

Joint 14th ITC and 4th ICAMDATA PROGRAM

Tuesday, October 5

8:30 – 9:30 : Registration <2nd and 3rd Floor>

9:30 – 10:00 : Opening addresses : Chair T. Kato <3rd Floor>
O. Motojima (Organizing Chairperson of ITC14 & ICAMDATA2004, NIFS, Japan)
M. Kitani (Ministry of Education, Culture, Sports, Science and Technology, Japan)
Y. Tsukamoto (Mayor of Toki City, Japan)

Atomic Data for Fusion <3rd Floor>

10:00 – 10:30: D. Reiter, Institute of Plasma Physics, Juelich, Germany
The role of Atomic and Molecular Processes in Magnetic Fusion Plasmas

10:30 – 11:00: Coffee Break <2nd Floor>
<3rd Floor>

11:00 – 11:30: D.R.Schultz, ORNL, USA
Present activities of the ORNL Controlled Fusion Atomic Data Center

11:30 – 12:00: S. Sudo, NIFS, Japan
New Multi-functional Diagnostic Method with Tracer-encapsulated Pellet Injection
on LHD

12:00 – 12:15 : Group Photo <2nd Floor>
12:15 – 14:00: Lunch

Plasma Diagnostics, Ion – ion Collisions <3rd Floor>

14:00 – 14:30: T. Fujimoto, Kyoto University, Japan
Plasma Polarization Spectroscopy: A+M data Aspects

14:30 – 15:00: U. Fantz, Max-Planck-Institut fur Plasmaphysik, Germany
Molecular Diagnostics of Fusion and Laboratory Plasmas

15:00 – 15:30: E. Salzborn, Giessen University, Germany
Ion-Ion Collision Processes: Experiment

15:30 – 16:00: Coffee Break <2nd Floor>

Special Lecture

<3rd Floor>

16:00 – 16:30: R. B. Laughlin (Nobel Laureate), Director, Korea Advanced Institute of Science and Technology, Korea

The Physical Basis of Computability

16:30 – 18:15: Poster Session I: P1-01~ P1-74

<2nd Floor>

18:30 : Reception by Toki Mayor for Foreign Participants

<2nd Floor>

Wednesday, October 6

Astrophysics

<3rd Floor>

9:00 – 9:30: J. Kaastra, Space Research Organization Netherlands, The Netherlands

Atomic Data Needs for X-ray Spectroscopy of Photoionized Plasmas

9:30 – 10:00: A. Pradhan, The Ohio State University, USA

The IRON project and the Rmax Project: R-Matrix Data for Astrophysical Applications

10:00 – 10:30: S. Johansson, Lund University, Sweden

Oscillator Strengths, How to meet the present and future needs in astrophysics

10:30 – 11:00: Coffee Break

<2nd Floor>

Electron Collision, Data Center

<3rd Floor>

11:00 – 11:30: N. Djuric, Jet Propulsion Laboratory, USA

Experimental Studies on Electron-Impact Excitation of Atomic and Molecular Ions

11:30 – 12:00: M. E. Bannister, ORNL, USA

Experiments on Electron-Impact Ionization of Atomic and Molecular Ions

12:00 – 12:30: R.E.H. Clark, IAEA, Austria

Recent data generation activities at the Atomic and Molecular Data Unit of the IAEA

12:30 – 14:00: Lunch

Molecules, Data Center

<3rd Floor>

14:00 – 14:30: E. Roueff, Observatoire de Paris, France

Understanding the physics and chemistry of interstellar clouds: Atomic and Molecular data needs

14:30 – 15:00: N. Kouchi, Tokyo Institute of Technology, Japan

Measurements of the fluorescence cross sections in the photoexcitation of CH₄, NH₃ and H₂O in the vacuum ultraviolet range: the role of doubly excited states

15:00 – 15:30: Y. Rhee, KAERI, Korea
AMO Database in KAERI and Atomic Structure Studies

15:30 – 16:00: Coffee Break <2nd Floor>

EUV sources, Data Center <3rd Floor>

16:00 – 16:30: G. O'Sullivan, University College Dublin, Ireland
Recent Progress in Source Development for EUV lithography

