



CSIR-CGCRI

NEWSLETTER

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FOCUS

Visit of Dr VK Saraswat, Hon'ble Member of NITI Aayog in CSIR-CGCRI

Dr VK Saraswat, Hon'ble Member, NITI Aayog (National Institution for Transforming India), New Delhi, visited CSIR-CGCRI on January 24, 2017 to deliver an invited talk in the International Conference on Advances in Glass Science and Technology held at the Institute from January 23-25, 2017. Ahead of his speech, Dr Saraswat visited three key laboratories - Speciality Glass Production Lab, Non-Oxide Ceramics & Composites Lab and Fiber Optics and Photonics Lab. Different products and processes recently developed by the Institute for meeting country's need in strategic, societal and industrial sectors were shown to Dr Saraswat. He also interacted with the scientists and officers and discussed about the national priorities for achieving targeted and time-bound scientific and technological goals.



Dr V K Saraswat, Member, NITI Aayog, interacting with Dr K Muraleedharan, Director and senior scientists during his visit to SGPLab. ■ Photo by Publication Division (PD)

Certain areas such as high power laser glasses, glasses equivalent to "ZERODUR", low temperature SOFC, ultra high temperature ceramics (UHTC), high temperature gas separation membranes, ceramic hot gas filters, etc. were suggested to be the priority areas in national planning for R & D. He also stressed upon the need of building a Centre by CSIR-CGCRI for development of all types of ceramic radomes and formulation of an appropriate business plan for this matter. Dr Muraleedharan

explained to the Hon'ble Visitor about how the Institute's recent programmes are aligned with national policies. In his remark Dr Saraswat voiced his admiration for the Institute as a National Laboratory of scientific excellence and proven research capabilities and expressed confidence that under the guidance of Dr Muraleedharan the Institute would scale new heights.

MOU for development of Instrumented Smart Pantograph

CSIR-CGCRI signed a MOU for development of Instrumented Smart Pantograph on January 24, 2017 with Stone India Ltd, a multi-product engineering company located in Kolkata, serving the Indian rail road industry for over seven decades. The MOU was signed in presence of Dr V K Saraswat, Hon'ble Member, NITI Aayog during his visit to the Institute.

SKILL DEVELOPMENT

Training, Demonstration & Skill Development Programme organised at CSIR Outreach Centre at Naroda, Gujarat

The onsite 5-day training and demonstration programme was organised by the CSIR-CGCRI Outreach Centre at Naroda, at five different district locations of Gujarat in different durations for rural artisans associated



Participants being given hands-on training on terracotta pottery making in the skill development programme organised under IPDP at Munjikuwa, Anand, Gujarat

■ Photo by CSIR-CGCRI Outreach Centre, Naroda

with the production of terracotta and pottery products. The programme was held as a part of a collaborative project 'Integrated pottery development project (IPDP) for economic benefit of rural artisans associated in making terracotta potteries in Gujarat State', being carried out with financial supports from Industries & Mines Department, jointly by the CSIR-CGCRI, Naroda Centre and the Gujarat Matikam Kalakari & Rural Technology Institute, a service institute established by the Gujarat State to promote appropriate technologies for rural development for the benefits of rural artisans and cottage industries. Programmes were held at Lilchha of Aravali district from November 28 to December 2, at Ambapur of Gandhinagar district from December 5 to 9, at Nandoli of Kheda district from December 13 to 17, at Munjkuwa of Anand district from December 19 to 23 and at Gojaria of Mehsana district from December 26 to 30. The total numbers of participants registered at the five locations were 141.

10-Day Residential Training Programme for skill development of rural artisans organised by CGCRI outreach centre at Naroda, Gujarat

An event entitled 'Training & Skill Development Programme for the Rural Artisans associated in making Terracotta Pottery across various states' was organised by the CSIR-CGCRI Outreach Centre at Naroda to impart advanced training to rural artisans of various states for improving their innovative ideas and technical skill of production of terracotta potteries. Hands-on training was given on characterisation and processing of clays, shape-making for clay-based products by different processes, plaster mould making, slip-casting, throwing clay on the potter's wheel, pressing, pugging the clay and related matters. Training was also given on ceramic coating and glazing with different colours, techniques for attaining high-quality surface finish, innovative designs for water bottles, utility and decorating wares, hand-made jewelleryes, selling of products and their packaging, marketing and business-related topics. Five batches were given the skill development training in five different durations - from January 25 to February 2, February 6 to 15, February 20 to March 1, March 6 to 15, and March 20 to 29. 25-30 candidates were selected on a first-come-first-serve basis from the states in each batch. The programme was funded by CSIR under the CSIR 800 scheme.

