

In the News

CSIR Initiates “One Week, One Lab” Campaign Nationwide Programme Kickstarts from CSIR-CBRI



At the first CSIR Leadership Meet on 26 September 2022, Hon'ble Minister (S&T) Dr Jitendra Singh announced the start of a nationwide campaign of showcasing technological breakthroughs, innovations and products of all the 37 CSIR laboratories. As part of the campaign, each CSIR lab will organise week-long activities



including industry & start-up meets, student & society connections, skill development workshops, displays of technologies, etc.

Addressing the first-ever CSIR Leadership Meet attended by the Directors of CSIR labs, Dr Jitendra Singh said, the legacy of CSIR is built on the cumulative contribution of its several national laboratories and institutes.



Curtain Raiser of the 'One Week, One Lab' programme



With the “One Week, One Lab” campaign 37 premier CSIR Labs spread across India will showcase their legacy, exclusive innovations, and technological breakthroughs.

**Hon'ble Minister (S&T)
Dr Jitendra Singh**

Each laboratory is unique and specialises in diverse areas ranging from genomics to geology, material technology to microbial technology and food to fuel. He said that through the “CSIR One Week, One Lab” programme, various stakeholders including the general public would be able to witness the wide-ranging achievements and technologies of CSIR labs.

The “CSIR One Week, One Lab” campaign was launched by Dr Jitendra Singh with a Curtain Raiser event at the India Habitat Centre, New Delhi on 6 January 2023 where he also inaugurated the first CSIR “One Week, One Lab” programme organised by the CSIR-Central Building Research Institute (CSIR-CBRI), Roorkee, which was held from 6-13 January 2023.

During the Curtain Raiser event, the Hon'ble Minister unveiled logos of the “One Week, One Lab” programme of CSIR and CSIR-CBRI. This was followed by the release of video films and the YouTube channel of CSIR-CBRI. Dr Jitendra Singh also inaugurated an exhibition and released Proceedings of a Workshop on “Innovative and Sustainable Construction Materials

& Technologies (ISCMT-2023)”. The DG, CSIR Dr N. Kalaiselvi and Directors from different CSIR labs were also present during the event.

Addressing the gathering, Dr Jitendra Singh noted that with its innovative technologies and innovations, CSIR has left a lasting impression on the nation during the past 80 years. Some of these include indelible ink, the parallel computer Flosolver, Swaraj tractor, Centchroman, DNA Fingerprinting, and Aroma Mission. He emphasised that instead of the technologies developed by CSIR laboratories remaining confined to laboratories, there was a need to establish a resourceful connection between stakeholders, entrepreneurs, industry, students, and the general public.

Dr Jitendra Singh stated that with the “One Week, One Lab” campaign 37 premier CSIR Labs spread across India will showcase their legacy, exclusive innovations, and technological breakthroughs. While the “One Week, One Lab” programme will provide an opportunity for students to gain knowledge on research activities and CSIR facilities, connecting them with future prospects,

the campaign will also expand entrepreneurship in the nation by spreading science and technology and supporting more start-ups, the Hon'ble Minister said.

Addressing the gathering, Dr N. Kalaiselvi, DG-CSIR said that CSIR's "One Week, One Lab" campaign will help to establish appropriate connections, not only for the technological breakthroughs and innovations at the CSIR institutes but also for future technologies on which research is ongoing in these labs. She stated that during the campaign scientists will interact with school students through programmes such as Jigyasa and Atal Tinkering Lab. These students are future scientists and it is important to inculcate the temper of science in them, she said.

Prof. R. Pradeep Kumar, Director, CSIR-CBRI, presented a brief of the series of events to be organised by the institute during the week-long campaign. He said that the institute would showcase technologies by holding 20 events that include a workshop, exhibition, industry meets, MSME & Startup meet, stakeholders' meet, competitions such as quizzes and technology hackathons for college students, visits of school students, meetings with state & district administration, academia meet, meetings with the local public representatives and interaction with press & media.

A Workshop and Exhibition on "Innovative and Sustainable Construction Materials & Technologies (ISCMT-2023)" was organised at the same venue. In an exhibition in New Delhi on the 6th, Dehradun on the 10th and

Roorkee 9-13 January 2023, CSIR-CBRI developed technologies were showcased.

