



ISSN 0409-7467

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CSIR News

NEWSLETTER OF THE COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

Volume 67 No. 21 & 22

website: <http://www.csir.res.in>

November 2017

In The News

Dr. Harsh Vardhan Visits CSIR-NIO Urges Journalists to take Science to the Public



Honorable Minister Dr. Harsh Vardhan addressing the gathering

“**LEARNING** science from close quarters is a great experience and the scientific accomplishments of our researchers should reach the public,” were the words expressed by Dr. Harsh Vardhan, Hon’ble Minister of S&T, Earth Sciences, and Environment, Forest & Climate Change, as he presided over the valedictory programme of the four-day workshop on “S&T Communication Strategies and Approaches

with focus on The Indian Ocean – Economic and Geostrategic Significance” organized at the CSIR-National Institute of Oceanography (CSIR-NIO), Dona Paula, Goa.

The Hon’ble Minister mentioned that he felt proud and privileged of the achievements of the scientific community in India since he has closely interacted with scientists from many of the developed countries.

He stated that India has high quality collaboration with almost 44 countries and said that we are on the right track in following the Prime Minister's vision of building a new India. He concluded with an appeal to the journalists to create greater awareness of the cutting edge research being carried out in our country for the benefit of the common

people. He also assured the journalists all possible support if they wanted to spend some time with the scientists in any of the research institutes in the country.

Earlier during the programme, Prof. Sunil Kumar Singh, Director, CSIR-NIO extended his hearty welcome to Dr. Harsh Vardhan, Dr. Sudeep Kumar, Head, CSIR, Shri Rajendra Prabhu, President of the National Union of Journalists and Shri K.N. Gupta, Senior Journalist. Prof. Singh also presented an overview of NIO's research activities.

Dr. Sudeep Kumar, Head, Mission Directorate, CSIR provided a brief about the workshop. He was joined by Shri Rajendra Prabhu expressing how such workshops would help journalists to understand various scientific activities and to reach them to the public to improve their lives as around 300 million people depend on the oceans.

Towards the end of the programme Shri K.N. Gupta informed that the idea of this workshop was proposed by Shri Rajendra Prabhu and encouragement was given by the Hon'ble Minister. Miss Vichitra Sharma, Director, NUJ-School of Journalism and Communication, proposed the vote of thanks.

In all, 25 journalists from around the country attended the workshop and were given a certificate at the hands of the Honorable Minister Dr. Harsh Vardhan.



Honorable Minister Dr. Harsh Vardhan being felicitated



Honorable Minister Dr. Harsh Vardhan posing with the journalist participants

CSIR-NISCAIR Organises Panel Discussion on Air Quality and Health



Dr. Manoj Kumar Patariya, Director, CSIR-NISCAIR addressing the gathering. On the dais are Dr. R.K. Bhandari, Chairman, Forum for Disaster Mitigation and Management, Indian National Academy of Engineering and Dr. K.J. Ramesh, Director-General of Meteorology, India Meteorological Department (IMD)

Crop stubble burning in the neighbouring states of Delhi contributes just 8% of the smog that has engulfed the national capital for about a week now. In fact, the major contributors to the smog are vehicular pollution and construction work that loads particulate matter in the air and the drifting particles from the burning crop stubble only exacerbates the existing poor air quality that has resulted in Delhi becoming a gas chamber.

These views emerged from a Panel Discussion held on the occasion of the “UNESCO World Science Day for Peace and Development” organized by the CSIR-National Institute of Science Communication And Information Resources (NISCAIR), New Delhi on 10 November 2017.

The UNESCO World Science Day for Peace and Development is celebrated

on November 10 every year to highlight the important role of science in society and the need to engage the wider public in debates on emerging scientific issues. It also underlines the importance and relevance of science in our daily lives.

Given the significance of the day and the prevailing smog in Delhi, since declared as a medical emergency in Delhi, CSIR-NISCAIR focussed on the ‘burning’ topic of air quality on the UNESCO World Science Day this year.

