



वार्षिक प्रतिवेदन
Annual Report
2020-21



होमी भाभा राष्ट्रीय संस्थान
HOMI BHABHA NATIONAL INSTITUTE

परमाणु ऊर्जा विभाग की सहायता प्राप्त संस्था
और यूजीसी अधिनियम 1956 की धारा 3 के तहत विश्वविद्यालय माना जाता है
(A Deemed to be University u/s 3 of UGC Act 1956 and a Grant-in-Aid
Institute of the Department of Atomic Energy, Govt. of India)

Note on Persons with Disabilities

Homi Bhabha National Institute is deemed to be a university and is a Grant-in-Aid institution of the Department of Atomic Energy. HBNI is a research university and educates students at the doctoral and masters level, and pursues research in accordance with its mandate. It has ten Constituent Institutions (CIs) and an Off-Campus-Centre (OCC) and they submit their annual reports. Faculty, students and non-teaching staff are on the rolls of CIs/OCC. In HBNI, there are only three sanctioned posts. These are Vice Chancellor, Dean and Registrar. The institute is sensitive to the subject of recruitment of persons with disabilities and would support such persons as and when the occasion arises.

Vigilance

There is nothing to report from a vigilance point of view for the period April 1, 2020 to March 31, 2021.

Events at Central Office

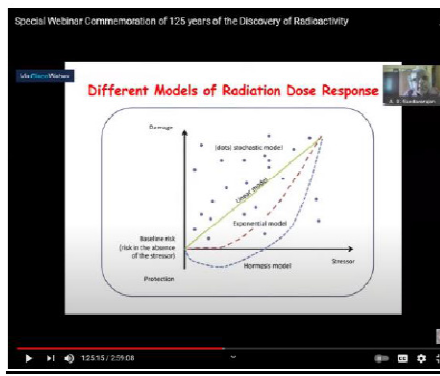
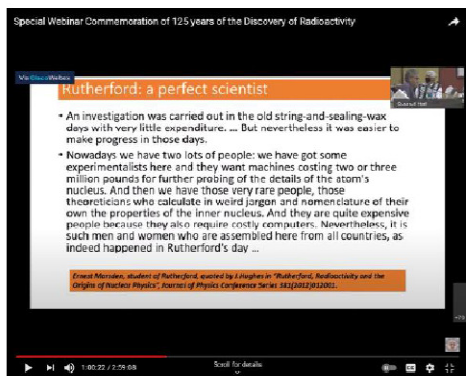
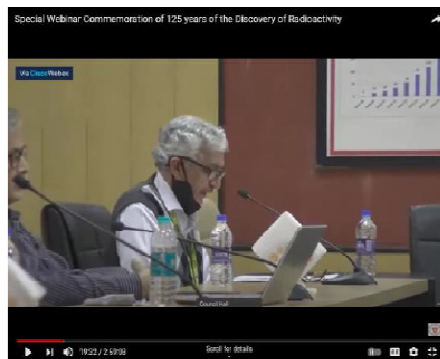
❖ Launch of HBNI Research Scholar Forum

“HBNI Research Scholar Forum” was launched by Prof. Srikumar Banerjee, Chancellor, HBNI on January 14, 2021 with the objectives to advance/promote academic links between the research scholars of CIs/OCC of HBNI and to provide them a platform to grow their skills in communication, management and organizational domains. Prof. Vasudeva Rao, VC, HBNI, Prof. P.D. Naik, Dean, HBNI, Prof. R.B. Grover, Emeritus Professor, HBNI, Prof. D.K. Maity, Associate Dean, HBNI and Prof. B. Chandrasekar, Registrar HBNI were present on the occasion. The forum is mentored by Prof. D.K. Maity. Prof. R.B. Grover and Prof. Srikumar Banerjee addressed and interacted with HBNI students and urged them to use the opportunities provided by RSF to get involved in large cooperative research projects involving several CIs. The students from different CIs/OCC also interacted with HBNI functionaries at central office and offered their comments and suggestions regarding RSF.

❖ Commemoration of 125 Years of Discovery of Radioactivity

The phenomenon of Radioactivity was discovered by Henry Becquerel on 1st March, 1896. To commemorate the 125 years of discovery of radioactivity, HBNI organized a Half Day Special Webinar on March 1, 2021 jointly with the Indian Association of Nuclear Chemists and Allied Scientists (IANCAS) over WebEx platform. Prof. B.S. Tomar, Institute Chair professor and President, IANCAS, welcomed the gathering. Shri K.N. Vyas, Chairman, CoM, HBNI and Secretary, DAE presided over the event. Scientific talks on topics related to radioactivity were delivered by eminent nuclear chemists and physicists from India and abroad on the occasion. Prof. Vasudeva Rao, Vice chancellor, HBNI delivered talk on historical aspects of the radioactivity. Prof. Araceli Lopez Martens, CNRS Universite Paris-Saclay spoke on the topic, “From radioactivity to modern nuclear physics - 125 years of discoveries.” Dr. V. Venugopal, Ex-Director, Radiochemistry and Isotope group talked about how the radiochemistry programme in India evolved and Shri A.R. Sundararajan, Former Director, Radiation Safety Division, AERB gave his talk on the topic

“Evolution of Radiation Safety.” Prof. P.D. Naik, Dean HBNI, gave concluding remarks and vote of thanks.



Dignitaries present on the occasion of Commemoration of 125 Years of Discovery of Radioactivity (top left). Shri K.N. Vyas delivering his address on the occasion (top right), scientific session in progress during the event (bottom left and right)

❖ Republic Day Celebration

The 72nd Republic Day was celebrated with great fervour by HBNI on January 26, 2021 adhering to all protocols due to Covid-19 pandemic. Prof. Vasudeva Rao, VC, HBNI unfurled the National Flag followed by singing of National Anthem by HBNI functionaries and staff. Prof. Rao also addressed the gathering. In his address, he explained about the significance of the day.

Recalling the year gone by as one of the most challenging, he mentioned about the steps taken by HBNI to ensure the smooth running of its various academic processes in the aftermath of Covid-19 pandemic. Other HBNI functionaries present on the occasion included Prof. R.B. Grover, Prof. P.D. Naik, Prof. B. Chandasekar, Prof. D.K. Maity and Prof. A.K. Dureja.



Prof. Vasudeva Rao, VC, HBNI unfurling National Flag (left) and HBNI staff at Republic Day Celebration (right)

❖ National Science Day

National Science Day (NSD) is celebrated on February 28 every year to commemorate the discovery of Raman Effect by Sir C. V. Raman. HBNI celebrated NSD on March 1, 2021 by organizing a webinar by Prof. B.N. Jagtap, IIT Bombay and Ex-Director, Chemistry Group, BARC on the topic “Seeking convergence of science, education and society in new India”, keeping in mind the theme for NSD-2021 which was ‘Future of Science, Technology and Innovation: Impact on Education Skills and Work’.

❖ International Women’s Day Celebration

International Women’s Day was celebrated by HBNI online over WebEx platform and streamed live on YouTube on March 9, 2021. Prof. Rohini Godbole, Centre for High Energy Physics, Indian Institute of Science, Bengaluru, was the guest speaker on the occasion. The event was organized by Women’ cell of HBNI and attended by a large no. of students, staff and faculty of HBNI. Smt. Bharati Suvarna, Assistant Registrar and Convener, Women’s Cell, HBNI welcomed the gathering. Prof. Vasudeva Rao, VC, HBNI gave introductory remarks. Dr. Umasankari, Chairperson, Women’s Cell, HBNI introduced the guest speaker of the day, Prof. Rohini Godbole, who is an avid supporter of women pursuing careers in science and technology. Prof. Godbole gave a webinar on the topic “Life in Science”. The essence of her talk was that to increase the participation of Indian women in the fields of science, technology, and engineering particularly in leadership positions, a lot needs to be done by institutions, society and policymakers. She remarked that just as science is important for women, they too are important to science and expressed hope that a day will soon come when we will just speak of scientists/ engineers and not their gender.



Prof. Vasudeva Rao, VC, HBNI addressing the gathering (left) and Prof. Rohini Godbole delivering her talk (right) on the occasion of International Women’s Day Celebration at HBNI

❖ हिन्दी दिवस समारोह

हिन्दी दिवस के अवसर पर संस्थान के परिषद कक्ष में दिनांक 14 सितंबर 2020 को प्रातः 11:00 बजे एक समारोह आयोजित किया गया। इस समारोह से पहले हिन्दी दिवस पर ऑनलाइन वार्ता प्रतियोगिता आयोजित की गई थी जिसमें संस्थान के सात कर्मचारियों ने भाग लिया था। हिन्दी दिवस समारोह में प्रो. भूपेन्द्र तोमर, संस्थान चेयर प्रोफेसर ने स्वागत भाषण दिया व अतिथियों का स्वागत किया। तत्पश्चात श्री एम.जी. केलकर, एसोसिएट निदेशक, मानव संसाधन, एनपीसीआईएल ने “परमाणु ऊर्जा के नए विकास – कुछ नए आयाम” पर वार्ता प्रस्तुत की। मानव संसाधन विकास मंत्रालय, नई दिल्ली के वैज्ञानिक एवं तकनीकी शब्दावली आयोग के सह निदेशक श्री शिव कुमार चौधरी ने वैज्ञानिक आविष्कारों व अन्वेषणों के हिन्दी प्रचार व प्रसार के लिए शब्दावली के महत्व पर अपनी वार्ता प्रस्तुत की। संस्थान के कुलपति महोदय ने समारोह में हिन्दी दिवस प्रतियोगिता में सर्वाधिक अंक प्राप्त करने वाले कर्मचारियों को पुरस्कार वितरित किए। कुलपति ने अपने सम्बोधन में हिन्दी भाषा के प्रचार एवं प्रसार के महत्व पर बल दिया एवं होमी भाभा राष्ट्रीय संस्थान की हिन्दी वेबसाइट शुरू की। अंत में डॉ. तोमर ने धन्यवाद प्रस्ताव प्रस्तुत किया। समारोह में संस्थान के सभी कर्मचारियों ने भाग लिया।



परिषद कक्ष में हिन्दी दिवस समारोह में भाग लेते एचबीएनआई के सदस्य।



श्री शिवकुमार चौधरी अपनी वार्ता प्रस्तुत करते हुये।



श्री एम जी केलकर अपनी वार्ता प्रस्तुत करते हुये।

❖ Celebration of 101st Birth Anniversary of Dr. Vikram Sarabhai

The birth centenary year of the founding father of Indian Space programme, Dr Vikram Sarabhai, who also succeeded Dr. Bhabha as Chairman of Atomic Energy Commission was celebrated during 2019-20. Beginning in August 2019, ISRO and Department of Atomic Energy jointly organized the

year-long Vikram Sarabhai Centenary Programme, wherein several events such as memorial lectures, student competitions, exhibitions, etc. were conducted across the country at more than 100 locations.

The 101st Birth anniversary of Dr. Sarabhai was celebrated by HBNI in virtual mode on August 12, 2020. To mark the occasion, HBNI arranged scientific talks by eminent nuclear scientists and physicists on the topic “Dr. Vikram Sarabhai and his legacy: A tribute to Dr. Sarabhai” over WebEx platform. Prof. R.B. Grover, Emeritus Professor, HBNI in his talk outlined the contributions of Dr. Sarabhai for the development of atomic energy in India. Prof. Bikash Sinha, INSA Senior Scientist, VECC, spoke about Dr. Sarabhai’s contribution to cyclotron program and Prof. Abhijit Sen, IPR, talked in detail about how Dr. Sarabhai established the program for plasma physics and fusion program at Physics Research Laboratory, Ahmedabad.

❖ **Founder’s Day Celebration**

The 111th Birth anniversary of Dr. Homi Jehangir Bhabha was celebrated by HBNI on October 30, 2020. On this occasion, Prof. Sreerup Raychaudhuri, Dean (Administration) and Professor, Department of Theoretical Physics, Tata Institute of Fundamental Research, delivered a special lecture on the topic “Homi Bhabha and the Early Days of Particle Physics in India.” The lecture was conducted online on a Webex platform and streamed live on YouTube. In his talk, Prof. Raychaudhuri, described about the history of nuclear physics, cosmic physics and particle physics research in India and highlighted the contributions made by Dr. Homi Jehangir Bhabha and various other Indian physicists/scientists.

❖ **Awards Function of HBNI**

The award function of the HBNI to honour outstanding students of the institute in various academic programs who passed out in the year 2019 was held online over WebEx platform and streamed live on YouTube on December 2, 2020. Prof. R.A. Mashelkar, Former DG, CSIR and Former Chairman, NIF, was the Chief Guest for the function. Shri K.N. Vyas, Secretary, Department of Atomic Energy (DAE), Chairman, Atomic Energy Commission and Chairman, Council of Management, HBNI presided over the function. Apart from participation of functionaries of HBNI at various CIs/OCC and Central Office, faculty, alumni, students of HBNI, vice-chancellors, directors and students of prestigious institutions across India also participated in the function online

Prof. P.D. Naik, Dean, HBNI welcomed the participants. Prof. Vasudeva Rao, Vice-Chancellor, HBNI, in his address spoke about the recent achievements of HBNI and awards and honours won by HBNI students and faculty. He briefed about the measures taken by central office to smoothly run the academic processes in the aftermath of COVID-19 pandemic and various online events conducted by HBNI during July-December 2020 to benefit its students and faculty. Shri K.N. Vyas, in his presidential address, congratulated all the award winners and their mentors on their achievement. He lauded the efforts of HBNI to bring India at the forefront in research and innovation and remarked that through its academic programmes HBNI has imbibed the spirit of DAE with regards to excellence, relevance and multi-disciplinary collaborations. He further informed that on the occasion of 111th birth anniversary of Dr. Bhabha, DAE has established incubation centres at BARC, IGCAR, RRCAT, and IPR and urged HBNI students to advance their research further to