ENSF
THE EMERGING NATIONS SCIENCE FOUNDATION

Newsletter

Number 3&4 **September – December 2009**

Dear Readers,

We are now approaching the end of 2009 and looking forward to 2010 with an increased activity in most of our programs. We shall continue various programs started in 2008 to help develop science as well as the appreciation of science by the public. This year, we initiated another prize for young scientists, the *ENSF Prize for Best Poster in Plasma Physics* with the idea that such an award will encourage young scientist in developing nations to interact with their counterparts both in developing and scientifically advanced nations, as well as conducting original research of significance. ENSF's policy to participate in international events, such as the Summer College on Plasma Physics at Trieste, resulted in a better understanding as to where we should focus our efforts. It is the young and highly motivated researchers who in the end shall solve major problems facing our planet in 21st century. They are the centre of our attention.

Professor K. Tahir Shah

Programmes

- **ENSF Prize for Best Poster**

ENSF established another prize, which is to be given for the best poster presentation during the annual Summer College on Plasma Physics, held every year at the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy. The prize is known as the *ENSF Prize for Best Poster in Plasma Physics* and is to be awarded to a young scientist. A committee of internationally-known experts will select the best poster presentation based on its scientific merit and eye-catching style of the public presentation. The 2009 prize was awarded to **Sukhdeep Kaur,** a young female scientist from the Indian Institute of Technology (IIT), New Delhi, India (see Profile of a Young Scientist).

- **Travel and Research Grants**

ENSF provided travel, living expenses and registration fee to **Dr. Tahani S. M. Shatir** of the University of Khartoum, Sudan, to participate in the International Conference on Physics Education (ICPE – 2009) held in Bangkok, Thailand from October 18-24.

A travel grant was provided to **M. Akram Safi** from the Department of Physics, Hazara University, Mansehra, NWFP, Pakistan to attend his doctoral admission examination at Ph.D. School in Physics, Astrophysics and Applied Physics, Department of Physics, University of Milan, Milan,Italy.

A travel grant was awarded by ENSF to **Professor Jamel-un Nabi** from the Faculty of Engineering Sciences, GIK Institute of Engineering Sciences and Technology, Swabi, NWFP, Pakistan, to present his research paper at a 5-day scientific event, TOURS Symposium on Nuclear Physics and Astrophysics VII, organized by Konan University, Kobe, Japan. The conference was held from 16-20 November 2009.

Profile of a Young Scientist

Sukhdeep Kaur, a young scientist from the Indian institute of Technology (IIT), New Delhi, India, is the winner ENSF Prize for Best Poster in Plasma Physics - 2009. In a simple ceremony during the formal banquet of the Summer College on Plasma Physics held at ICTP, Trieste, Italy, the prize money and certificate were presented to her by the ENSF Chairman. The College was directed by Professors P.K. Shukla (Germany), S.M. Mahajan (USA), L. Stenflo (Sweden), Z. Yoshida (Japan) and R. Bingham (UK). The college ran from 10 to 28 August 2009. The poster presented by Ms Kaur provided a successful theoretical explanation of the third harmonic generation in rippled laser-produced plasma.

Born in 1979, Ms Kaur obtained her M.Tech. degree in 2003 from M.D.S. University located in her native town of Ajmer, India. Presently, she holds the title of Research Scholar at the prestigious Indian Institute of Technology, Delhi, India. She has co-authored many papers published in important international journals of high reputation. Her area of research is non-linear high power laser interaction with plasmas, harmonic generation, self-focusing and its consequences. She was rated by her supervisor as among the top one percent researchers at IIT, Delhi, and top in the research group at the Centre for Energy Studies of the same institution.

Our hearty congratulations to her for such an extraordinary achievement and wish her great success in her future endeavour in scientific education and research.

(From left to right, standing) Professor K. Tahir Shah, Professor S. M. Mahajan, Ms. Sukhdeep Kaur (winner of the ENSF Best Poster Prize), Dr. W.J.M. Samaranayake (Sri Lanka, winner of I0P-PPCF Poster Prize), and Professor P.K. Shukla.

Events

To celebrate the independence day of both Pakistan and India on 14 and 15 August, respectively, ENSF gave a reception on the evening of August 14, where some 50 guest scientists from both countries were invited. The purpose was to bring together scientists from the two countries to enjoy this moment of pleasure and reflection and to create a strong feeling that science has no boundaries, race or religion. Progress comes only from cooperation between individuals or nations.

International Collaboration

- **Meetings with the Cultural Advisor to the Embassy of Iraq, Rome.**

TRIESTE: ENSF Chairman met with **Professor Abdul Mahdi Taleb,** Cultural Advisor, Embassy of Iraq, Rome, Italy to discuss a proposal to set up the Baghdad International Center for Mathematics and Physics (BICMP). Three meetings took place in July 2009, where **Dr. Ahmad Zainy Al-Yasry**, a mathematician working as a post-doctoral fellow at ICTP, Trieste, Italy, also took part in the discussion focused on this project and the business plan for the Center of Mathematics and Physics. Dr. Al-Yasry and other Iraqi scientists sought advice on how to initiate this project in the near future and plan its functional aspects.

In the News

ENSF fellows **Dr. I. Ahmed** from National Centre for Physics, Islamabad, and **Dr. M.J. Aslam** from Physics Department, Quaid-i-Azam University, Islamabad, Pakistan, co-authored jointly with **Professor Ahmed Ali** and **Dr. C. Hambrock** from DESY, Hamburg, Germany, a research paper titled: *A Case for Hidden bb^- Tetraquarks based on $e^+ + e^- \rightarrow bb^-$ Cross Section between $\sqrt{s}$ =10.54 and 11.20 GeV.* The paper is issued as Deutches Elektronen-Synchrotron preprint number DESY 09-192, November 2009. It is also available at the address arXiv: 0911.2787, an open access eprint archive for scientific paper run by the Library of Cornell University, USA. The paper has been submitted for publication.

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