An industry meet was arranged in Mumbai on 7th January, while meetings with industries and MSME startups were also held on 11th January at the India Habitat Centre, New Delhi. In Mumbai, more than 60 delegates from industries attended the event and expressed their views, and also gave suggestions for further research. In Delhi, around 40 industries and 25 MSME startups participated in the event. The participants and CSIR-CBRI scientists actively interacted to connect and share valuable knowledge, information, experience, and wisdom. Several suggestions were offered for future collaborative works.

Hands-on training and quiz programme for college students was organised on 9 January 2023 at CSIR-CBRI. In the event, 80 students from Roorkee and nearby areas participated and gained information regarding various aspects of building engineering, such as concrete mix design, geotechnical investigation, non-destructive testing, and prefabricated building components. An interactive event was also organised in Ghaziabad on 13 January, where more than 50 engineering students actively participated.

A meeting with the State & District Administration of Uttarakhand was held in Dehradun on 10 January. Dr Kalachand Sain, Director, Wadia Institute of Himalayan Geology was the Chief

CSIR's "One Week, One Lab" campaign will help to establish appropriate connections, not only for the technological breakthroughs and innovations at the CSIR institutes but also for future technologies on which research is ongoing in these labs.

Dr N. Kalaiselvi, DG-CSIR



Inauguration of stakeholders meet

Guest and Shri Ashok Kumar, DGP, Uttarakhand, was the Guest of Honour. Issues specifically related to the state of Uttarakhand were discussed.

CSIR-CBRI organised an event “Nurturing Entrepreneurship and Startups (NES)” on 10 January 2023 in Roorkee where 134 students from various colleges from Roorkee and Dehradun and 27 industry personnel from Roorkee, Bhagwanpur and Haridwar participated. There were three keynote addresses related to startups and business models delivered by eminent professors and Dr Sanjeev Majumder from NRDC, New Delhi.

An event “Futuristic Ideas by Young Scientists – A Poster Presentation” was held on 10 January 2023 at the institute. About 80 young scientists, AcSIR



DG, CSIR with participants & scientists

students, trainees and project staff presented 55 posters with novel and future-bound ideas.

A Stakeholders’ Meet at India Habitat Centre was organised on 11 January 2023. The event was inaugurated by Dr N. Kalaiselvi, DG-CSIR. The presence of heads of infrastructure-related agencies such as DG, CPWD; Chairman, AAI; MES, DG Railway Safety, ONGC, NTPC, and Shri Mahesh Tandon, Chairman, RC, CSIR-CBRI and many others made this programme special.

“Jigyasa – School Students and Scientist Interaction” was held on 11 January at Roorkee. More than 100 students participated in the event and interacted with the scientists. The Atal Tinkering Lab event was organised on 12 January, in which more than 200 students from four schools in



School students participating in ‘Jigyasa’



Participants of the ‘Atal Tinkering Lab’ event



Academia Meet

Roorkee participated. They visited the Exhibition and Robotics Lab in CSIR-CBRI.

An Academia Meet was organised at CSIR-CBRI on 12 January 2023 where eminent academicians from various IITs participated. Prof. R. Pradeep Kumar, Director CSIR-CBRI, Roorkee, and scientists from the Institute also interacted during the panel discussions.

A “Meeting with the Local Public Representatives” was held on 13 January 2023. The meeting drew huge participation. It was inaugurated by the chief guest Shri Pradeep Batra, MLA, Roorkee, and Shri Gaurav Goel, Mayor, Roorkee

was the Guest of Honour. The Joint Magistrate, Roorkee, Shri Anibhav Shah, Shri Kiran Choudhary, President, Jila Panchayat, members of Industries Association, Ward members of Roorkee city, Pradhans of Panchayats of nearby villages, engineers from Uttarakhand Electricity Board, Jal Board, Irrigation department, PWD, and others attended the event.