Dr. K.J. Ramesh, Director-General of Meteorology, India Meteorological Department (IMD) and Dr. R.K. Bhandari, Chairman, Forum for Disaster Mitigation and Management, Indian



Dr. K.J. Ramesh, Director-General of Meteorology, India Meteorological Department (IMD) giving his insight into the issue of air pollution



(L to R): Dr. Manoj Kumar Patariya, Director, CSIR-NISCAIR, Dr. R.K. Bhandari, Chairman, Forum for Disaster Mitigation and Management, Indian National Academy of Engineering and Dr. K.J. Ramesh, Director-General of Meteorology, India Meteorological Department (IMD)

National Academy of Engineering spoke on the occasion.

In his talk on “Societal Challenges – Air Quality, Environment and Public Health”, Dr. Ramesh highlighted the air quality monitoring initiatives of the IMD. Dr. Ramesh said that the situation this year is better than that of last year and with the measures being taken to control air pollution, it is likely that 2018 would be remarkably better. The prevailing situation is owing to multiple factors including the weather, existing poor air quality and burning of the agricultural waste, he said.

Dr. Bhandari called the Delhi smog a Frankenstein – a result of our own creation. In his lecture on “Frankenstein of Smog in Delhi and the

Rising Threats to Human Survival in a Multi-hazard Context”, Dr. Bhandari said that the alarming growth of vehicles in Delhi is a major cause of air pollution. He also focussed on the many construction and civil works as a major contributor to the smog. Speaking of mitigating the problem, he said that it is a collective responsibility and we cannot look up only to the government to address the issue. He exhorted that every citizen should play a responsible role for reducing environmental pollution. He also added that we should coordinate for better disaster preparedness and management.

Dr. Manoj Kumar Patariya, Director, CSIR-NISCAIR chaired the event and in his opening remarks highlighted vehicular pollution stating that technological developments while beneficial to mankind also leave behind undesirable effects such as pollution. He added that we need to strike a balance and appropriate policies need to be devised. He informed that CSIR-NISCAIR as a national communication institute can play an important role in enhancing the two-way communication between the common man and the policy makers. Dr. Patariya also informed about the major project on climate change being carried out at CSIR-NISCAIR.

CSIR-NISCAIR scientists, invitees and media personnel participated in the event and had detailed deliberations with the invited experts. In response to a query on the seeming lack of credible climate change data from coastal regions, the expert responded that for rainfall there is a robust mechanism for collecting data. However, there are



Dr. R.K. Bhandari, Chairman, Forum for Disaster Mitigation and Management, Indian National Academy of Engineering addressing the gathering



Dr. Manoj Kumar Patariya, Director, CSIR-NISCAIR honouring Dr. K.J. Ramesh, Director-General of Meteorology, India Meteorological Department (IMD) with a memento



no effective mechanisms for collecting data for other civil weather monitoring or weather sensitive parameters that are damaging the crops such as strong winds or hale. There are plans to set-up panchayat level weather stations to

collect data.

Mr. Sanjay Burde, Head, Information and Human Resource Division proposed the vote of thanks.

Dr. G. Mahesh, Senior Principal Scientist, CSIR-NISCAIR

MoUs

IIMC and CSIR-NISCAIR Sign Agreement to Augment Science Communication

The Indian Institute of Mass Communication (IIMC) and the CSIR-National Institute of Science Communication And Information Resources (CSIR-NISCAIR) signed an MoU on 16 November 2017 to strengthen the science communication scene in the country. The agreement is expected to bring about a focused synergy that would not only lead to trained science journalists and science communicators but also open up new research opportunities in this area.

While CSIR-NISCAIR has at its

mandate the objectives to take up new ventures in the field of science communication, dissemination and S&T information management systems and services, IIMC is a premier Institute imparting teaching, training and research in the field of Mass Communication and Journalism.

As part of the agreement, the two institutions seek to forge collaborative research projects and short-term courses in Science Communication. "Science journalism today is more or less confined to health and

NOVEMBER 16, 2017
 ASC Complex, New Delhi



MoU Signing Ceremony



Dr. K.G. Suresh, DG-Indian Institute of Mass Communication (IIMC), New Delhi and Dr. Manoj Kumar Patairiya, Director, CSIR-NISCAIR signing and exchanging the MoU

technology reporting,” said Dr. K.G. Suresh, Director General, IIMC. “Students of journalism and mass communication need to be exposed to the innumerable facets of science journalism, which is required today to combat the various ills plaguing Indian society such as scientific illiteracy and superstitions. The outcome of this coming together of two institutions working in this area, therefore, would be very fruitful for the country.”

There was a huge possibility of expanding the scope of community radios in the country, which had not been fully exploited until now, said Dr. K.G. Suresh. He also lamented that while the coverage of science in the media was too low, often there was misrepresentation of scientific facts due to journalists not being able to grasp the complexities of science.

Dr. Manoj Kumar Patairiya, Director, CSIR-NISCAIR said, “Media-savvy scientists and science-savvy journalists need to be brought together on a common platform for effective and holistic science communication.”

He also said that this joining of hands between IIMC and NISCAIR could open up several avenues of collaborations such as in the field of creating scientific content in regional languages. There was also enough scope for targeted science communication training for multitudes of end-user groups, he said.

Dr. Suresh informed that as the first step in the collaboration between IIMC and NISCAIR, a national conference was being organized during 21-22 December 2017 on India’s scientific wisdom. Very soon an international conference would also be organized, he said.

Events

CSIR-NISCAIR Organises Regional Workshop on “Sustainable Development Goals: Communication Strategies”



Dr. Manoj Kumar Patairiya, Director, CSIR-NISCAIR delivering the Opening Remarks

CSIR-National Institute of Science Communication And Information Resources (CSIR-NISCAIR) organised a Regional Workshop on “Sustainable Development Goals: Communication Strategies” during 16-18 November 2017 at the NASC Complex, New Delhi in collaboration with the Association of Academies and Societies of Sciences in Asia (AASSA) and the Indian National Science Academy (INSA).

The Workshop brought together a diverse array of partners to communicate the Sustainable Development Goals (SDGs). Scientists, communicators and policy makers from South Asian countries like Japan, South Korea, Indonesia, Georgia, Iran, Afghanistan and India deliberated on

communication strategies and innovative initiatives in communication, especially in remote areas and for marginalized sections, risk and disaster communication, development communication, public scientific literacy, and communication challenges in the digital age.

“Rumours and misconceptions spread fast and last longer than good communication that we intend to educate the public with,” said Dr. Narender K. Sehgal while inaugurating the AASSA-INSA-NISCAIR Regional Workshop on “Sustainable

Development Goals: Communication Strategies” on 17 November 2017.



Dr. Narender K. Sehgal, Former Adviser, DST, Govt. of India giving the Inaugural Address

Dr. Sehgal, winner of the prestigious Kalinga Prize for science popularisation, further said that countering such misconceptions is not easy and takes extra effort. “We have a market for misconceptions,” he said, “and digital communication such as WhatsApp messages only serve to further confuse the audiences that we as science communicators intend to inform.”

Speaking on the relevance of institutions like AASSA, Dr. Manoj Kumar Patairiya, Director, CSIR-NISCAIR said that such agencies had become essential especially for developing countries where societies were facing problems different from those in developed countries. For instance, the lack of clean drinking water was a major problem in developing countries leading to many deaths.

Prof. A.K. Sood,



Prof. A.K. Sood, President, INSA, giving his Opening Remarks

President of the Indian National Science Academy (INSA) said that communication strategies were integral to achieving the Sustainable Development Goals. But there were significant communication challenges too, he said, including lack of public scientific literacy.