Skill development programme for village potters organised at CSIR-CGCRI, Kolkata

A programme of skill development through training in terracotta pottery making was organised at the Institute during March 16-17, 2017. A batch of 29 village potters from Chaltaberia, 24-Parganas (N) was trained



Participants getting trained in the art of terracotta pottery making at CSIR-CGCRI, Kolkata ■ Photo by PD

under the CSIR 800 scheme in the programme coordinated by the Refractory and Traditional Ceramics Division (RTCD) in association with Chaltaberia Gramounnayan Sanstha, a NGO. Hands-on training was imparted on raw material processing, slip casting, glazing, mould making, decoration, hand-made jewelleryes, etc. Onsite training programme was also arranged at the Chaltaberia village.

3-Day Programme on Managerial Effectiveness organised by CSIR-HRDC

A 3-day Programme on Managerial Effectiveness was organised at the Institute by CSIR-HRDC during January 9-11, 2017. The inaugural function was graced by the august presence of Dr Manu Saxena, Head, CSIR-Human Resource Development Centre, Ghaziabad, Shri Varada Raju PV, Associate Director (MDRG), Centre for Good Governance (CGG), Hyderabad, Dr K Muraleedharan, Director, CSIR-CGCRI and Prof BK Mishra, Director, CSIR-IMMT and Head, HR Directorate, CSIR. Dr Saxena delivered the welcome address and discussed about the significance and prospects of such programmes in augmenting the managerial skill of the officials of research and knowledge institutions like CSIR laboratories. Shri Varada Raju PV spoke on the programme details, while Dr Muraleedharan and Prof Mishra delivered motivational speeches welcoming the delegates. Special lectures on topics like introduction to managerial effectiveness, positive attitude and self motivation, leadership and basic communication skills, team building, stress, time and team management, problem solving and decision making, cross functional team working, etc were arranged. The lectures were given by Shri Varada Raju PV, Miss Anoosha Koneti, Knowledge Manager and Shri J Janakiram. Around 30 participants from different CSIR laboratories attended the programme. The candidates were presented participation certificate by Prof Samit Chattopadhyay, Director, CSIR-IICB.



Shri V Raju PV, AD, CGG, delivering lecture in the Programme on Managerial Effectiveness organised by CSIR-HRDC at the Institute ■ Photo by PD

SEMINAR International

International Conference on Advances in Glass Science and Technology (ICAGST-2017) & ICG-CGCRI Tutorial

CSIR-CGCRI, as the Asia's leading Glass and Ceramic Research Institute, organised a 3-day International Conference on Advances in Glass Science and Technology (ICAGST-2017), during January 23-25, 2017. Another two important events were also hosted under the aegis of ICAGST-2017. The Institute in association with International Commission on Glass (ICG) organised 'ICG-CGCRI Tutorial' on glass

for the first time in India during January 19-21, 2017. ICG Steering Committee Meeting was also held during the mega event. The conference provided platform for deliberation, discussion and interaction among researchers, students, scientists, academicians, engineers and industrialists who came from all over the globe, on various aspects of glasses and related materials such as manufacturing and processing of glass, glasses for photonic applications, glasses for energy and environment, multifunctional glass and glass-ceramics, glasses for biomedical applications, structure, simulation and properties of glass, etc.



The book of abstracts being released in the inaugural session of ICAGST-2017
■ Photo by PD



Dr K Muraleedharan, Director, presenting a memento to Dr V K Saraswat, Hon'ble Member, NITI Aayog after his theme lecture in the special morning session of ICAGST-2017, on January 24, 2017 ■ Photo by PD

The Ceremonial Lamps at the inauguration function of the conference were lit by Dr K Muraleedharan, Chairman, ICAGST-2017 and Director, CSIR-CGCRI, Dr Manoj Choudhary, President, International Commission on Glass, Prof Dipankar Chakravorty, SERB Distinguished Fellow, Emeritus Professor and INSA Senior Scientist, IACS, Shri C K Somany, Chairman, Hindustan National Glass & Industries Ltd. and Dr Ranjan Sen, Convener, ICAGST-2017 and Chief Scientist and Head, Glass Division and Fiber Optics and Photonic Division, CSIR-CGCRI. Prof Chakravorty and Shri Somany graced the occasion as the Chief Guest and the Guest of Honour, respectively. In his welcome address Dr Muraleedharan highlighted Institute's recent achievements including successes in the research on glasses and spoke on the pioneering role the Institute has played in the service to the nation. Dr Chaudhury

