

Report on the U.S. Participation in the Korean Physical Society Jubilee Symposia, Seoul, Korea, 23 -26 October 2002

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1. Introduction

The Korean Physical Society (KPS) celebrated its 50th Anniversary during October 24 - 26, 2002, at Hanyang University, Seoul, Korea, with a 50th Anniversary General Academic Meeting, and three International Symposia, plus four special lecture sessions. The General Academic Meeting was consisted of 17 Sessions of 11 academic Divisions of the KPS, such as those of Particle Physics (Sessions Ba & Bb); Nuclear Physics (Session Ca & Cb); Condensed Matter Physics (Sessions Da, Db & Dc); Heat and Statistical Physics (Session F); Plasma Physics (Session H); Atomic and Molecular Physics (Session J); Semiconductor Physics (Session K); and Astrophysics (Session L) among others. The International Symposia were on Nano Science and Technology; Photonic Science in the 21st Century; and Physics Education. In addition, the special lecture sessions were held with such speakers as Lenny Susskind of Stanford University on "Paradigm Lost, Paradigm Regained", Ki-Hyon Kim of North Carolina Central University on "Role of Physics Community toward One Korea", and Presidents of four foreign Physical Societies including Dr. William F. Brinkman of the American Physical Society. The Jubilee Meeting was attended by over 3,000 physicists including some 20 U.S. physicists. Over 5,000 papers (including those in the poster sessions) were presented throughout the mammoth three day celebration of the 50th Anniversary Meeting.

To insure the participation of as many active and well-known U.S. physicists and in particular of Korean heritage as possible, the KPS (Professor Hee-Sung Song, President, and Professor Sook-il Kwun, the KPS Jubilee Events Committee Chair) delegated me to

find financial supports which would allow a group of the U.S. physicists of Korean heritage to attend this historic Jubilee Events.

Accordingly I formed the Coordinating Committee for the U.S. Participation in the KPS Jubilee Meeting and Symposia, upon consultation with the leaders of the Association of Korean Physicists in America (AKPA), and submitted a proposal to the Korea-U.S. Science Cooperation Center (KUSCO) for a financial grant. The proposal was approved on August 27, 2002 by the KUSCO Executive Board with an amount for 10 travel supports.

The U.S. Coordinating Committee:

Dr. Sungkwun Lyo, Sandia National Laboratory, Past President of the AKPA;
Professor Kwang-Je Kim, Argonne National Laboratory and the University Of Chicago, President of the AKPA;
Dr. Quiesup Kim, California Institute of Technology, President-elect of the AKPA; and
Professor Kyungsik Kang, Brown University and the Committee Chair.

The Coordinating Committee was in charge of recruiting, reviewing and selecting the U.S. delegation out of the applicants who responded to the open solicitation advertised in the AKPA News Bulletin. The applicant was asked to submit a resume showing at least 5 recent and representative research publications and one page abstract of the proposed talk at the KPS 50th Anniversary Meeting.

The Committee set the priority in the quality of the applicants as for the professional reputation and recognition as well as the current research activity in respective fields, regardless the age, which would warrant an invited talk in the respective Divisional Sessions of the KPS Meeting. Other factors of consideration were their association with the KPS and the AKPA, and the areas of special interest in Korea at the present time. Based on the materials submitted by the applicants, the Committee selected a quality group of 12 people initially, of which 10 people were eventually supported by the KUSCO travel grant. One of them preferred to accept another invitation from a Korean institute and the other had the last minute duty-call and obligation at his institute. I then for-

warded this information on behalf of the U.S. Coordinating Committee to the KPS and requested to invite the selected people as invited speakers at the KPS 50th Anniversary General Academic Meeting. Our recommendation was accepted by the KPS Academic Conference Committees in each Division. As shown in the next section, everyone in the selected group gave invited talks in the respective Divisional Sessions at the KPS Jubilee Meeting. The talks presented by the AKPA delegation received high acclaims in quality and interest, including those by four other AKPA members who were invited by the KPS separately with other supports.

2. The U.S. Participants, Titles of Presentation and Schedule

Everyone of the AKPA delegation gave an invited presentation (Inv)¹ in the respective session of the KPS Divisions during the three days of 24 - 26 October 2002.