Prof. Yoo Hang Kim, President, AASSA, said that for communication strategies to succeed, widespread collaborations between stakeholders was the need of the hour.



Prof. Yoo Hang Kim, President, AASSA, delivering the Presidential Address



Release of Workshop Book. From Right: Dr. P. Goswami, Director, CSIR-NISTADS; Dr. Manoj Kumar Patairiya, Director, CSIR-NISCAIR; Prof. Yoo Hang Kim, President, AASSA; Dr. Narender K. Sehgal, Former Adviser, DST, Govt. of India; Prof. A.K. Sood, President, INSA; Prof. Krishan Lal, former President, INSA; Mr S.P. Mishra, Deputy Executive Director, INSA

The inaugural programme was also marked by the release of the *Workshop Book* and launch of the *Dr. S.S. Bhatnagar Digital Repository*, put together by CSIR-NISCAIR. The vote of thanks was delivered by Mr S.P. Mishra, Deputy Executive Director, INSA.

In the first technical session chaired by Prof. Krishan Lal, former President of INSA, Prof. Lal gave a brief introduction of the AASSA project on Food and Nutrition Security and Agriculture (FNSA).

In his presentation, Prof. Yoo Hang Kim, President, AASSA mentioned about the IAP Inter Academies which includes IAP, IAC and IAMP. There are four regional networks – Asia/Pacific, Europe EASAC, America IANAS, and Africa NASAC. He emphasised on links between scientists and decision makers, and said a scientifically literate society can have informed choice, promoting healthy food systems.

The second scientific session was chaired by Prof. Mooha Lee, Executive Director, AASSA and Prof. Finarya Legoh, Agency for Assessment and Application of Technology, Indonesia.

In the first presentation, Dr. Mohammad Hakim Haider, Institute of Economics, Academy of Science



Prof. Krishan Lal, Former President, INSA

of Afghanistan, gave a presentation on *Sustainable Development: Communication from a Development Perspective*. He said that SDG's is a multidimensional approach, which requires people's participation. He focused upon eradication of extreme poverty, avoidance of exploitation of resources, decrease in pollution levels, and the role of media in filling the gap between the poor and the policy makers.

In his presentation on *Fundamentals of Communicating SHARE*, Prof. Hak-Soo Kim, former President, AASSA said that there was no dearth of information providers, no lack of media



Dr. Mohammad Hakim Haider, Institute of Economics, Academy of Science of Afghanistan



Hak-Soo Kim, Former President, AASSA





Dr. V.K. Srivastava, President, Indian Science Writers Association (left) and Dr. Kamal Kapoor, Associate Professor, University of Jammu (right)

channels and no lack of messages. All that was required was more of public engagement.

While Dr. V.K. Srivastava, President, Indian Science Writers Association spoke about *Emerging Perspectives in Health Communication*, and the work done by ICMR in 41 villages where people suffered from protein

energy malnutrition, Dr. Kamal Kapoor, Associate Professor, University of Jammu, highlighted the merits of green chemistry.

In the third scientific session, Prof. Finarya Legoh said that technology innovation and social culture can be linked by integrating work elements like knowledge of management, promotion and marketing, science and technology communication and social responsibilities.

Miss Wiwi Syafarhadiati delivered a talk on *Spreading Technology Development Outcomes through e-Media*, where she talked about the importance of social media in communicating science.

She said that technology development has to be socialized.

Dr. N. Murugan, Former Director, All India Radio, Chennai delivered a talk on *Significance of Science Communication through Regional Languages to Reach the Unreached*. He highlighted the success of Radio and said it is the cheapest medium



Prof. Finarya Legoh, Indonesia



Miss Wiwi Syafarhadiati, Indonesia



Dr. N. Murugan, Former Director, All India Radio, Chennai

to reach people.

Dr. M.A. Ansari, Professor, Agriculture Communication, GBPU, Uttarakhand, in his presentation on Communication strategies for sustainable agricultural development, explained the sustainable agricultural development goals as increasing agricultural productivity, increasing production efficiency, increasing farm profitability, and enhancing socio political policy.