presented the ICG's view of attaching great importance to glass R & D and manufacturing activities taking place in India and talked almost affectionately about CSIR-CGCRI which has been recognised as the National Participating Organisation that represents India in ICG. Being associated with Indian glass industry for a very long period of time has been an incredible experience, said Shri Somani while speaking on India's glorious history in glass making, current national status in the glass sector, constraints and challenges being faced by the glass industries and their future prospects. Embracing a history of the glass, from the creation in ancient ages to the present day Prof Chakravorty spoke significantly on interesting properties and uses of glassy materials. He also mentioned that nanoscience and technology can play a very important role in modern glass industries. A book of abstracts was released in the inaugural session by the dignitaries.

The keynote lecture was delivered by Prof Arun K Varshneya, President, Saxon Glass Technologies, Inc., USA and Emeritus Professor of Glass Science and Engineering, Alfred University, USA. The title of his talk was 'Recent advances in the chemical strengthening of glass'. On the second day in a special morning session, Dr VK Saraswat, Hon'ble member, NITI Aayog, delivered the theme lecture. Dr Manoj Chaudhary delivered the plenary talk on 'A special moment in time: arrival of glass age'. Twenty invited speakers with twelve from nine countries, Brazil, Germany, Italy, Japan, Slovenia, Spain, UK, USA and China, delivered lectures. Among the eminent speakers were Prof Alicia Duran, Prof Hinamshu Jain, Prof H Inoue, Dr MJ Pascual, Prof Ana Candida Martins Rodrigues, Prof Delia S Brauer, Prof GP Kothiyal, Prof Devendra Kumar and Prof CK Jayasankar. A poster session was also held in which sixty posters were presented. There was a substantial participation from industries like Hindustan National Glass and Industries Ltd, La Opala, Saint Gobain, Asahi Glass, Ant Ceramics, VB Ceramics, Anton Paar and Verder Scientific, etc. Twenty five industrial delegates attended the conference. In the 'ICG-CGCRI Tutorial' fifteen faculty members from India (five) as well as abroad (ten) taught thirty one registered participants several different subjects on glass. The valedictory session of the conference was well attended by the members from ICG, glass industries and the organiser. In this session the importance of holding conferences and tutorials on glass on a regular basis was discussed.

2nd International Conference on Alumina and Other Functional Ceramics (AOFC-2017)

CSIR-CGCRI in collaboration with the Indian Ceramic Society organised this international conference during February 15-17, 2017. AOFC-2017 had been designed to attract attention to current trends in research, engineering, application strategies, economics and business perspectives of these frontier classes of ceramic materials. In fact the initiatives that began in 2008 to focus spotlight on high-tech aluminas evolved through well-planned discourses in the following years into a globally acclaimed conference on multifunctional ceramics – AOFC-2017. The conference covered topics such as alumina and speciality alumina, high temperature ceramics, alumina based binders and additives, cost effective functional tiles, functional ceramics for membranes, energy and environment applications, functional coatings, etc. in which CSIR-CGCRI pursues collaborative activities with industries and academic institutions. The keynote address was delivered by Dr Marcel Spreij of Almatris GmbH, Frankfurt, Germany and

the title of his talk was 'The speciality alumina market - growth opportunities and challenges'. The inaugural address was given by Dr AK Chattopadhyay, Managing Director, National Refractories and Past President, Indian Ceramic Society. Dr K Muraleedharan, Director, CSIR-CGCRI and Vice-President, Indian Ceramic Society delivered the presidential address as the Chairman of AOFC-2017.

