanchipuram for security arrangements and to Mr. Ravi Boratkar who was in charge of the Pride of India Exhibition.



Adoor Gopalakrishnan (Right) at the awards ceremony

## 3 bag first Golden Beaver Award for science documentaries

**C. Sahana**

For the first time a science documentary film festival was organized during the 98th Indian Science Congress and seven filmmakers received awards from veteran director Mr Adoor Gopalakrishnan.

Several science documentaries from all over India were screened during the festival titled *Rashtriya Vigyan Chalchitra Mela and Competition (RVCM)-2011*.

Mumbai-based Ms. Seema Muralidhara bagged the Golden Beaver Award and a cash prize of Rs 50,000 from Mr Gopalakrishnan for her documentary *Bahari*

*Duniya ke Ajab Sanket* under the Popular Science Programme category.

Some of the others who won the awards include: Ms Anitha Gupta (New Delhi) gets the Golden Beaver Award for *Action Reaction* under Short Films on Science and Technology category; Mr. K. S. Madhu of Kerala also bagged the Golden Beaver Award for his film titled *Pupii-2* under the Animation and Graphics Films on Science and Technology category.

Earlier, speaking before presenting the awards, Mr Gopalakrishnan said, “Cinema cannot exist without physics and chemistry.”



The Provost Dr. Ponnavaiko receiving an award from Prof. Pandey for his contribution to the book *Ayurveda for Diabetes Mellitus*. Also seen in the picture are the Chancellor and Vice Chancellor

## Beneath the modern exterior lies ageless culture

**Mandakini Ayapilla and Karishma Lodaya**

“The dance movements and rhythm is similar to that of our place and the only difference is its form,” said Prof Iain Reid, University of Adelaide, Australia. The Professor felt that the cultural programme, that took place on 6th January, 2011 in the 98th Indian Science Congress, was interesting and full of energy. The event was initiated with the entry of two groups that played the traditional music of Tamil Nadu. They focused on the cultural and folk sectors of the state and spread a message to the audience that one should never forget her/his roots.

## Protein forms natural bypass - reduces heart risk

Anuj Srivas and Ratnika Sharma

“Growth factors could be stimulated to speed the process, making it possible for the heart to perform a kind of natural bypass,” said Dr H.S Sharma, VUMC, University Medical Center, Amsterdam.

Speaking on the theme of Mechanisms and Therapeutic Targets in Cardiovascular Diseases, he emphasised the use of therapeutic techniques in reducing cardiac failures.

In order to study cardiac function in heart failure and cure heart diseases, Dr. Sharma conducted an experiment in which he managed to block the coronary artery in a pig's heart with two crystals. This led to an understanding of the pre-conditioning of the pig's heart. “Preconditioning requires constant thickening of the systolic wall by the

identification of the Heat Shock Protein-70 (HSP) that helps in therapeutic techniques that treats heart failure” he said. The HSP-70 is responsible for building the natural bypass.

Dr. Sharma then explained the role of the human vascular system in fighting metabolic diseases. “Study of the vascular network formation led us to identify the various vascular factors such as the Vascular Endothelial Growth Factor (VGEF) in order to test myocardial function of the human body” he remarked. Incidentally, the VGEF turned out to be a key molecule, he added. Using this factor, Dr. Sharma was able to conduct a series of case studies on people with cardiac issues. Keeping a control test group and varying the age range of the groups, he observed the decline in cardiac risk. “We use microarray chips (Affymetrix) to develop these therapeutic strategies” the cardiac specialist said.

## Half the population cannot afford cardiac therapy

Komal.J, Siddhant Bohara, Harish Murali and Vimal Raj

“Around 50 per cent of today's population suffers from many cardiac problems. With the treatment getting costlier each day, it is merely impossible for those below the poverty line think of a cure,” said Dr. G. Subrahmanyam, Director of Narayana Medical Institutions at the plenary session titled Stem Cell Therapy.

He explained that adult stem cell therapy is an autologous adult treatment derived from a patient's blood to treat heart diseases for people suffering from coronary artery disease and severe angina. The cardiac muscle cells play a vital role in replacement of dead or impaired cells and restores pumping power to heart. This is because of the fact that the stem cells have the ability and capacity to generate into multiple cell linages. Adult

*We have approximately 50 patients who are suffering from coronary artery disease everyday and not responding to medical treatment, -Dr. G. Subrahmanyam*

stem cells are those found on post-natal tissue that can yield only the specialized cell types of the tissue

“We have approximately 50 patients who are suffering from coronary artery disease everyday and not responding to medical treatment,” he maintained.