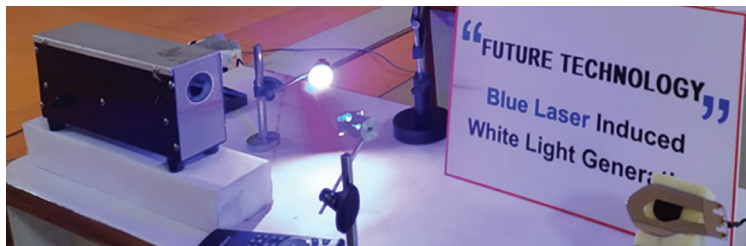
The Closing Ceremony of the week-long “One Week, One Lab” programme of CSIR-CBRI was held on 13 January 2023. During the ceremony, all the event coordinators presented a summary of the respective events. Director Prof. R. Pradeep Kumar highlighted the idea and objectives of the “One Week, One Lab programme” and the vision of the Hon’ble Minister for S&T, Dr Jitendra Singh and support & motivation received from Dr N. Kalaiselvi, DG, CSIR. He also appreciated the team spirit and contribution of each employee and others in conducting different events.



Local MLA Shri Pradeep Batra addressing the gathering

Prof. R. Pradeep Kumar appreciated the team spirit and contribution of each employee and others in conducting different events.

Blue Laser Induced Phosphor Coated White light – Future Technology

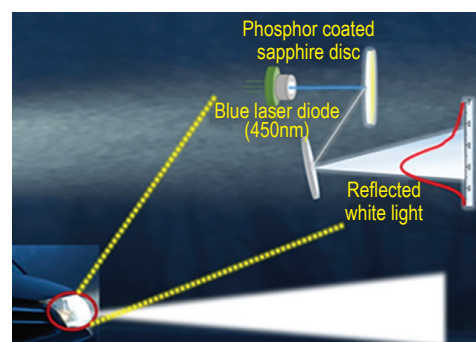


Demonstration of a blue laser-induced phosphor-coated white light prototype

The blue laser-induced white light is a promising candidate to revolutionise the luminous intensity of the white light by several orders of magnitude as compared with the existing blue light-emitting diodes-based white light. This emerging technology has an extremely bright future with endless uses of tunable power of the laser that controls the intensity of the emitted white light for several applications such as headlights in automobile industries, rail engines, playgrounds and many more.

CSIR-National Physical Laboratory (CSIR-NPL), New Delhi, has designed and developed a prototype device based on a phosphor-incorporated Sapphire Disc (PISD) which on excitation by a blue laser diode produces highly-efficient white light. The CSIR-NPL has developed this prototype under a consultancy project entitled "Development of YAG:Ce yellow phosphor integrated with blue diode laser to produce white light for a car headlight application" funded by Fiem Industries Limited, Sonapat-Haryana, India.

This new approach provides a paradigm shift to produce highly-efficient white light based



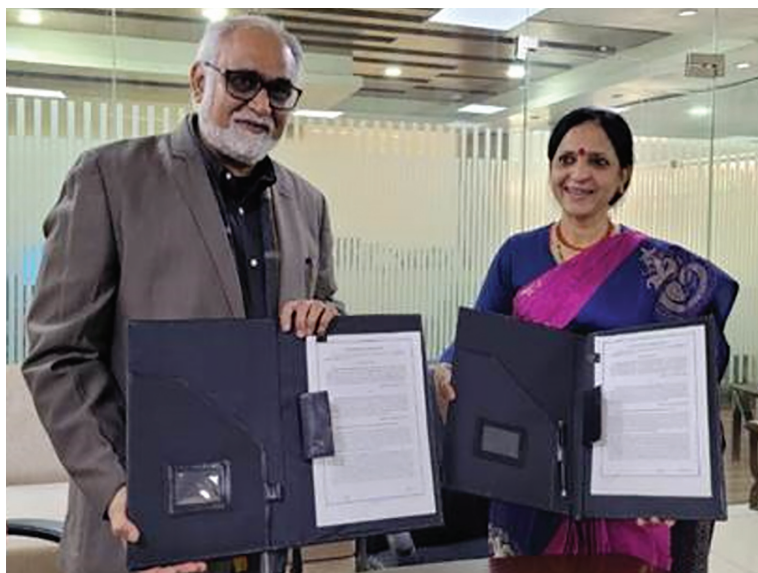
on PISD integrated with a blue laser diode as compared with the conventional technology. Fiem Industries conducted a joint meeting of industries collaborative discussion (Yamaha, Japan and Fiem) for futuristic lighting systems development and related demonstration on 13 October 2021 for automobile headlights with leading international two-wheeler company Yamaha, Japan at Fiem Industries Limited, Sonapat, Haryana, India.