IMPORTANT EVENTS

National

Technologies & Equipment for Waste Water Treatment & Recycling

A one-day seminar on 'Innovative technologies and equipment for treatment and recycling of industrial and municipal waste water in India' was jointly organised by the Academy of Water Technology and Environment Management, Corporate Monitor and CSIR-CGCRI on February 10, 2017, to address various issues pertaining to water and waste water technological solutions leading to sustainable environmental practices. CSIR-CGCRI recently launched the Water Technologies Section (WTS), with a specific focus on searching innovative technological routes for addressing water sustainability challenges, under the leadership of Mr Swachchha Majumdar, Principal Scientist of the Ceramic Membrane Division who took a very vital role in organising the event. Efficient management of water in industrial and municipal sectors, research and innovation for waste water utilisation, optimal water use in Indian mining, metal and alloys industries and power plants, emerging technologies and equipment for waste water treatment, etc. were the key discussion topics. The inaugural ceremony was graced by the presence of Smt Bani Roychudhury, Senior Vice President, Bengal National Chamber of Commerce, Mr Ashim K Bhattacharyya, ED, AWTEM and Dr K Muraleedharan, Director, CSIR-CGCRI. Smt Roychudhury was present as the Guest of Honour. The technical sessions became very attractive with presentations from industries like Symbiogreen Tech Pvt Ltd., Alfa Laval, Macnelly Bharat Eng Pvt Ltd., GE Water and Press Technologies etc. and academic institutions like Heritage Institute of Technology, CSIR laboratories (CSIR-NEERI, CSIR-CIMFR and also CSIR-CGCRI) and others. Mr Bibhas Maiti, Director General, Water Supply, Kolkata Municipal Corporation, attended the Valedictory Session as the Chairperson.



Dignitaries at the inauguration function of seminar on 'Innovative technologies and equipment for treatment and recycling of industrial and municipal waste water in India'— (from left) Mr Swachchha Majumdar, Principal Scientist & Head, WTS, CSIR-CGCRI, Mr Ashim K Bhattacharyya, ED, AWTEM, Dr K Muraleedharan, Director, CSIR-CGCRI and Smt Bani Roychudhury, Senior VP, BNCC ■ Photo by PD

Around 80 delegates from Indian Institute of Social Welfare and Business Management (IISWBM), Jadavpur University, Heritage Institute of Technology, Calcutta Institute of Technology, Millennium Institute of Energy and CSIR laboratories, attended the seminar.

One day Awareness Programme on ISO 9001: 2015

CSIR-CGCRI organised a 'One day Awareness Programme on ISO 9001: 2015' on February 7, 2017 for the purpose of getting acquainted with various versions of quality management system. CSIR-CGCRI recently launched the Business Development and Standardisation Division (BDSD) under the leadership of Dr BB Jha, Chief Scientist. The BSDS took the lead role in organising the event under the supervision of Dr Jha and Dr M Pal, Principal Scientist. While delivering the inaugural address Dr K Muraleedharan, Director, CSIR-CGCRI, emphasised the importance of maintaining the ISO 9000 standards in the research and technology development activities of the Institute. Dr Jha spoke on the different versions of the ISO 9000 standards and their usefulness in the fast-changing business sector. Mr Prosenjit Majumdar, the lead assessor of DNV GL Group, an international certification body and classification society, was invited to conduct the event as the key resource person. Mr Majumdar spoke on the differences of various versions of the ISO 9001 quality management system, their advantages, concepts of PDCA (Plan-Do-Check-and-Act) or Deming's cycle and HLS (High Level Structure) and their relations. The event was well-attended by officials from different divisions of the Institute and Mr Majumdar satisfactorily clarified all the queries raised by the delegates.

68th Republic Day celebration

The 68th Republic Day was celebrated in all its solemnity and grandeur at the Institute on January 26, 2017. Dr K Muraleedharan, Director, CSIR-CGCRI hoisted the National Flag. The staff-members saluted the National Flag with singing the National Anthem of India. Dr Muraleedharan greeted the staff-members and delivered the Republic Day Address. The staff-members pledged themselves to upholding the honour and integrity, diversity and uniqueness of India.



Dr K Muraleedharan, Director, CSIR-CGCRI delivering his speech on the occasion of 68th Republic Day, 2017 ■ Photo by PD

74th CSIR Foundation Day Celebration at CSIR-CGCRI

74th CSIR Foundation Day was celebrated at CSIR-CGCRI on December 12, 2016. While delivering the welcome address at a function organised for this purpose, Dr K Muraleedharan, Director, greeted all the staff members, students and dignitaries present on this auspicious

occasion. He mentioned that CSIR stepped into the Platinum Jubilee Year in 2016 and Honorable Prime Minister Shri Narendra Modi inaugurated the Platinum Jubilee Function held on occasion of its Foundation Day on September 26, 2016, at Vigyan Bhavan, New Delhi. The celebration of the Council's Foundation Day at the Institute was therefore shifted to December 12, 2016. Dr Muraleedharan also briefly narrated the successes of the research and technology development activities of the Institute being pursued round the year and solicited cooperation and assistance of all members for continuation of the progress.