16:30 – 17:00: K. Nishihara, Osaka University, Japan
Atomic Data for Laser Produced Plasma Extreme Ultra Violet Light Source

17:00 – 17:30: J. Yan, Institute of Applied Physics and Computational Mathematics, China
Recent Progress of CRAAMD A+M Database and Related Activities

17:45 – 19:30: Poster Session II: P2-01 ~ P2-70 <2nd Floor>

18:30 – 20:30 Lectures for Citizen <3rd Floor>

Thursday, Oct. 7

Atomic Spectra, Data Center <3rd Floor>

9:00 – 9:30: J. E. Lawler, University of Wisconsin, USA
Spectroscopic Data for Neutral and Ionized Rare Earth Elements

9:30 – 10:00: K. Aoki, National Astronomical Observatory, Japan
Isotope abundance analysis from stellar spectra

10:00 – 10:30: Yu. Ralchenko, NIST, USA
New Generation of the NIST Atomic Databases

10:30 – 10:50: Coffee Break <2nd Floor>

Industrial Applications, Data Center <3rd Floor>

10:50 – 11:20: T. Makabe, Keio University, Japan
Atomic and Molecular Data Needs for Design of Plasma Etching System

11:20 – 11:50: K.W. Whang, Seoul National University, Korea
Numerical Simulation for PDP Plasma

11:50 – 12:20: T. Kato, NIFS, Japan
NIFS Atomic and Molecular Data Research Center Activities

12:20 – 13:30: Lunch

Molecules

<3rd Floor>

13:30 – 14:00: M. Larsson, Stockholm University, Sweden

Dissociative Recombination: Results from Storage Rings

14:00 – 14:30: F. Esposito, Institute of Inorganic Methodologies and Plasmas of C.N.R., Italy

Detailed cross section calculations of atom-molecule energy transfer processes and dissociation for hydrogen, nitrogen and oxygen

14:30 – 15:00: L.P. Presnyakov, P.N. Lebedev Physical Institute, Russia

Photo-Dissociation and Free-Free Absorption of Molecular Ions

15:00 Excursion to Meiji Mura

17:30 Banquet in Meiji Mura

Friday, Oct.8

Ion Atom Collisions

<3rd Floor>

9:00 – 9:30: C.D. Lin, Kansas State University, USA

New and Old Theoretical Tools for Evaluating Cross Sections for Ion-Atom Collisions

9:30 – 10:00: M. Kimura, Kyushu University, Japan

Charge transfer processes in ion-molecule collisions at intermediate energies; the vibrational effect, isotope effect, isomer effect, and steric effect

10:00 – 10:30: Y. Sato, National Institute of Radiological Science, Japan

Secondary Electrons from Water Vapor with Impact of 6.0 MeV/u He²⁺ Ions: Atomic Data and their Application to Biomedical Investigations

10:30 - 10:50: Coffee Break

<2nd Floor>

Highly Charge Ions

10:50 – 11:20: S. Fritzsche, Kassel University, Germany

Reliable atomic data calculations: Requirements and presently available tools

11:20 – 11:50: F.B. Rosmej, CNRS/Universite de Provence, France

A New Class of Relevant Atomic Data for Transient and Opaque Plasmas

11:50 – 12:20: N. Nakamura, The University of Electro- Communications, Japan

EBIT (Electron Beam Ion Trap) Potential for Atomic Data Production

12:20 – 13:30: Lunch

Atmosphere, Low temperature plasma

<3rd Floor>

13:30 – 14:00: S. Buckman, Australian national University, Australia

Electron Collisions in our Atmosphere - How the Microscopic Drives the Macroscopic

14:00 – 14:30: H. Fukunishi, Tohoku University, Japan

Atomic and Molecular Processes in Lightning-induced Sprite Events

14:30 – 15:00: W. Goedheer, FOM Institute for Plasma Physics, The Netherlands,

Modeling of dusty plasmas, A+M data needs

15:00 – 15:30: V. Kolobov, CFD research Corporation, USA

Simulations of non-equilibrium plasmas for materials processing and lighting: A&M data needs

15:30 – 16:00: Coffee Break

<2nd Floor>

Conference Business Meeting

<3rd Floor>

16:00 – 17:00 : R. K. Janev, ICAMDATA Chair