In the last scientific session on 18 November 2017, in a session chaired by Prof. Yoo Hang Kim, President, AASSA and Prof. Kankan Bhattacharyya, Vice

President (Science Promotion), INSA, while Prof. Avtandil Korakhashvili from National Academy of Sciences of Georgia, Georgia gave a presentation on “*Adaptation of Food Safety Communication Systems RASFF and INFOSAN in Grogian Cheese Production*”, Prof. Iraj Malakmohammadi, University of Teheran, Academy of Sciences, Islamic Republic of Iran, presented his research on “*Communication Strategies to Empower Sustainable Development Technology Users in Digital Age*”.

Prof. Mastaka Watanabe from the University of Tsukuba, Japan, presented his views on “*The Sprout of Science: How to grow it in Society*” highlighting the major programmes being organized in Japan in recent years. These include Youngster science festivals, Exhibitions, Workshops, Science Agora, Folk Literacy, Science cafes, etc.

Shri V.P. Singh, President, Indian Science Communication Society, presented his views on “*Human Resource Development in Science Communication*”. He talked about the importance of developing our human resource to develop science communication. He mentioned that there is a need for creating positions of science communicators in our



**Dr. M.A. Ansari, Professor,
Agriculture Communication, GBPU**



**Prof. Mastaka Watanabe
from the University of
Tsukuba, Japan**



**Prof. Avtandil Korakhashvili from
National Academy of Sciences of
Georgia**



**Prof. Iraj Malakmohammadi,
University of Teheran, Academy of
Sciences, Islamic Republic of Iran**



**Shri V.P. Singh, President,
Indian Science Communication
Society**



**Dr. Pradeep Srivastava,
former Chief Scientist, CSIR-CDRI**

laboratories and research institutes, so as to fill the gap between scientists and the layman.

The highlights of the Workshop included two Scientainment programmes. Dr Pradeep Shrivastava, former Chief Scientist, CSIR-CDRI addressed the workshop on the topic “*Scientoon as a tool for Communicating Science, Environment and Risk*”. Scientoons, he said, not only make you smile and laugh but also provide information about new researches, subjects, data and concept in a simple, understandable and interesting way.

Dr. Rickey Kej, Grammy Award Winner and conservationist gave a



Dr. Rickey Kej, Grammy Award winner

musician’s perspective of Sustainable Development Goals. Dr. Kej gave live demonstrations of hazards associated with climate change through his films and music.

The final component of the Workshop was a Round Table Discussion and Summing Up, chaired by Prof. Mastaka Watanabe, University of Tsukuba, Japan and Prof. Avtandil Korakhashvili.

While Prof. Kankan Bhattacharyya emphasised that education lasts for long and that social media is the best medium for science communication, Dr. Ankuran Dutta, Associate Professor and Head, Department of Communication and Journalism, Gauhati said that we need to encourage people to get involved to bring about change in the society. He also spoke about the success and popularity of community radio across the world.

Shri Shabir Ahmad Shabir, Secretary, Student Welfare Association, Srinagar, spoke about the development and awareness programmes organized by his institution. Dr. Jagdish Chander, Advisor, International Cooperation, Department of Science and Technology, focused upon the hybridization of ideas, need for objectives and communication strategies to be adopted. Dr. V.K.

While Prof. Kankan Bhattacharyya emphasised that education lasts for long and that social media is the best medium for science communication, Dr. Ankuran Dutta, Associate Professor and Head, Department of Communication and Journalism, Gauhati said that we need to encourage people to get involved to bring about change in the society.

Shrivastava said that Indian science writers are doing well but it is not enough. While Dr. Murugan commented on the need for establishing a science channel, Dr. Mohammad Hakim Haider appealed to fill the gap between policy makers and the public.