Prof BK Mishra, Director, CSIR-Institute of Materials and Materials Technology, Bhubaneswar, graced the occasion as the Chief Guest and delivered a talk on 'Fun with granular materials'. He spoke on the beauty of the granular materials and stated that by virtue of certain uniqueness they occupy a very special position in the domain of materials and discussed about their specialty in the field of glass and ceramics.

On this occasion Prof Mishra presented shawl and certificate to 34 retirees and wrist watch to 20 staff members who completed 25 years of service in CSIR. Three wards of staff members who secured 90% and more marks in science subjects in board examinations were awarded for academic excellence. The staff members and their wards who excelled in various cultural competitions were also awarded.



Prof BK Mishra, Director, CSIR-IMMT, delivering the CSIR Foundation Day Lecture
■ Photo by PD

International Women's Day Celebrated

The Institute celebrated on March 8, 2017, the International Women's Day, a global day of celebration by women of all countries and of different political, economic, social, linguistic and ethnic backgrounds by joining together to reflect on issues of the struggle for equality, celebrate accomplishments achieved through great efforts and identify the challenges for the future. The Internal Complaints Committee (ICC) of the Institute took the leading role in organising the event under active supervision of Dr P Sujatha Devi, Senior Principal Scientist, Student Counsel and Member, ICC and Ms Sumana Majumdar, Section Officer and Convener, ICC. In this function, Dr K Muraleedharan, Director, CSIR-CGCRI, highlighted the role of Indian women in Nation Building. Smt Alka Saraogi, Recipient of the 2001 Sahitya Akademi Award for Hindi for her novel 'Kalikatha: Via Bypass' graced the occasion as a very special guest. She delivered an inspirational talk highlighting the problems and challenges Indian women are facing today and their solutions. Many students attended the function. Some of them took part

in the interactive discussions with the speaker. Shila Datta's short documentary, Human Trafficking, that won the best documentary film award for the year 2011, was shown in this function. Smt Datta is the recipient of the prestigious Banga Ratna Award, 2011-12.

Programme for popularising science among school children: 'The State Camp of VVM'

The theme of the programme has been contextualized by the recent call given our Honorable Prime Minister, Shri Narendra Modi, in his message during the CSIR Platinum Jubilee Celebrations, that council scientists must devote some efforts towards popularising and educating science among the school children in parallel to their research responsibilities. The state level camp of the Vidyarthi Vigyan Manthan (VVM) at West Bengal was organised at the Institute on February 3, 2017, jointly by Vigyan Prasar of Department of Science and Technology (DST), National Council of Educational Research and Training (NCERT), Vijnana Bharati and CSIR-CGCRI. In the inaugural function Dr Ranjan Sen, Chief Scientist, Head, FOPD and Glass Division and Director (Acting), CSIR-CGCRI, delivered the welcome address. Prof Satyajit Saha, Applied Nuclear Physics Division, SINP, Kolkata was the Chief Guest. Mr Kalyan Ganguli, Member, Governing Council, VIBHA and Prof Pataki Charan Banerjee, President, Vivekananda Vijnan Mission also graced the occasion. The Publicity and Public Interface Division recently launched under the leadership of Mr Sitendu Mandal, Sr Principal Scientist, Glass Division took a very active role in organising the programme. Around 300 students from city schools attended the State Camp. They were given intensive training in the execution of hands-on experimental activities and situational problem solving and also shown educational videos on science subjects. Visits in different laboratories of the Institute were also arranged for the students. Scientists explained the novelties and uniqueness of various experimental techniques to the students and they took a lot of interest in the experiments shown and demonstrated.



Students from city schools participating in the State Camp of VVM organised at the Institute for popularising science among them ■ Photo by PD, CGCRI

PEER RECOGNITION

Professional Awards & Honours

1. Dr K Muraleedharan, Director, CSIR-CGCRI

(i) Elected as the Vice President of the Indian Ceramic Society for 2017 & 2018 in the meeting of the Executive Council held in the Annual Session of ICS at Hyderabad during December 13-15, 2016.

(ii) Elected as a Fellow of the West Bengal Academy of Science and Technology (WAST) in the year 2016.

(iii) Received the 2016 IIM-Hindustan Zinc Gold Medal from the Indian Institute of Metals.

2. Dr P Sujatha Devi, Senior Principal Scientist, and Head, Sensor and Actuator Division, CSIR-CGCRI

(i) Received the MRSI-ICSC Superconductivity & Materials Annual Prize 2017 during the 28th AGM of Materials Research Society of India held at IIT-Bombay during February 13-15, 2017.

(ii) Elected as a Council Member of West Bengal Academy of Science & Technology (WAST) for the period 2017-18.