CSIR-NPL and Fiem Industries Ltd jointly presented and demonstrated a prototype based on Laser Assisted Remote Phosphors (LARP) white light generation for automotive lighting for automobiles. This joint effort is a stepping stone towards Make in India (Vision of Nation) for future technology based on Blue Laser Induced White light.

This emerging technology has an extremely bright future with endless uses of tunable power of the laser that controls the intensity of the emitted white light for several applications.

Signing of MoU between IGNCA and CSIR-TKDL Unit

The MoU aims at cooperation related to digitisation and the inclusion of information on traditional knowledge of India like manuscripts and traditional cultural expressions.



The Indira Gandhi National Centre for the Arts (IGNCA), New Delhi, and the CSIR-Traditional Knowledge Digital Library (CSIR-TKDL) Unit signed a Memorandum of Understanding (MoU) in New Delhi for cooperation related to digitisation and inclusion of information on traditional knowledge of India from manuscripts and traditional cultural expressions.

The MoU was signed by Prof. Sachchidanand Joshi, Member Secretary, IGNCA and Dr Viswajanani J Sattigeri, Scientist H and Head, CSIR-TKDL Unit in the presence of several senior officials from both organisations.

India is home to over two crore manuscripts containing valuable information on Indian heritage and

Traditional Knowledge (TK). Our Traditional Cultural Expressions (TCE) are still passed on from one generation to the next through word of mouth.

With fewer people understanding the scripts and languages of these manuscripts and our cultural expressions, the MoU between IGNCA and CSIR-TKDL Unit will facilitate protection and preservation of the manuscript knowledge for current and future times, through the inclusion of the information into the TKDL database. This cooperation between the parties is also expected to enable digitisation and the inclusion of non-written, oral and audio-visual materials related to traditional knowledge and traditional cultural expressions into the TKDL.

The MoU will facilitate protection and preservation of the manuscript knowledge for current and future times, through the inclusion of the information into the TKDL database.



Prof. Joshi stated that the cooperation between the two organisations is a much-required initiative towards addressing national needs on preserving and disseminating information on our invaluable heritage.

Speaking on the occasion, Prof. Sachchidanand Joshi spoke of the importance of manuscripts and documentation of local practices in the context of preserving this valuable information for future generations. He also mentioned the efforts of the IGNCA on the above, including the existence of priceless manuscripts in all subject areas, and manuscripts in languages and older scripts such as Sanskrit, Arabic and Persian. Speaking of local traditions and practices, Prof. Joshi highlighted the IGNCA initiative on “mera gaon meri dharohar” in reference to the mapping of information at village levels related to modern and traditional practices. He stated that the cooperation between the two organisations is a much-required initiative towards addressing national needs on preserving and disseminating information on our invaluable heritage.

Dr Sattigeri highlighting the deliberations over the years

between the organisations on various aspects related to TK and TKDL stated that the signing of the agreement is a forward-looking action towards enriching and enhancing the scope and value of the TKDL. Stating that the TKDL offers a unique platform to bring together traditional knowledge and technology that can be understood by the current generations, she opined that the cooperation with IGNCA offers immense potential for both parties to work across diverse aspects of TK and TCEs.

Besides focused activities related to manuscripts and local practices, both organisations have also agreed to collaborate and undertake outreach and dissemination activities such as publications, seminars, conferences, workshops and exhibitions jointly, and also pursue research studies in areas of common interest.