While summing up the deliberations of the AASSA-INSA-NISCAIR Regional Workshop on “Sustainable Development Goals: Communication Strategies”, Dr. Manoj Kumar Patairiya, Director, CSIR-NISCAIR highlighted some of the strategies and best practices for SHARE Communication in the form of recommendations for member countries. These included training of scientists and journalists in science communication, publication of suitable resource materials, encouraging regional and local languages, implementing outreach and public engagement activities like science fairs, lectures, demonstrations, films, debates of emerging scientific issues, etc.

to be implemented, emphasising digital modes of communication, government support for science communication activities, and national level studies to gauge public understanding of science.



Dr. Manoj Kumar Patairiya, Director, CSIR-NISCAIR summing up the final deliberations of the Regional Workshop

CSIR-IICB Organizes B.K. Bachhawat Memorial Lecture and Symposium

CSIR-Indian Institute of Chemical Biology (CSIR-IICB), Kolkata organized the 3rd B.K. Bachhawat Memorial Lecture and a Symposium on “Chemical Biology Research” in its Jadavpur campus on 13 November 2017 in association with Chemical Biology Society.

Professor Bimal Kumar Bachhawat, one of India’s leading biologists, obtained his Ph.D. degree in 1953 from the University of Illinois. Subsequently

he worked at the School of Biological Chemistry, University of Michigan, Ann Arbor. In 1976, Prof. Bachhawat moved to Kolkata as Director of the Indian Institute of Experimental Medicine now Indian Institute of Chemical Biology (IICB). He was responsible for making IICB a leading centre in the area of contemporary biology in the country.

Prof. Bachhawat was the person who coined the term “Chemical Biology” in the early eighties when nobody in

Apart from being an outstanding scientist, Bachhawat was a great builder of institutions and a science manager par excellence. He set up the first internationally recognized center of neurochemistry and glycobiology in Vellore and created one of the best Departments of Biochemistry in the country, at the University of Delhi South Campus.

India or in the world even thought of it. In 1982, with his modern view and initiative the Institute was renamed as Indian Institute of Chemical Biology. He was a true visionary and far ahead of his time in pioneering the introduction of lectin biology and liposome biology in India. He pioneered sugar-bearing liposomes as a molecular Trojan horse for site-specific delivery of drugs and enzymes only to the diseased organ.

Apart from being an outstanding scientist, Bachhawat was a great builder of institutions and a science manager par excellence. He set up the first internationally recognized center of neurochemistry and glycobiology in Vellore and created one of the best Departments of Biochemistry in the country, at the University of Delhi South Campus. As the Director of the Indian Institute of Chemical Biology, Kolkata, he transformed this institution into one of the finest laboratories in biological sciences in the country.

He was the recipient of numerous awards and honours which included Shanti Swarup Bhatnagar Award (1962), Golden Jubilee Medal of IISc (1976), Birla Smarak Kosh (1986), FICCI award (1982) to name a few. He was honoured with Padma Bhushan in 1990. He was elected to all the scientific academies

in India and several of them conferred many honours and medals on him over the years. Up to the very last day of his life Bachhawat was deeply involved in science and its development in India.

In the first session, Welcome addresses were delivered by Prof. Samit Chattopadhyay, Director, CSIR-IICB and Dr. P. Jaisankar, Secretary, Chemical Biology Society. The 3rd B.K. Bachhawat Memorial Lecture was delivered by Dr. Anindya Dutta, Harry F. Byrd Professor and Chair of Biochemistry and Molecular Genetics and Professor of Pathology, University of Virginia, USA.

Dr. Dutta in his lecture entitled “New nucleic acid molecules in our cells: MicroDNAs and tRFs” stated that high throughput sequencing, developed after the human genome was sequenced, has been amazingly useful for making new discoveries. He illustrated this by talking about three discoveries in their lab. He informed that MicroDNAs are small extrachromosomal circles of DNA, discovered in normal tissues and in cancers, arising from GC-rich, transcriptionally active parts of the genome through the action of specific DNA repair pathways. Their exact function is still unclear, but they hint at significant genome instability even in



Dr. Bimal Kumar Bachhawat (26th August 1925 - 23rd September 1996)



Glimpses of the programme

normal cells and tissues.