(iii) Re-elected as the Editor of the Transactions of the Indian Ceramic Society during Annual Session of ICS during December 13-15, 2016.

3. Dr Goutam De, Chief Scientist, and Head, Nano Structured Materials Division, CSIR-CGCRI

(i) Elected as a Council Member of the West Bengal Academy of Science and Technology (WAST) for the year 2017-2018.

4. Dr Sunirmal Jana, Principal Scientist, Sol-Gel Division, CSIR-CGCRI

(i) Received the Award of Distinguished Scientist for contribution and achievement in thin films from Venus International Foundation, Chennai, in the Annual Research Meet of the Foundation held at Le Royal Meridien Chennai on December 3, 2016.

Poster Presentation Awards

☞ **Ms Shreyasi Chattopadhyay**, SRF, Nano Structured Materials Division, working under Dr G De received the best poster presentation award in the IUMRS-ICYRAM-2016 held at Indian Institute of Science, Bangalore during December 11-15, 2016 for her paper 'Ordered mesoporous electrospun TiO₂-rGO nanofibers: efficient anode material for lithium ion batteries'.

☞ **Mr Anurag Roy**, SRF, Sensor and Actuator Division, working under Dr P Sujatha Devi received the second best poster presentation award at the International Conference on Ceramics, Glass and Refractories – Emerging Innovations (CGREI – 2016) held during the 80th Annual General Meeting of the Indian Ceramic Society at IICT, Hyderabad during December 13-15, 2016, for his paper 'Enhanced stability of Zn₂SnO₄ ceramics as a photoanode in dye sensitized solar cells'.

LECTURES

Platinum Jubilee Institute Colloquium

The 'Platinum Jubilee Institute Colloquium' Lecture Series has been initiated at the Institute to mark the Platinum Jubilee Celebrations of CSIR. Dr P Sujatha Devi is the Convenor and Dr Kaushik Biswas is the Co-Convenor of organising PJC. Dr Amarnath R Allu, Scientist, Glass Division delivered the 2nd PJ Institute Colloquium Lecture on 'Glass-ceramic sealants for functional applications' on December 21, 2016. Dr Debashri Ghosh, Senior Scientist, Fibre Optics and Photonics Division, was the speaker of the 3rd PJC Lecture on 'Photonic crystal fibres: potential and prospects' on January 31, 2017, while on March 28, 2017

the 4th PJC Lecture was delivered by Dr Subhadip Bodhak, Senior Scientist, Bio Ceramics and Coating Division, on 'Functional biomaterials for musculoskeletal regeneration'.

Other Lectures delivered

December 16, 2016: Dr Nina Daneu, Senior Scientist, Department of Nanostructured Materials, Jožef Stefan Institute Ljubljana, Slovenia and Assistant Professor, for Microscopy, Jožef Stefan Postgraduate School, delivered a talk on 'Microstructural engineering of ZnO-based varistor ceramics via inversion boundary induced grain growth'.

January 19, 2017: Dr Peter McSwiggen, Eminent Application Specialist of M/s JEOL, USA, delivered a talk on 'EPMA—an efficient research tool'.

OBITUARY

Dr PS Ahuja, former DG, CSIR and former Director, CSIR-IHBT, Palampur, breathed his last on January 21, 2017. A condolence meeting was held at the Institute on January 25, 2017, to mourn his untimely death. All the staff-members shared their grief and anguish with his bereaved family in his passing away and prayed to God that may his soul rest in peace.

SPORT

National Youth Day was celebrated at the Institute on the birthday of Swami Vivekananda on January 12, 2017. CSIR-CGCRI Staff Club organised 'CSIR-CGCRI Annual Outdoor Sports -2017' on this auspicious day. In the inauguration function Dr K Muraleedharan, Director, CSIR-CGCRI and President of the Staff Club, paid homage to Swamiji and delivered a motivational speech emphasising the importance of games and sports and Yoga in development of human body and mind as well as in Nation Building. Dr Muraleedharan then declared the 'CSIR-CGCRI Annual Outdoor Sports -2017' open by kicking the ball. The staff-members joyfully and enthusiastically participated in various events such as running between the wickets, target to goal, tug of war, musical chair, etc. Successful candidates were rewarded with recognition and prizes.



Dr K Muraleedharan, Director, CSIR-CGCRI and President, CGCRI Staff Club, kicking the ball during inauguration of 'CSIR-CGCRI Annual Outdoor Sports -2017' at the Institute organised on the National Youth Day ■ Photo by PD