2a. Session A: Special Lecture

Ki-Hyon Kim, North Carolina Central University.

(25/10/02): *Role of Physics Community toward One Korea: Report on the DPRK Science and Technology Infrastructure.*

2b. Session B: Particle Physics

Kyungsik Kang, Brown University.

(25/10/02) Ba-06(Inv) : *Physics of Extra Dimensions.* and

(26/10/02) Ba-13(Inv) : *Knowledge Bases in Particle Physics for Research and Education.*

Songhoon Yang, Caltech.

(26/10/02) Bb-12(Inv) : *Search for Decays of B_0 Mesons into Pairs of Leptons.*

2c. Session C: Atomic and Nuclear Physics

Cheung-Ryong Ji, North Carolina State University.

(26/10/02) Ca-01(Inv) : *Hadron Phenomenology in Light-Front Dynamics.*

Ki-Hyon Kim, North Carolina Central University.

¹The invited papers was denoted as (Inv) after the paper number in the KPS Meeting Program.

(26/10/02) Cb-12(Inv) : *Anti-personnel Mine Detection and Need for New Technology.*

2d. Session D: Condensed Matter Physics

Seung-Hun Lee, NIST.

(25/10/02) Dc-01(Inv) : *Emergent Excitations in a Geometrically Frustrated Magnet.*

Quiesup Kim, JPL/NASA, Caltech.

(26/10/02) Da-08(Inv) : *Electron-Phonon Interaction on Optical Spectra of Nano-electronic Devices.*

2e. Session F: Heat and Statistical Mechanics

Yong W. Kim, Lehigh University.

(26/10/02) F-07(Inv) : *Physics with Non-Gaussian Distribution.*

2f. Session H: Plasma Physics

Kwang-Je Kim, The Univ of Chicago and Argonne National Laboratory.

(25/10/02) H-01(Inv) : *Future Light Sources Based on X-ray Lasers.*

2g. Session K: Semiconductor Physics

Sung Kwun Lyo, Sandia National Laboratories.

(25/10/02) K-01(Inv) : *Inter-Well Transfer Dynamics of Excitons in Confined Semiconductor Structures.*

2h. Session L: Astrophysics and Gravity

Ho Jung Paik, University of Maryland.

(25/10/02) L-01(Inv) : *Precision Gravity Experiments to Test Predictions Beyond General Relativity and the Standard Model of Particle Physics.*

Eun-Suk Seo, IPST, Univ. of Maryland and Ewha Womans University.

(25/10/02) L-03(Inv) : *Particles and Anti-particles.*

In addition, there were other AKPA members invited separately from the AKPA delegation:

Young Keun Lee, The Johns Hopkins University.

(24/10/02) Cs-06(Inv) : *The BRAHMS Experiment at Relativistic Heavy Ion Collider;*

Sang Boo Nam, USA.

(26/1002) Da-07(Inv) : *Notion of Incomplete Condensation in Low and High T_c Superconductors*;

M. Howard Lee, University of Georgia.

(25/10/02) F-01(Inv) : *Boltzmann's Ergodic Hypothesis: Dynamic Mechanisms and Validity*.

Y.-K. Kim, NIST.

(26/10/02) J-01 (Inv) : *Significance of Excitation-Autoionization in Open-Shell Atoms*.

3. Conclusion

All in all this KUSCO grant program supported a truly excellent group of physicists, who represented the U.S. and AKPA outstandingly in the KPS Jubilee Meeting. The presence of the AKPA delegation, though a small group, helped definitely to make the KPS celebration more lively, interesting, meaningful and even proud in the opinions of the official representatives of the foreign Physical Societies and in particular President William F. Brinkman of the American Physical Society. He expressed a pleasant surprise and appreciation to find a quality group of the U.S. participation through the AKPA delegation. Thus we believe we have contributed in a significant way to the KUSCO missions of the U.S. and Korea science exchange and cooperation. This KUSCO grant program succeeded to promote the U.S. and Korea science cooperation through the KPS Jubilee Meeting and paved a way to continue closer collaborative activities between the physicists in the U.S. and Korea.

We would like to express our sincere appreciation to the KUSCO for the grant, without which it would not have been possible for the U.S. physicists to participate in the historic Jubilee Meeting of the Korean Physical Society.

Date: 24 February 2003