
Guest Editor's Preface: International Conference on the Frontiers of Plasma Physics and Technology

The first International Conference on the Frontiers of Plasma Physics and Technology was organized in Bangalore, India during December 9–14, 2002. More than 100 delegates from all the continents participated in the conference and about half the delegates were from overseas. This Forum specially encouraged the young researchers to present their work and exchange ideas with experts. This conference which was inter-disciplinary in nature, brought several plasma physicists and technologists to a common platform to discuss the research and applications useful for the advancement of the present society.

The conference included review, invited, contributory talks, and poster sessions. Recent progress in basic plasmas, complex and multi component plasmas, magnetized plasmas, solitons, magnetic confinement, inertial fusion with emphasis on Fast Ignitor, Rotamak plasma, clusters, space and astrophysical plasmas, free electron laser, matter at extreme pressures and density, spectroscopic diagnostics, EOS in condensed matter, generation of energetic particles, plasma physics in engineering perspective, industrial applications specially in biology, textile, preservation of artifacts etc., ultra intense laser matter interaction, positron-plasma interaction etc. were some of the front line topics discussed during the conference. Two days special evening course “Mathematica as a tool for plasma research” was conducted by P. Sakanaka (Brazil) for young researchers. Conference activity was reviewed by N. Cramer (Australia) and M. Lontano (Italy).

The event also marked to felicitate two distinguished personalities, Academician (Prof.) O. N. Krokhin and Prof. H. C. Pant. Academician Oleg Nikolaevich Krokhin, Director, P. N. Lebedev Physical Institute, Moscow, Russia has made an extensive contribution to plasma physics especially to Laser plasma. His association with Nobel Laureate N. G. Basov on fundamentals of quantum electronics is well known. Prof. Hem Chandra Pant, Bhabha Atomic Research Center, Mumbai, India who built the first indigenous semiconductor laser in India in 1965, is well known as the father of Indian laser program and made notable contribution to the field of laser plasma interaction studies.

Forty-six papers have been accepted for publication. Twenty papers will appear in *Laser and Particle Beams*, Volume 21, Number 4, 2003 and Volume 22, Number 1, 2004, each issue containing 10 papers. Remaining papers will appear in *Pramana*, Indian journal of Physics.

Conference Scientific Advisory Committee consisted of D. Batani (Chairman, Italy), V. Apollonov (Russia), R. Bingham (UK), P. Drake (USA), A. Giulietti (Italy), B. Goel (Germany), J. Grun (USA), A. S. Gupta (India), M. Hashmi (Germany), MHA Hassan (Italy), H. Hora (Australia), P. K. Kaw (India), T. Kawabe (Japan), M. H. Key (USA), O. Khrokin (Russia), S. Lawande (India), S. Lee (Singapore), J.T. Mendonca (Portugal), A. Mendis (USA), K. Mima (Japan), G. Mourou (USA), A. El Nadi (Egypt), S. Nakai (Japan), A. Ng (Canada), H. D. Pandey (India), C. Phipps (USA), P. Sakanak (Brazil), M. Skowronek (France), SomKrisan (India), N. Tsintsadze (Georgia), J. Ullschmied (Czech Republic), R. K.Varma (India), F. Verheest (Belgium), and Yu Wei (PR China).

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Conference was directed by N. Rudraiah, T. Desai, P. K. Shukla, A. Sen, H.C. Pant, and B. Krishnamurthy acted as Scientific secretary.

Our special thanks are due to Profs. H. Hora and D. Hoffmann for the co-operation during the publication of the papers. On behalf of all the directors, I take this opportunity to extend our earnest thanks to all the authors for their valuable contribution and to the referees for the critical reviewing/suggestions.

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