Events

77th Foundation Day of CSIR-NPL

CSIR-National Physical Laboratory, (CSIR-NPL), New Delhi, celebrated its 77th foundation day on 4 January 2023 at the institute’s auditorium. The programme was graced by Dr Satheesh Reddy, Scientific

Advisor to the Defence Minister, Government of India, as the chief guest and the Director General CSIR Dr N. Kalaiselvi, as the guest of honour. The invitees included RC members, personnel from CSIR headquarters, Ex-Directors of NPL



Dr Krishan Lal and Dr Vikram Kumar, industry partners, students from colleges as well as retired scientists of NPL.

In his welcome address, Director CSIR-NPL Prof. Venugopal Achanta elaborated on the achievements of CSIR-NPL in the last year including the national and international visibility of NPL and also highlighted collaborations with departments like Legal Metrology in the Ministry of Consumer Affairs, the Quality Council of India, NABL, etc. NPL is helping in strengthening other metrology institutes under the PTB-SAARC programme. A phaser measurement calibration facility which is required for smart grids, development of gas standards in collaboration with ONGC and relevant ministries have been initiated at NPL. The awards and fellowships during this period were briefly mentioned.

He highlighted the fact that NPL being the national metrology institute of India has strong metrology based research as

well as Material Science and Environmental Science. The new standards like the primary sound standard in extended range and the international inter-comparisons for resistance and voltage measurements are among some of the achievements. The successful revival of Cesium cold atom cloud for the Cesium fountain atomic clock was another proud achievement. Research has also been initiated in quantum materials as well as single photon detection. A special mention was made about the security ink development work, work towards a cleaner environment and the launch of several certified reference materials known as Bhartiya Nirdeshak Dravyas. However, he emphasised that NPL has many more milestones to achieve.

Dr N. Kalaiselvi delivered an energetic and motivating address, especially for the researchers and students. She appreciated the important role of CSIR-NPL in the

Dr N. Kalaiselvi appreciated the important role of CSIR-NPL in the CSIR family and lauded the fact that it preserves the constitution of India.

Dr Satheesh Reddy appreciated the roadmap and vision suggested by the DG and how NPL is suggested to work towards it in addition to its present activities.



CSIR family and lauded the fact that it preserves the constitution of India. Thus, the lab has an important place not only in science but also in Indian history. She appreciated the metrological and other R&D activities at CSIR-NPL but mentioned that the best is still to come. DG-CSIR also promised adequate and needed resources from CSIR for exclusively pursuing the scientific endeavours at NPL and invoked all to gear up for future work and goals. She especially mentioned NPL activities like work on crystal growth, semiconductors and carbon paper. She mentioned the importance of rare earth magnets and the need to work in the area as well as for storage devices. She called upon all for thinking towards new dimensions such as transition metals, rare earth and red mud. She also mentioned that CSIR labs can contribute more by collaboratively carrying out research. The DG also laid importance on realising and justifying each individual's contribution and motivated all to do more. She appreciated the student connect programmes in inspiring young minds for scientific development in the country.

The Chief Guest Dr Satheesh Reddy congratulated the NPL family on completing 76 years of its establishment which he mentioned has been a great journey with significant contributions. He mentioned his past associations and discussions with NPL personnel. NPL has a high place in Indian science and technology. He appreciated the roadmap and vision suggested by the DG and how NPL is suggested to work towards it in addition to its present activities. He stressed the fact that areas of metrology, standards, materials as well as the environment are very important for the nation. NPL is one of the topmost laboratories in metrology in the world to have come out with specific areas and the need to further continuously improve science and technology with higher accuracies. Quantum metrology with better systems and improved accuracies is the need of the day. He emphasised the importance of setting our own standard documents rather than following the international ones in a timebound manner.





He underlined the need for going into manufacturing equipment in India, developing of new materials, smart materials as well as indigenous medical devices. We need to realise equipment manufacturing instead of importing. He suggested that a cluster of labs cooperate and coordinate work towards the realisation of Atmanirbhar Bharat. He suggested better cooperation between CSIR-NPL and the Directorate of Standardisation, Ministry of Defence.

Mentioning the importance of materials, he stressed the need for better extraction techniques, given our limited natural resources. Multiple materials, smart materials, technologies and commercial products are the need of the day. He invoked a call

to students to make in India and proceed towards make for the world and go from being an importer to a global exporter. Presently there are 75000 start-ups in the country and young students need to take these forward.

