

Report on Activities organized to celebrate WYP2005 in Pakistan.

1.1 The first meeting on organizing WYP2005 activities in Pakistan was held on 3rd October 2003 at Islamabad Club in Islamabad. Prof. Riazuddin, Director General, National Centre of Physics, Prof. Pervez Hoodbhoy, Department of Physics, Quaid-i-Azam University, Prof. Asghar Qadir, Department of Mathematics, Quaid-i-Azam University, Dr. N. M. Butt, Pakistan Academy of Sciences, Dr. Abdullah Sadiq, Rector Pakistan Institute of Engineering and Applied Sciences and Prof. Khalid Rashid, Department of Mathematics, Quaid-i-Azam University, attended this meeting. At this meeting, Pakistan Committee for the WYP2005 was constituted and a WYP2005 Desk was created at the **National Centre of Physics (NCP)**. Khalid Rashid was assigned the task of coordinating and representing WYP2005 activities.

1.2 The second meeting was held on 3rd November 2004 at the National Centre of Physics under the patronage of Dr. Ishfaq Ahmad, special Advisor to the Prime Minister and Prof. Riazuddin. Many directors and professors of science and technology organizations attended the meeting. At this meeting a general program for WYP2005 activities was proposed. The realization of this program is list in section 2 hereunder.

1.3 The activities were coordinated through the WYP2005 desk at the National Centre of Physics, Quaid-i-Azam University. The centre provided the running expenses for the WYP2005 desk, as well as some financial support to the holding of sessions on Einstein at the Annual Symposium on Frontiers of Physics, organized by the Pakistan Physical Society and held in the city of Lahore.

1.4 The logo for Pakistan World Year of Physics was designed by Dr. Tasneem Zehra Hussain. This is posted below.



1.5 Although many funding agencies, such as Higher Education Commission, Pakistan Science Foundation, the Ministry of Science and Technology, etc were approached for funds, the WYP2005 did not dispose of any direct funds. However these agencies did sponsor the holding of seminars and special sessions under their own project heads. Because of non-availability of financial resources, Pakistan could not send any delegation to WYP2005 UNESCO sponsored conferences in Paris, Bern and Durban. It was also not possible to make any videos or other cinematographic material for later use in schools and colleges. The only exhibition held was at Ghulam Ishaq Khan Institute of Engineering Sciences (GIKI) in Topi, NWFP province of Pakistan.

1.6 Unfortunately, due to unavailability of funds and resources, as well as the motivation Pakistan did not participate in any of the international events such as, sending the light around the world, physics as a cultural heritage. Although we tried very hard, through the office of Dr. Shaukat Hameed Khan, Advisor to the Planning Commission, Ministry of Finance, Government of Pakistan, we were not successful in obtaining funds for a traveling physics exhibition on a train, that would go around Pakistan. Lack of

motivation became grossly apparent from the fact that only one reply came from the letters and suggestions on organizing World Year of Physics events that were sent to over 300 Colleges and Universities of Pakistan.

1.7 The statistics on the role of World Year of Physics and the enrollment of physics students has yet to be collected.

1.8 Unfortunately, Pakistan did not bring out any stamp to commemorate the World Year of Physics

1.9 There was rather modest involvement with the Press, Media and TV. The primary daily paper DAWN however did bring out on 25 June 2005 a special edition of Science and Technology weekly magazine on World Year of Physics, with contributions from Asghar Qadir, Fayyazuddin, Atta-ur-Rahman, Sabiha Essa Khan, Riazuddin, Alok Jha, Zane Asher Green, Suhail Zaki Farooqui, Khalid Rashid, and Isa Daudpota.

1.10 The world year of physics desk does have contact with some of the policy makers, but this contact is limited to essentially academic exchange. However the WYP2005 desk intends to maintain the contact during the coming years. Whether there will be any impact has yet to be seen.

1.11 We have yet to evaluate the impact of the WYP2005 activities in Pakistan. However it seems that in the cities such as Islamabad, Lahore and Karachi, the impact among the students was noticeable in the interest they showed for physics.

1.12 There may have been additional activities of which I am not aware at the present. If I come to know of these I will make the necessary corrections.

2 Summary of Major activities to celebrate Einstein's Year 2005

2.1 Pakistan Physical Society held a special session to celebrate WYP2005 at the 10th Symposium on Frontiers in Physics to be held in Lahore on 11-14 January 2005. Prof. Asghar Qadir gave a talk on Relativity, Prof. Fayyazuddin on Brownian Motion and Prof. Riazuddin on the Photoelectric effect. Dr. Ishfaq Ahmad chaired the session. For further details on these talks, contact Prof. G. Murtaza, Email: sschair@lhr.comsats.net.pk

2.2 National Engineering & Scientific Commission held on 31st January 2005, a Special One Day Symposium on Physics with Dr. Samar Mubarikmand, Chairman of this Commission, as the chief Guest. Talks were delivered on Plasma Physics by Prof. G. Murtaza, Solid State Physics by Dr. Mansur Beg, on Astrophysics by Dr. Abdul Majeed, and on accelerator Physics by Dr. Khunab Gul.