In the Scientific Session II, Dr. Prasad Krishnan, Head, Neurosurgery Division, Peerless Hospital & B.K. Roy Research Center, Kolkata in his lecture titled “Not just a cover: The story of our magnificent cranial shell” mentioned that the brain has been and continues to remain a source of fascination for humans. In the shadow of all the attention it generates it lies silently in the much ignored cranium. Widely dismissed as just being a protective shell, the skull has a rich story to tell – in terms of the changes it has undergone in the course of evolution, the procedures it has had performed on it and last but not the least the increasing understanding we are gaining about its role in improving brain function.

Dr. Dipyaman Ganguly, Senior Scientist & Ramanujan Fellow, CSIR-Indian Institute of Chemical Biology, Kolkata delivered a lecture on “Let there be force: Piezo1 mechanotransduction and T cell activation”. He told that T cells are critical players in adaptive immune responses. CD4+ and CD8+ T cells are presented with

cognate peptides (antigens) by antigen presenting cells (APCs) in the context of major histocompatibility complex (MHC) II and MHC I respectively, triggering T cell receptor (TCR) signaling and downstream activation events. He added that Piezo proteins have been recently described as conserved mechanosensitive channels. In vertebrates two Piezo proteins are described – Piezo1, involved in various tissue development, differentiation and dynamics, and Piezo2, that senses gentle touch. Interestingly, Piezo proteins are expressed widely in immune cells, although their role in regulation of the immune system is not known. They found that the professional mechanosensor protein Piezo1, but not Piezo2, is critically involved in human T cell activation. While deficiency of Piezo1 attenuates downstream events on ex vivo TCR triggering, a Piezo1 agonist can obviate the need for the essential mechanical cues.

A large number of research scholars and scientists from CSIR-IICB and other institutes of Kolkata participated in the programme and interacted with the speakers.

Dr. Prasad Krishnan, Head, Neurosurgery Division, Peerless Hospital & B.K. Roy Research Center, Kolkata in his lecture titled “Not just a cover: The story of our magnificent cranial shell” mentioned that the brain has been and continues to remain a source of fascination for humans.



Students of R.K. Mission Vivekananda English School visit CSIR-NML



A group of 64 students of class IX & X Standards from R.K. Mission Vivekananda English School, Sakchi accompanied by three teachers Shri Rajeev Mishra, Swami Isha Permanand, and Bikash Banerjee visited CSIR-National Metallurgical Laboratory, Jamshedpur and interacted with scientists and research scholars under

the aegis of the CSIR-NML-School Interactive programme. The students were thrilled to visit the laboratory and interact with scientists and staff at CSIR-NML.

Dr. P.N. Mishra, Principal Scientist, welcomed the students and teachers, briefed about the programme, and discussed an overview of CSIR and



NML, its contributions in different branches of Science & Technology. He defined science, science & technology, development of science & technology in Indian perspectives, and also explained about natural resources like ores, minerals, rocks and their value for the development of our Nation.

Further, a laboratory visit programme was organized in two groups lead by Dr. P.N. Mishra and Sri S.N. Hembram helping students to interact with working scientists and technical officers.

The students visited creep testing units of MTE Division and got to know about fatigue, creep, fractures prevailing in different types of industrial components. Students also got exposure to different machines like Servo Hydro Testing Machine, Servo Electrical Machine

and Furnace.

The students were appreciative of the facilities and the contributions of NML to the Nation. During the interactive session, students asked many questions about minerals, ores, origin of coal, the evolutionary history behind the formation of metal, metals forging, rolling, and heat treatment. The teachers and students requested for an early next visit to the laboratory.



