

XeSAT2005

**Workshop on Applications of Rare Gas Xenon
to Science and Technology**

8 – 10 March 2005

Second Circular

Waseda University, Tokyo, Japan

Supported by
The Japan Society of Applied Physics



WELCOME

The "Workshop on Applications of Rare Gas Xenon to Science and Technology" (XeSAT) is planned to provide an opportunity for physicists, chemists, engineers and medical doctors to discuss together topics of current interest. The conference topic is rare gas xenon and its applications for science, medical science, and technology. It will be held at Waseda University, Tokyo, from March 8-10, 2005, and is sponsored by Waseda University. The conference will provide a significant opportunity for discussion among people working in diverse fields.

TOPICS

The conference will involve fields related to the physics and chemistry of gas and liquid xenon, and their applications to science, medical science and engineering.

- Ionization and scintillation of rare gases
- Electronic and ionic transport processes in rare gases
- Developments in recent radiation detectors based on Xenon gas
- Purification and recycling methods for rare gas xenon
- Applications to nuclear and high-energy physics and astrophysics
- Applications to nuclear geology, engineering and space technology
- Imaging applications: Astrophysics and nuclear engineering
- Medical Applications: Medical imaging, PET, anesthesia, and contrast media

CALL FOR PAPERS

In addition to invited talks and highlight talks, we are expecting contributions for oral and poster presentations from colleagues over the world. If you are interested, please prepare and send us your abstract following the instruction described below. All abstracts must be received before January 14, 2005. After the conference, the proceedings will be published containing all presentations. The official language of the conference is English.

XeSAT 2005 CONFERENCE SITE

International Conference Center, Waseda University
1-6-1 Nishi-waseda, Shinjuku, Tokyo 169-8555, Japan

HOST INSTITUTES & ADDRESS

XeSAT Secretariat
Cosmic Radiation Lab.,
Advanced Research Institute for Science and Engineering,
Waseda University,
3-4-1 Okubo, Shinjuku, Tokyo 169-8555, Japan
TEL/FAX: +81-3-5286-3897
E-mail: xesat@kurenai.waseda.jp
URL: <http://xesat.cosmic.rise.waseda.ac.jp/>



International Conference Center

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S. Suzuki, (Waseda Univ., Tokyo, Japan)
S. Ulin, (MEPhI, Moscow, Russia)

IMPORTANT DATES

Deadline for the submission of abstract: January 14, 2005

Deadline for the submission of manuscript: March 8, 2005

SESSIONS & SCHEDULE

Tentative schedule is as follows. Speakers for invited and highlight talks may be changed.

March 8 (Tue)

8:30 – 9:30	<u>Registration</u>
9:30 – 9:40	<u>Opening Remarks</u>
9:40 – 11:10	<u>Session 1 Basic Physical Properties of Xe (I):</u> Electron and Ion Transport Process Highlight Talk: Dr. Atrazhev
11:10 – 11:30	(Coffee Break)
11:30 – 13:00	<u>Session 2 Basic Physical Properties of Xe (II):</u> Scintillation Process and Others Highlight Talk: Prof. Miyajima
13:00 – 14:00	(Lunch)
14:00 – 16:00	<u>Session 3 Application to Science:</u> Highlight Talk: Prof. Hasebe, Prof. Suzuki
16:00 – 16:20	(Coffee Break)
16:20 – 18:10	<u>Session 4 Application to Medical Science:</u> Highlight Talk: Prof. Morita
18:10 – 19:40	<u>Poster Session (I)</u>

March 9 (Wed)

8:30 - 10:20	<u>Session 5 Radiation Detectors:</u> Highlight Talk: Dr. Bolotnikov
10:20 - 10:40	(Coffee Break)
10:40 - 11:20	Invited Talk I (Basic properties: Prof. Doke)
11:20 - 12:00	Invited Talk II (Radiation Detectors: Dr. Akimov)
12:00 - 12:40	Invited Talk III ($\mu + e \rightarrow \gamma$: Prof. Mori)
12:40 - 13:40	(Lunch)
13:40 - 14:20	Invited Talk IV (Medical Science: TBD)
14:20 - 15:00	Invited Talk V (PET: Dr. Murayama)
15:00 - 15:20	(Coffee Break)
15:20 - 16:00	Invited Talk VI (Appl. to Industry Prof. Dmitrenko)
16:00 - 16:40	Invited Talk VII (Appl. to Ion Prop: Prof. Kuninaka)
16:40 - 18:10	<u>Poster Session (II)</u>
19:00 -	<u>Banquet</u>

March 10 (Thu)

8:30 - 10:20	<u>Session 6 Application to Engineering (I):</u> PET, Imaging Technologies and Electronics Highlight Talk: Prof. Thers
10:20 - 10:40	(Coffee Break)
10:40 - 12:10	<u>Session 7 Application to Engineering (II):</u> