## Report: A Curtain Raiser Programme to Mark The Beginning of The Year Long Commemoration of The Birth Centenary of Prof D.P.Khandelwal

Last year (2019) the Executive Council of IAPT took a decision to observe the birth centenary of its founder Prof D.P. Khandelwal in 2020-2021 in a befitting manner and plans started pouring in. We at RC 15 of IAPT were no exception and also planned to have a programme at Midnapore College, where the IAPT-Midnapore College Centre for Scientific Culture was established in 1993 with a very special initiative of Prof Khandelwal and the very encouraging role of the Midnapore College in hosting and providing support for the Centre.

Prof Khandelwal was born on October 01, 1921 and his centenary year began on October 01, 2020. Unfortunately, due to the prevailing pandemic situation that all of us are passing through all plans of holding face-to-face programmes have come to a scratching halt. However, perhaps the encouragement provided to the IAPT fraternity kept our spirits alive and gave us the impetus to make a beginning.

For most of us in IAPT Prof D.P.Khandelwal was the founder President of Indian Association of Physics Teachers that came into being in 1984. But it is possibly the tip of the iceberg so far his wider activities and dedication for physics and physics education in this country and his vision as an educationist are concerned. With some of his close colleagues and dedicated physics teachers, Prof Khandelwal nurtured IAPT till 1996 when he passed away. For the members of the organisation that he established his centenary year brings in an opportunity to look back to this great teacher and introspect into his thoughts and vision. With this backdrop in mind the Regional Council 15 of IAPT, Midnapore College (Autonomous), West Bengal and the IAPT-Midnapore College Centre for Scientific Culture (CSC) jointly organised one web based programme to pay tribute to the memory of Prof Khandelwal on October 01, 2020 where senior IAPT members, who have closely interacted with Prof Khandelwal, would reminisce about him from different parts of India.

Dr Pradipta Panchadhyayee of P.K.College, Kanthi, was the administrator of the meeting and ran the entire programme with aplomb by providing the necessary technical support .The programme was anchored by Dr Bhupati Chakrabarti, Former General Secretary of IAPT. Prof G.P.Das, Faculty IIT Kharagpur and the President of IAPT RC 15 presided over the function.

After a few introductory comments by Dr Chakrabarti, the shared screen presented the garlanded photo of Prof Khandelwal. The welcome address was delivered by Prof G.C.Bera, the Principal of Midnapore College (Autonomous). Prof Bera is a member of the physics community and IAPT and he is actively involved in the activities of CSC since its inception. He talked about the role of the College in hosting and supporting the Centre that is conducting various types of Workshops for teachers and students particularly highlighting the role of the experiments in physics for better learning of the subject. He underlined the role of Dr S.C.Samanta who not only shouldered the responsibility for providing shape to the Centre but has encouraged and inspired the generations of students into getting passionately involved in experimental physics. Prof G.P.Das in his presidential remarks spoke briefly about Prof Khandelwal's vision and how IAPT is thriving to follow his footsteps. He felt that the thoughts of Prof Khandelwal are still relevant though we possibly have to go a long way to achieve them so far as the teaching- learning of physics in the country is concerned.

IAPT President Prof Vijay Singh was the first speaker to follow Prof G.P.Das. Since he was occupied at the time of the programme he sent us an audio message that was played. Prof Singh as a very young faculty in IIT Kanpur in 1984 actually attended the first meeting convened by Prof Khandelwal in Kanpur to formally launch the IAPTand he fondly narrated his experience. Next speaker was Prof S.Lokanathan from Jaipur, who is a retired faculty from the Rajasthan University and a former faculty of IIT Delhi. Prof Lokanathan being a very senior professor had the opportunity of meeting Prof Khandelwal before the IAPT was established and he knew Prof Khandelwal as a very sincere teacher who liked to do experiments in the laboratory by himself like a student to get the real feel of it even when he was nearly 50 years old. The third speaker of the evening was Prof P.N.Ghosh who was a Professor at the Department of Physics in Calcutta University and former VC of Jadavpur University. Prof Ghosh talked how he got associated with IAPT virtually from its beginning when Prof Khandelwal not only took him into the fold but put on some academic responsibilities for the organisation right from the beginning. He was actually among the first set of members of IAPT from West Bengal along with Late Prof Chanchal Kumar Majumdar.