“There is predicted to be a 120 per cent increase in diabetes in India by the year 2030 compared to the year 2000,” said Dr. Lingam Gopal, Consultant, Shri Bhagawan Mahavir Vitreoretinal Services, Neuro Ophthalmology Department.

Unfortunately, it remains

asymptomatic until a fairly advanced state is reached. Hence it is important to identify the disease at an earlier stage, in future. The talk highlighted some of the strategies and approach to the management of this social problem. Glaucoma is the second leading cause of blindness worldwide, said Dr. Vijaya, specialist in Ophthalmology, Sankara Nethralaya. She stressed there is a need to educate the public to go for regular ophthalmic check-ups that offer comprehensive eye examination.

## Curing Cancer the Indian Way



Dr. Bal L. Lokeshwar addressing the plenary

C. Sahana and Aravind. T. S.

“Curcumin, an active ingredient in turmeric, could be used to control and reduce the cancer cells in the human body,” said Indian American cancer specialist Dr. Srikanth Anant, University of Kansas Medical Center, USA.

Stating that prostate cancer is largely prevalent in western countries when compared to

India, Dr. Bal L. Lokeshwar, University of Miami, USA, said Biological Immune Response Modulator (BIRM), a dietary medicine, could decrease the growth of prostate tumor when taken orally, which were tested on the animal model.

Crocetin, a component present in saffron, has been found to exhibit benefits for prevention of pancreatic cancer. They showed the anti-tumorigenic effect when given in lower doses in

pancreatic cells, observed Dr. Animesh Dhar, University of Kansas Medical Centre, USA

Dr. Addanki P Kumar, University of Texas Health Science Centre, USA, said various biological factors were involved in multiple fundamental cellular processes. He stressed on the mechanisms that could increase the quality of life and even prevent the growth and occurrence of cancer.

“This study states the possibility of using patients' own cancer cells to fight against cancer,” said Dr. Pragatheeswar Thirunavukarasu, University of Pittsburgh, USA. Vaccinia virus, a small pox vaccine, is now used in the field to manipulate the tumour. The virus replicates in the body by reducing the cancer cells in the suitable environment.

Dr. R. Ramamurthi from Sri Venkateshwara University, Tirupathi the co-chairman of the session was also present.

## India has a long way to go in checking child mortality: WHO official

Hari Priya Madhavan and Aravind.T.S

Dr. Soumya Swaminathan, Coordinator, World Health Organisation (WHO), Geneva called on the ministries of agriculture, health and finance in India to work together towards food and nutrition security and stop deaths of children below five years due to malnutrition.

The WHO official was addressing the gathering at the Plenary Session on ‘Agriculture, Biotechnology, Food and Nutrition Security’ on the last day of the 98th Indian Science Congress at SRM University.

Expressing concern over such deaths, Dr. Swaminathan said, “WHO statistics show that one-third of the deaths of children below five years in the world today are due to malnutrition.” Stating that the causes for poor health conditions in India are

poverty, inadequate child care and lack of access to healthcare facilities, she stressed the need for better vaccines, nutritional food supplements for the young, baby friendly hospitals and maternal leave laws.

Speaking to Spectrum, Dr. Swaminathan said “India has a long way to go in achieving the Millennium Development Goal (MDG) of reducing child mortality. A national task force is required. The existing Integrated Child Development Services (ICDS) focuses on children above three years. But special attention is required for infants aged between six months and two years”.

Speaking on prevalence of tuberculosis (TB) in the country, she said that TB is



The Hospitality Committee with the Director E & T Dr. Muthamizhselvan and Prof. Lennus Martin



The Website Committee with the Director E & T Dr. Muthamizhselvan and Dr. Srimathi (seated at the centre)



Dr. Robert S. Zeigler and Dr. Mahmoud Solh in a conversation at the agriculture, biotec, food & nutrition security plenary



A snapshot of how the 98<sup>th</sup> Indian Science Congress was put to

# On Spectrum Cover

It has indeed been our privilege to bring out the Special Edition of the 98th Indian Science Congress. As always reporting for the special issue of SRM University. But for this occasion we took the assistance of students from Anna University and professional editorial help. Faculty of Journalism and Mass Communication wrote reports as well, 'Spectrum Reporter', and generally assisted with editing and bringing

The publication of Spectrum has always been a collective effort. A special "Thank You" to those who have been intimately involved: the Chancellor, the ever-supportive Vice Chancellor; the Director of the Faculty of Journalism and Mass Communication, Dr. Balasubramanian, who has never turned down any genuine request; and the "signing off" authority; and the office assistant, who was instrumental in ensuring that copies of the journal were available to our special funding for the occasion.

The Spectrum team also wishes to place on record its appreciation to our J. Vijaykumar, to Francis Benjamin and Bharath for their layout, to SRM Publications for the high quality and on-time delivery, to the office assistant, who was instrumental in ensuring that copies of the journal were available every morning.

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**Editor**



*Spectrum team with the Director of Faculty of Science and Humanities Dr. R. Balasubramanian*



*Culturals showcasing Tamil Nadu's folk dances*



*together... various organising committees along with volunteers*

# Good tidings for obese people

**HariPriya Madhavan**

In what will make obese people happy, Dr. Philomena George, Department of Biotechnology, Karunya University, Coimbatore, said there are herbal remedies for this largely prevalent discomfiture. She was presenting a paper at the 4th Science Communicator's Meet, happening on the sidelines of the Indian Science Congress at SRM University.

The paper that highlighted the study on Herbal Remedies for Malnourishment and Anti-obesity through Health Mix, put forth a solution for some contemporary lifestyle diseases. The efficacy of some commonly available herbs in solving health concerns like malnutrition and obesity were explained.

The study explores the formulation of non-synthetic food supplements having high nutritional value. The preparation which contains completely natural ingredients such as coriander, mint, garlic and ginger dissolves the adipose tissue present under our skins, thus preventing fat



*Dr. Philomena George presenting a paper at the Science Communicator's Meet*

accumulation. These health foods are oil-less and prepared in the form of noodles, soup powder, biscuits and pizzas to suit the expectations of the modern population.

Nutritional substitutes are also being developed for the rural people who cannot afford

branded energy drinks.

Stating that bringing these products into the market would take a few more years, Dr. Philomena maintained that she intends to develop this project into a beneficial entrepreneurship venture for her students and cater for the malnourished rural

people and the over-nourished elites.

Later, speaking to Spectrum, she told, "All students should not be job-seekers, but should become entrepreneurs and create more jobs."

Papers on eco-friendly

herbicides, seismic risk-reduction and communication of scientific research were also presented at the session. The hosts screened the movie Truth about Tigers and wildlife filmmaker Shekar Dattatri delivered a special address during the valedictory session on January 6.

## Engineering students told to explore social sciences

**C Sahana and Ratnika Sharma**

"India is among the top 10 in research articles' contribution in the world, particularly in chemistry, mathematics, engineering, physics and biology," said Dr. Michiel Kolman, Senior Vice-President, Global Academic Relations, Elsevier.

Delivering his Special Lecture on India's Racial strength, Dr. Kolman added that the leadership survey is based on certain criteria and that India's leading research competency is in molecular chemistry.

Later, speaking on an experimentally based global approach to engineering education, Dr. Stephen W. Director of Northeastern University said in the current scenario engineers cannot limit themselves only to engineering studies but also get acquainted with non-technical studies

through increased curricula flexibility.

"Engineering is not only about technology but behaviour also; so there should be meaningful humanities and social science components as well," added Dr. Stephen.

Introducing the concept of co-operative education that involves integrating classroom learning with real world experience, he said, "It involves alternate semester of academic study with semesters of full-time employment." This programme will help students to achieve career goals, experience diversity of work and develop ethical thinking.

With this objective, his University has introduced a bachelor's degree in 'Internal Business', using the principles of co-operative education for engineering students on an experimental basis.

## The secretion of zebrafish benefits humans: Scientists

*"Not only blood cells are flowing in our blood but also micro particles formed by platelet dust,"*  
- Dr Pudur Jagadeeswaran

**Mandakini Ayapilla and Harish Murali**

"River Ganges is sacred because trypsin secreted by the unique zebrafish, which is found in the river, benefits the humans," said Dr Pudur Jagadeeswaran, Professor, Department of Biological Sciences, University of North Texas, while he was delivering a public lecture on the topic titled Impact of little zebrafish from India on medical science.