2.3 At the All Pakistan Science Fair, 2005, 5-6 February, held at Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, "Topi district, NWFP, Prof. Khalid Rashid gave a talk on Einstein and Physics. At this fair, young physics and engineering students of age 16-19 participated in a science exhibition comprising projects in the field of Physics and Electronics. This was an exciting experience for me (Khalid Rashid) as a speaker, because the young minds were more curious and fascinated by the story of the young Einstein as well as by Physics. Dr. Ishfaq Ahmad gave his concluding remarks and his comments on the value of World Year of Physics in Pakistan. For further details, contact Dr. Jameel-Un-Nabi, Dean,

Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, "Topi district, NWFP, Pakistan.

2.4 Commission for Science and Technology for Sustainable Development in the South (COMSATS) organized a Seminar on Physics in our Lives on 23 and 24 February 2005. Dr. Ishfaq Ahmad delivered his address on the World Year of Physics in Pakistan. At this Seminar a live video lecture on Einstein by Prof. Robert Aymar, Director General CERN, was arranged. Prof. Khalid Rashid, Member WYP2005 Committee, gave a talk on Einstein 1905. Further details can be obtained from, Dr. Hameed Ahmed Khan, Director General COMSATS, Email: comsats@comsats.org.pk

2.5 On the occasion of the Einstein's birthday birthday **Einstein Seminar** was organized by the students of the department of Physics of Quaid-i-Azam University on 19th March 2005. At this Seminar, Khalid Rashid talked about the International activities World Year of Physics and how physics students could participate in some international events, Asghar Qadir on Relativity, Fayyuzuddin on Brownian Motion, Pervez Hoodbhoy on Where Einstein went Wrong, and Farhan Saif on Einstein and Today's Physics.

2.6 During the **International Bourban Conference on Applied Sciences and Technology**, Held from 13-18 June 2005, special WYP2005 special lectures on Einstein were a part of the programme. For further details contact Dr. Hafeez Hoorani, Director National Centre of Physics, Quaid-I-Azam University.. Email: hoorani@comsats.net.pk

2.7 At the annual **International Summer College on Physics and Contemporary Needs**, June 27 – July 13 2005. a special Inaugural WYP2005 session was held on Cosmology, Quantum Theories and Thermodynamics and on Einstein's original 1905 papers. The chief guest was Mr. Shaukat Aziz, the Prime Minister of Pakistan. Late Prof. Abdus Salam founded the college in 1976, and ever since it is held every year. The main organizer of this college is now Prof. Riazuddin, Director General of the National Centre of Physics at Quaid-I-Azam University. Fresh PhD graduates, graduate students and young scientists mostly attend this college from Pakistan as well as from regional and neighbouring countries. Speakers are invited from all over the world. For further details contact: Dr. Hafeez Hoorani, Director, National Centre of Physics, Quaid-I-Azam University. Email: hoorani@comsats.net.pk

2.8 The Aga Khan University of Medical Sciences organized a conference on PHYSICS & HEALTH on 7-8 September 2005 in Karachi. The Keynote speaker was Dr. Ishfaq Ahmed, who addressed the gathering of medical professionals on The World Year of Physics and the contribution of Physics to Medical Sciences, especially in the field of diagnostics. Over 20 talks were delivered on Physics, biology and medicine, For details contact Dr. Saad Bashir, Aga Khan University, Stadium Road, Karachi.

2.9 A special session on World Year of Physics was held on 19th November 2005 at the **National Centre of Physics (NCP)**, Quadi-i-Azam University, Islamabad. The main speakers were Prof. Riazuddin, who talked on the role of NCP in WYP2005, Prof. Roger Cashmore of Oxford University and CERN, who talked on the nature of matter, Khalid Rashid, who talked on the WYP2005 as a global activity involving all nations, and Dr. Ishfaq Ahmed who made concluding remarks on the WYP2005 activities in Pakistan.

2.10 Finally, the **Pakistan Science Foundation** organized on 29 December 2005, a special function on World Year of Physics for the college students of Islamabad area. Over 200 students between the ages of 16 and 19 participated in this function. Presentation were made by Dr. N.M. Butt, presently, the Chairman of Pakistan Science Foundation on the role of

Physics in Development, by Ms. Faiza Najeeb, a girl student of Islamabad Model College for Girls, I-89/4, on Einstein, his life and works, by Khalid Rashid on Einstein, the Genius of the Century. Prof. Tahir Hussain, Vice President of Sir Syed Memorial Society, gave his concluding remarks. On 27 December the Pakistan Television aired a talk show on World Year of Physics. On the panel were, Dr. N M Butt, Prof. Mujahid Kamran and Khalid Rashid. This was apparently a very successful program because of the large response and question from the viewers regarding the world year of physics and physics as such.

I would welcome any comments and would be very glad to respond to any further questions, suggestions and any requests for details..

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