Glimpses of the interactive student visit programme at CSIR-NML

CSIR-IICB Starts CSIR-Skill Development Programme



Inaugural function of the CSIR-Skill Development Programme at CSIR-IICB

The courses include (i) Bioinformatics, (ii) Clinical Biochemistry, Microbiology and Pathology techniques for biomedical applications, (iii) Biomedical equipments and (iv) Advanced plant tissue culture among others.

CSIR-Indian Institute of Chemical Biology (CSIR-IICB) has started the CSIR-Skill Development Program. The inaugural function was organized on 14 November 2017.

The programme began with a welcome address by D. G. Suresh Kumar, Chief Scientist & Head, PME and P&I Division. Dr. K. Muraleedharan, Director, CSIR-CGCRI graced the ceremony as chief guest.

The Nodal officer of the CSIR-IICB Skill Development Program & Chief Scientist, Dr. P. Jaisankar provided a brief account of the courses offered herein.

The courses include (i) Bioinformatics, (ii) Clinical Biochemistry, Microbiology and Pathology techniques for biomedical applications, (iii) Biomedical equipments and (iv) Advanced plant tissue culture among others.

Dr. Muraleedharan delivered an inspiring lecture to the student trainees and to the gathered audience emphasising the tremendous need for skilled manpower in the present competitive world. The programme ended with a vote of thanks by Dr. R. Natarajan, Sr. Scientist & Convener Skill Development Program.



National Conclave on

Connecting Education, Skill-Development and Career Aspiration

18-20 January, 2018

CESCA-2018 will bring together educationists, industrialists, thought leaders and students to exchange views

Key Issues

- *Employment opportunities of future*
- *Skill requirements for next generation-employment*
- *Connecting the Education System to skill development*

Events

- *Panel discussions with eminent Panelists*
- *Student-Expert Interaction Sessions*
- *Student debates on student identified themes*
- *Public lectures by eminent scientists*
- *Exhibition on Education, Skill and Career opportunities*

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N.C.A.S.

International Conference on Cell Death in Cancer and Toxicology

20-22 February 2018

Organised by CSIR-Indian Institute of Toxicology Research (CSIR-IITR)

The International Conference on "Cell Death in Cancer and Toxicology (CDCT)" will be held at CSIR-Indian Institute of Toxicology Research, Lucknow, India from February 20-22, 2018. This conference is being organized by CSIR-IITR, Lucknow, India in association with the Roswell Park Cancer Institute, Buffalo, USA, International Cell Death Society, USA and Cancer Research and Care Academy (CRCA) New Delhi, India

It will bring together scientists across various disciplines including cancer, toxicology, and cell death. Cell death is an integral part of cellular homeostasis and development. Alterations in cell death are frequently associated with various pathophysiological conditions including cellular toxicity and cancer. The conference will showcase new discoveries in these areas and will advance new therapeutic interventions in cancer and toxicological response caused by cell death.

The aim of this conference is to provide an international platform for established scientists as well as young researchers to showcase recent discoveries and exchange ideas in the areas of cell death, cancer and toxicology. To promote brainstorming interactions between established experts and young researchers, poster and selected oral presentation sessions are also proposed in the program. Together, the conference will connect researchers from diverse disciplines working across the globe to foster new collaborations.

Themes of the Conference

- Cancer Stem Cells and Clinical Perspectives
- Cell Death Mechanism and Cancer
- Cell Death and Toxicological Responses
- Therapeutic Resistance in Cancer and Translational Progress

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Printed and Published by

Dr. Manoj Kumar Patariya on behalf of CSIR-National Institute of Science Communication And Information Resources

Dr. K.S. Krishnan Marg, New Delhi -110 012 and printed at NISCAIR Press

Dr. K.S. Krishnan Marg, New Delhi -110 012

Editor : Hasan Jawaid Khan; **Assistant Editor :** Sonali Nagar

Design: Neeru Sharma & Sarla Dutta; **Production:** Pankaj Gupta

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Annual Subscription: Rs 500; Single Copy: Rs 50.00

RN 4512/57