Trypsin which is buried inside the zebrafish leads to thrombosis, the formation of blood clot.

Almost all clotting of humans is present in fish which is like a mosaic formation. The Biologist showed a video comparing thrombosis of humans and fish with the streets of Chennai where traffic is always a jumble. This video is still being used by students abroad.

The fish was called as Danio rerio when it migrated overseas and now is popularly known as zebrafish. Dr Pudur Jagadeeswaran is a pioneer of zebrafish and it was his major contribution to medical science. He used the zebrafish for developmental studies. It

took his fellow-scientists and he ten years to complete the experiment because the fish is little and they could get only small quantities of blood. He kept the baby fish larva under a laser beam and simulated a thrombosis.

Zebrafish is one and a half inch long and has transparent embryo but still it is complicated for research as only one mutation occurs a day. There are 500 factors controlling the metamorphosis process. It has a special receptor called Orphan G Protein that is not present in mice or humans.

"Not only blood cells are flowing in our blood but also micro particles formed by platelet dust," he maintained. Nature has to balance the young and matured platelets at the site of injury to create a clot. Young platelets accumulate first at the site of injury and clusters with the matured ones.

He signed off by thanking the fish as they are 85 per cent mammals, which are great to discover novel players in human disease.

## Positive trends in science education lauded

Komal J

Higher education in science has recorded two positive trends: phenomenal rise in science courses and the response to the market demand, said, Dr. R.C Sobti, Vice Chancellor, Punjab University, Chandigarh. He was delivering a lecture on science education in India and the current trends and future challenges.

The objective of his presentation was to make the audience gain familiarity with the subject he was speaking about and to broaden the frontiers of knowledge. Categorization is done in four parts like description, explanation, prediction, and control. There are a few aims of scientific development like exploiting the available rich natural resources in the country. With poverty being one of the main problems in India, making basic amenities like food, clothes and shelter and taking care of the sick and the destitute is one of the top priorities. For this scientific development is necessary. The country tries to sustain and improve its high economic growth and increase in per capita income areas. In the archival past, Indian universities like Taxila, Nalanda and Vikramsvilla were centres of high learning.

There have been several reports reviewing the status of higher education in the last

*The country now has vast expertise, excellent and conscientious workforce, painstaking and sincere endeavours and good facilities for research - Dr. Sobti*

few years. Nation's scientific achievements now in science are nanotechnology, biotechnology, pharmaceuticals, agriculture, information technology, space technology, telecommunication and nuclear science. The country now has vast expertise, excellent and conscientious workforce, painstaking and sincere endeavours and good facilities for research. But it still lacks communication to all parts and application of available facilities.

He regretted that there is a shift from an industrial to a technologically - driven, knowledge - based economy. Dr. R.C.Sobti wound up by explaining the hampered facilities to impart scientific education, especially in rural areas. Mr. Toshiyuki Kano and Mr. Atsuhiko Tanaka spoke briefly on NEC's research and development challenges to design the future ICT.

## Electronics sector replete with opportunities: Mayya

Avani Khandelwal

"Our strength lies in our demographic dividend and our ability to create world class designs," said Prof. Y.S. Mayya, Chairman and Managing Director, Electronics Corporation of India Limited (ECIL), Hyderabad. He was speaking about the evolution of the electronic sector in India-its rise and decline. Industries should bridge the gap in terms of viability. While emphasizing the role of electronics in the nuclear industry in ensuring the safety standards, he warned that the major threat to the electronic sector is phony technology transfers.

The experience of Indian Strategic Electronics Industry is unique in many ways. Since Independence, India has built up a vibrant electronics industry based on indigenous technology and market covering areas of sensors, instruments, controllers computers and communication systems.

The loss of hardware industry however, has resulted in dependence and vulnerability as far as the strategic programmes are concerned. The nuclear sector has been the developer and consumer of cutting edge electronics worldwide. He mentioned the fact that India is self - reliant in atomic energy.



Prof. Y.S. Mayya at the Plenary

The advantage now in enhanced technology is the improved plant availability and safety while minimizing the cost. The main concern in the nuclear industry is safety. To adhere to these cardinal principles for safety, observance of simplicity, diversity, zero- failure and freedom have become the norms.

Dr. Mayya concluded with the unprecedented opportunities opening up in India for the rapid

growth of strategic electronics sector. It should be wisely used to develop home - grown products. Indian industry needs to be encouraged to look beyond labour intensive installations. Only ownership of design know-how by the Indian Industry can allow India, as a nation to claim respect, instill pride and offer challenges to the large pool of youngsters.