Prof H.C.Pradhan, Former President of IAPT and the former Centre Director, HBCSE spoke from Mumbai. He specially underlined the thoughts of Prof Khandelwal not only on physics education but science education in general and identified him as a 'karmayogi'. He pointed out that one would find the relevance of the vision of Prof

Khandelwal even today if one takes a closer look at the New Education Policy 2020. The next two speakers Prof R.M.Dharkar and Prof M.L.Ogalapurkar were both from Pune, and both very senior members of IAPT. Prof Dharkar was given the charge of Chief Coordinator of IAPT Exams by Prof Khandelwal in early 1990s and he was looking after both the NSEP and NGPE at that time. He told the audience how Prof Khandelwal used to instil confidence in the persons once he or she has been given an important responsibility. Prof Dharkar in his reminiscence brought out the hallmark of an experimental physicist in Prof Khandelwal by mentioning how he used to differentiate an active lab from a passive one when he visited Wilson College, Mumbai where Prof Dharkar was the HOD Physics. Prof M.L. Ogalapurkar who was also the Chief Coordinator of IAPT Exams at a later stage, talked about his personal experience of interacting with Prof Khandelwal as he was staying in Pune for about one year or so before his demise in 1996. Since Prof Ogalapurkar organised the IAPT Convention in his college in Pune in 1995 he had the opportunity of meeting Prof Khandelwal and taking his valuable advice.

Following the recollections of these eminent speakers was the narration of a unique experience which perhaps turned out to be the biggest tribute to Prof Khandelwal. The background was that this year the conduction of NGPE Part C (Practical) proved to be quite challenging due to the pandemic scenario. Although the theory exam was over and top 27 students were identified it was difficult to conduct the exam in any college or university department by bringing in all the eligible students from different parts of India. Under the leadership of Prof S.C.Samanta and with the support from IAPT-Midnapore College CSC quite a few IAPT members from this region took up the challenge of developing suitable experiments for the conduction of the practical exam in distance mode. Prof B.P.Tyagi, Chief Coordinator of IAPT Examinations encouraged this approach and accordingly made arrangements for its delivery with the help of Dr Pradipta Panchadhyayee and a few more from different parts of the country. Dr Panchadhadhyayee shared the screen to tell the audience about this experience of developing the experiments and the conducting the examination by sending designated kits to the students' home by courier. No doubt this approach is a special tribute to Prof Khandelwal who had a very strong inclination for experiments and the way the entire work was planned and executed is an experiment by itself.

Dr S.C.Samanta the real anchor person for the CSC from its inception and working with whole hearted dedication for last twenty seven years or more first talked about Prof Khandlewal and his vision about experimental physics. He also shared some of his experience with the present scenario related to practical classes in schools and stressed the need for the improvement of the scenario.

IAPT General Secretary Prof K.N. Joshipura sent an audio message as he was not available at the time of the function. He talked about his experience of meeting Prof Khandelwal and his interest in experiments.

After the speeches by all the speakers the IAPT RC 15 President took over to sum up the discussions. He presented the salient features of the observations made by all speakers. Dr S.C.Samanta supplemented this summing up with a few comments. The deliberations were unanimous about the fact that there is no way of learning good physics by neglecting the laboratory. Very unfortunately now the lab work has taken a backseat not only in the schools but this is gradually spreading at other levels as well. IAPT as an organisation should take a more proactive role to change this scenario by following the thoughts of Prof D.P.Khandelwal. The vote of thanks was offered by Dr Achintya Pal, Secretary, IAPT RC15. He appreciated all the speakers for the interesting and encouraging memoirs and extended gratitude to all IAPT members and everyone in the audience.

Video of the recorded programme is available in the following link

https://drive.google.com/file/d/1Ikc8bP\_ITrklk38jLIZJPm0JumRp4ddn/view?usp=sharing

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