The programme also included the release of 14 Bhartiya Nirdeshak Dravyas (Certified Reference Materials) prepared in collaboration with various industry partners. These included BNDs for calibration of powder x-ray diffractometer, 4 BNDs for test of Ultimate Tensile Strength, BND for Rockwell Hardness, BNDs for gold as well as for drinking water testing. An MoU was also signed between CSIR-NPL and RMP Pharmaffiliates Analytics & Synthetics Pvt. Ltd, Panchkula, for the development of BNDs for organic substances/antibiotics.

Eight new posters made by AcSIR students at NPL were released on the occasion and have been included in the Dr KS Krishnan Gallery in the Library wing of the institute. The programme concluded with certificates for the three best posters awarded to the student teams.



The programme also included the release of 14 Bhartiya Nirdeshak Dravyas (Certified Reference Materials) prepared in collaboration with various industry partners.

CSIR-NCL Celebrates 73rd Foundation Day

CSIR-National Chemical Laboratory (CSIR-NCL), Pune, celebrated the 73rd Foundation Day on 3 January 2023. On the occasion, Prof. Ajit Kembhavi, Professor Emeritus and Former Director, IUCAA, Pune, delivered the Foundation Day Oration on the topic “From Galileo to the James Webb Space Telescope: The Forward March of Astronomy.” A website for the Central Analytical Facility was also launched at the hands of the chief guest.

In his speech, Prof. Ajit Kembhavi talked about how astronomy has moved forward from the time of Galileo Galilei (who first did his observations) in 1609 to the present time. Galileo was a great astronomer who first turned the telescope to the sky and pioneered its use for observing the night sky. He made the most magnificent discoveries. He highlighted the discovery of Jupiter’s satellites: Io, Europa, Ganymede, and Callisto. This discovery annoyed the people at that time due to the established theology, although Galileo continued with his findings. He discovered the spots on the sun. His most elegant discovery about the phases of the planet Venus was in the early days. Galileo was multifaceted. He made his living by giving tuition. He was a great expert on military projectiles, as big guns were invented in those days, and it was essential to see where it should point so that the shell lands where you want it to go. Galileo gave the



Prof. Ajit Kembhavi, Professor Emeritus and Former Director, IUCAA, delivering the CSIR-NCL Foundation Day Oration

principle of inertia which became the basis of the special theory of relativity.

Prof. Kembhavi shared that imaging, photometry, spectroscopy, polarimetry, and variability studies are the major tools of an astronomer. He said that much of astronomy is devoted to looking at how objects vary in the sky. He also informed about the astronomy facilities available in India, including GMRT, AstroSat, and forthcoming Aditya L1, TMT, LIGO-India, and SKA. He talked about different telescopes, including the Great Forty-foot Telescope developed by William Herschel. He gave a couple of examples of modern telescopes like reflecting telescope, Himalayan Chandra Telescope, Palomar, 5 m Hale Telescope, Very

Prof. Kembhavi shared that imaging, photometry, spectroscopy, polarimetry, and variability studies are the major tools of an astronomer.

Large Telescope (VLT) from Cerro Paranal Chile, Segmented Mirror Telescopes like the Keck Telescope and Betelgeuse Telescope, Thirty Meter Telescope, Hubble Space Telescope, James Webb Space Telescope (launched in December 2021) and many more.

He further talked about the difficulties of making large telescopes. He said that the exoplanets we have seen so far are entirely abnormal as they are huge and close to the sun.

Earlier, in his welcome remarks, Prof. Ashish Lele, Director, CSIR-NCL, provided brief updates on the significant progress made in projects aligned with the roadmap of CSIR-NCL for the 2020-2030 decade. The roadmap was developed keeping in mind the key challenges and the new opportunities presented to Indian chemical and allied industries in view of some of the global megatrends such as climate change, sustainability, energy



Prof. Ashish Lele, Director, CSIR-NCL, felicitating Prof. Kembhavi

transition, supply chain disruption, self-reliance and the emerging deep tech innovation system, etc.

Later, NCL Research Foundation Awards (Student Merit Awards) were also distributed to the CSIR-NCL staff's wards by Prof. Kembhavi.