## Rapid expansion in population requires new cities: Ahmed

C. Sahana and Siddhhant Bohara

India would require building new cities in the size of Chicago every year, to accommodate 47,000 people adding up to its population, day by day. This would have tremendous impact on bio-diversity, said Dr. Ahmed DJOGLAF, Executive Secretary, UN Convention on Biological Diversity.

He was speaking at a plenary session that discussed Biodiversity - Focus on Fragile Coastal Ecosystems.

Indian middle class, now accounting for 20 per cent of the total population, will enlarge to 80 per cent by 2050 and the subsequent need for space and resources will have its toll on



Dr. Ahmed chairing the plenary session

the country's flora and fauna.

He reiterated the need for fulfillment of the Copenhagen Summit and the implementation of the Nagoya Protocol, to address concerns relating to

reanimating biological diversity, like ocean acidification, owing to climate change. Speaking on Sacred Groves, Dr. Nandhita Krishna said; "Groves are the spiritual and cultural heritage

of India. These groves helped the preservation of local biodiversity.

She touched upon the cultural links of biodiversity bound to groves which are fast depleting due to wanton destruction of eco systems for increased human habitation needs. Groves that spanned across acres are now curtailed to single-tree-groves, Dr. Krishna observed. Sacred groves are governed by taboos and that is what makes them distinct from a forest. People are bound to a cultural mandate that warrants utmost reverence to trees, herbs and shrubs in the groves that are propitious for ground water replenishing, providing refuge for birds and local wild life, she added.

However rapid urbanization

and developmental activities coupled with debunking of such practices by western model education, is hindering the sustenance of these groves at bay. Dr. T.P Singh from Bangkok explained Mangroves for the Future Initiative Project. The project strives for the development of infrastructure for the coastal system and to enhance coastal governance at all levels, he said.

In this process, National Conservation of bio-diversity and private sector play a vital role by financing the small and large grant development projects.

Luminaries from different parts of the world, dealing with conservation bio-diversity spoke.

# It is Nature that sustains us: Shekar Dattatri

*Shekar Dattatri is a renowned Indian wildlife filmmaker who has pursued his passion for Nature conservation right from the age of 13. His first film A Cooperative for Snake Catchers won the National Award in 1987 for Best Scientific Film. He uses his filmmaking skills to make hard-hitting advocacy of conservation issues. His films on mining and turtles have brought lasting changes on the ground. Spectrum reporter Haripriya Madhavan caught up with Mr. Shekar Dattatri to share his views on wildlife filmmaking, during the screening of his film Truth about Tigers at the valedictory session of the Science Communicators' Meet.*

**Question: Why are wildlife**

**films essential?**

**Shekar:** Our whole existence is dependent on Nature. If there are no forests that absorb carbon or give us water resources, life would not at all be possible. Wildlife films are essential to communicate this importance of Nature to the planet and the human kind.

**Q: What is the current status of wildlife films in India?**

**Shekar:** Wildlife films are almost non-existent in India. In a population of a billion, there are probably only three to four professional wildlife filmmakers. It is one of the least glamorous professions now.

**Q: What do you think is the future of wildlife filmmaking**



Shekar Dattatri

**in India?**

**Shekar:** To be frank, it is bleak. To give you the reasons, the most important one being that the forests are rigidly

controlled by the Government. There is poor understanding in the Government about nature films and wildlife films. Many states do not allow scientists or wildlife filmmakers inside the forests. Above all this, the cost for filming a documentary inside the forests has now shot up to astronomical levels. It might take one and a half years to make a one-hour film. The other challenges are the need to unearth immense passion and dedication and the low-funding available. But, a determined filmmaker can surmount all these problems.

**Q: What would be your suggestions for making interesting wildlife films?**

**Shekar:** Have a really good

understanding of what you are filming in order to give a clear insight to the audience. Use good technology for filming. Most importantly, be a good story-teller who can engage the audience.

**Q: How can students learn more on nature and wildlife filmmaking?**

**Shekar:** You can have a look at my website [www.shekarDattatri.com](http://www.shekarDattatri.com). We will shortly be launching an initiative called "Youth for Conservation", which will provide a one-stop web portal for young people to know how they contribute to conservation of Nature. The portal will contain information on eco-regions of India, conservation problems in our country and much more.

## Scientist says Manmohan will be General President of Centenary ISC

Maheswari M D

"The centenary of the Indian Science Congress (ISC) 2012-2013 will be held under the general Presidentship of Dr. Manmohan Singh," said Prof. Ramamurthi Rallapalli, Scientific Advisor, SRM University.

Kalinga Institute of Industrial Technology, Bhubaneswar will host the 99th Indian Science Congress in partnership with National Institute Science Education and Research (NISER) under the Presidentship of Dr. Geetha Bali.

Speaking to Spectrum, Prof Ramamurthi said it was indeed a matter of honour to have had all the three Nobel Laureates who shared the 2009 Prize



Prof. Ramamurthi Rallapalli

for chemistry - Venkatraman Ramakrishnan, Thomas A. Steitz and Ada E. Yonath - under one roof here at SRM University

"The children, who participated in the Indian Science Congress, got the opportunity of interacting with Thomas Steitz and Venkataraman. The Nobel Laureates also gave awards

to the children who asked the most interesting questions," Prof Ramamurthi remarked.

"On January 3, a special programme titled 'Chemistry of Future', chaired by Prof. CNR Rao declared 2011 as the International year of Chemistry. It is remarkable that ISC celebrated it first in the world," the former Vice Chancellor of Sri Venkateswara University, Tirupathi said.

"The Vice Chancellor and the Provost of SRM University had come out with a brilliant idea of developing a 'Nobel Garden', where the Nobel Laureates planted saplings and there are plans to develop a garden under their names on the campus," Prof Ramamurthi said.

Haripriya Madhavan

The valedictory session of the Science Communicators' Meet was held on January 6, with the highlight being the screening of the documentary film 'The Truth about Tigers'. Stating that the film has a lot of factors on science to offer, Shekar Dattatri, the filmmaker explained how we need to understand the science about tigers to undertake preservation measures.

The film covered a tiger's life in detail and also enlightened the audience about the colossal damage wrought by poaching on the national animal's population. Shekar urged the audience to form watchdog groups and use the Right To Information (RTI) Act to influence tiger protection measures at policy level.

Answering a question on interesting terror encounters while shooting wildlife films, Shekar remarked "Moment of terror was for the tigers as they fear humans. We film in the gentlest way without going close to the animal. An important lesson is to learn to respect animal space and treat wildlife reserves as temples".

Ms. Anuradha Parakkat, Director- Corporate Affairs & Student Mentoring, SRM University welcomed the gathering. The speakers who presented their papers during the meet on the focal theme "Public Communication of Scientific Research: Bridging the Knowledge Divide" were felicitated during the occasion. Dr. Ponnavaiko, Provost, SRM University distributed certificates and delivered the valedictory address.

## And now - a major sport meet

A Spectrum Reporter

Close on the heels of successfully hosting the 98th Indian Science Congress, SRM University is organizing an All India Inter-University Ball Badminton Tournament for Men and Women between January 10 and 14, 2011. Players from as many as 120 Universities from all over India will be participating in the tournament which will also be played in floodlight at the Valliammai Sports Complex. The Chief Guest for this major sporting event is Dr. K. Vaithianathan, Vice Chancellor,

Tamil Nadu Physical Education and Sports University

On January 10, Dr. R. Balasubramanian, Director of the Faculty of Science and Humanities and Sports will deliver the Welcome Address followed by a Presidential Address by the Chancellor of SRM University, Dr. T. R. Pachamuthu after which the Chief Guest will deliver his address. The vote of thanks is by Mr. Y. C. Louis Raj, Organising Secretary, All India Inter University Ball Badminton (M&W) Tournament, 2010-2011.

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closely linked to malnutrition. Pointing out the effectiveness of Directly Observed Therapy (DOT) strategy in decreasing TB deaths, she recommended an integrated food and drug scheme for people affected with the disease. Another speaker at the session, Dr. V. Prakash, Director, Central Food Technological Research

Institute (CFTRI), Mysore explained how traditional foods like legumes and spices have better nutritional benefits. Dr. B. Sesikaran, Director, National Institute of Nutrition, Hyderabad enlightened the audience on the bio-safety measures undertaken before approval of Genetically Modified Crops in India. Dr. M. S. Swaminathan of M. S. Swaminathan Research Foundation chaired the session.