Workshops/Seminars/Conferences

International Workshop on Research Agenda, Social Needs and Open Science

CSIR-NIScPR (CSIR-National Institute of Science Communication & Policy Research), New Delhi, organised an International Workshop on 'Research agenda, Social needs and Open science' on 8 December

2023. Dr Ismael Rafols, UNESCO Chair, Diversity and Inclusion in Global Science Centre for Science and Technology Strategies (CWTS), Leiden University, Netherlands, was the keynote speaker of the workshop. Dr Sanjay Kumar



Prof. Ranjana Aggarwal, Director, CSIR-NIScPR addressing the workshop

Prof. Aggarwal emphasised that CSIR-NIScPR is working towards solving problems under the motto "One Earth, One Family, and One Future."

Mishra, Sr Advisor, Department of Biotechnology, also graced the occasion the programme.

In her welcome address, Prof. Ranjana Aggarwal, Director, CSIR-NIScPR, New Delhi, said that the institute is involved in creating livelihood and fostering skill development in rural areas through CSIR technologies. Recent cutting-edge fields are being worked on by various R&D divisions of the lab. Scientometrics has been one of the institute's strongest areas and CSIR-NISTADS (which was one of the laboratories which together with CSIR-NISCAIR merged to become NIScPR) was instrumental in bringing up this area as a focus area of research and input to policy-making in India, she added.

Further, Prof. Aggarwal highlighted that CSIR-NIScPR is the largest government organisation

in the nation that publishes more than 15 journals in a variety of research fields in an open access mode as there is no APC involved for publishing and also publishes popular science magazines to bridge the gap between science and society. An online repository National Open Periodicals Repository (NOPR) of CSIR-NIScPR also provides access to older papers from anywhere in the world. She concluded by emphasising that CSIR-NIScPR is working towards solving problems under the motto "One Earth, One Family, and One Future."

Dr Ismael Rafols, UNESCO Chair, Diversity and Inclusion in Global Science Centre for Science and Technology Strategies (CWTS), Leiden University, Netherlands, delivered the keynote address. Dr Rafols reinforced UNESCO's



Dr Ismael Rafols, UNESCO Chair, Leiden University, Netherlands, delivering the keynote address

recommendation of diverse and inclusive matters for the research agenda for benefit of the whole humankind. He brought forth the usual notion that research agenda tends to favour the elite and rich though not universal but true to a greater extent. He justified his argument by describing the concentration of research in the global north, being driven by market demands and incentivized by a few narrow academic goals and social groups. Dr Rafols highlighted that research agendas are not in sync with SDG goals in higher and middle-income countries. Evidence indicates better alignment in the least developing countries of research with SDGs. He emphasised on the need for more open access to science and having more open infrastructure so that maximum benefit can be achieved

by mankind. He concluded by highlighting the need for the inclusion of the citizen in sciences to lessen the misalignment.

Dr Sanjay Kumar Mishra, Sr Advisor, Department of Biotechnology, put forward his initial remark about the subject of the workshop as putting three oceans of knowledge set into one go, namely bibliometrics, scientometrics and informetrics. Dr Mishra urged to take into consideration the social needs of societies, countries and on the global level in research and research agenda to extract maximum benefit out of scientific research to mankind. He also opined that the science advisory role is as important as research output. Usually, science research is generally pro-urban, pro-affluent, there is a need for a new focus,

Dr Rafols emphasised on the need for more open access to science and having more open infrastructure so that maximum benefit can be achieved by mankind.



Speakers of the second session focused on 'Frugal Innovations and Openness'

Dr Vivek Kumar Singh emphasised the need for making research accessible to society because there is a gap in knowledge access in India, and we need to seek for effective policy implementation to address this.

society oriented. Bibliometrics and scientometrics tool can be used to understand the gap in the research for society by scientific communities.

During the second session, Dr Sujit Bhattacharya, Chief Scientist & Dean-Policy Research, CSIR-NIScPR and Coordinator of the Workshop presented a brief overview of STS (Science, Technology and Society), innovation studies and Scientometrics research, drawing upon the strong linkages among these fields of research. He stressed that the contemporary global challenges have called for the science-technology-innovation agenda to be shaped by societal needs and user-driven approach.

Prof. Saradindu Bhaduri, Associate Professor, Centre for Studies in Science Policy, Jawaharlal Nehru University, New Delhi, and coordinator of the Trans-disciplinary Research Centre on Frugality Studies

(a joint initiative of JNU with Leiden-delft-Erasmus University) gave his presentation on how research agenda, innovation, regulation, and user-driven research conflict with each other. He highlighted some interesting engagements between policymakers and stakeholders. He highlighted how useful and widely used appliances such as stoves suffer from agencies not giving standard certification.

Dr Vivek Kumar Singh, Professor and Head of the Computer Science Department, Banaras Hindu University (BHU), Varanasi, provided an overview of open access and its various forms, such as Gold, Platinum, and Diamond open access. He highlighted the open archive available in India such as the IndiaRxiv, eprints by the Indian Institute of Science, Krishikosh by the ICAR, etc. Dr Singh correctly emphasised the need for making research accessible to society because



Audience at the workshop

there is a gap in knowledge access in India, and we need to seek for effective policy implementation to address this.

Dr Kavita Shah, Professor, Purdue University, USA, gave a brief insight into the changing environment she has been observing in India now. The infrastructure and support to research are bringing a positive change for doing high-end research. She felt that this opportunity calls for students and researchers to make their research more aligned with the challenges faced by society.

Dr Madhulika Bhati, Principal Scientist, CSIR-NIScPR and Dr Anurag Kanojia, Policy Fellow, Department of Computer Science, BHU, as discussants drew upon the important learning from this workshop. They stressed the important argument and key issues that linked the different presentations together.

Dr Shiv Narayan Nishad, Scientist, CSIR-NIScPR, gave a broad overview of the ongoing project on Social Network Analysis by CSIR-NIScPR. This study led by Dr Sujit Bhattacharya explores how social network analysis can be developed as a resource material for its application in different fields of study. The project intends to impart training and provide the resources developed in open access.

The interactive session led to many questions and comments that enriched the workshop. Several young researchers among the attendees raised many important issues related to their research and how this workshop has benefitted them to think of open access, aligning their research in the proper direction, etc. At the end of the workshop, Dr Sandhya Lakshmanan, Scientist CSIR-NIScPR, proposed the vote of thanks. Dr Kasturi Mandal, Principal Scientist, CSIR-NIScPR moderated the programme.

*Dr Kavita Shah,
Professor, Purdue
University, USA, gave
a brief insight into the
changing environment
she has been observing
in India now.*

CSIR-HRDC Organises various Programmes

Programme on Excellence in Leadership

CSIR-HRDC (CSIR-Human Resource Development Centre), Ghaziabad, organised two days exclusive programme on Excellence in Leadership for newly joined Directors of CSIR Labs during 8-9 December 2022. Honourable Minister of S&T and Vice President of CSIR, Dr Jitendra Singh graced the occasion and motivated the newly joined CSIR Directors. Dr N Kalaiselvi, Director General, CSIR & Secretary, DSIR,

interacted with the Directors and shared her expectations and vision for CSIR.

Eight Directors from CDRI, CIMFR, CRRI, IITR, NAL, NEERI, NGRI and NIIST participated in the programme. Dr R.K. Sinha, Head, CSIR-HRDC; Sh. Anil Swarup, Former Secretary, Ministry of Coal, Govt of India; and Dr Arun Bandyopadhyay, Director, CSIR-IICB were present in the inaugural session of the programme.





Dr Sanjay Kumar, Director, CSIR-IHBT, gave a talk on “Leading Science: Lab to Land” wherein he shared his experience with participants. Sh. Gurdeep Singh, Chairman & Managing Director, National Thermal Power Corporation Ltd addressed on Making and Leading the Change. Sh. Hemang Jani, Secretary,

Capacity Building Commission and Board Member, Karmyogi Bharat also interacted with the Directors.

Heads of various other divisions of CSIR, JS CSIR and other members also interacted with the Directors to share the functioning of CSIR. Eminent speakers from other Ministries and organisations were also part of this programme.





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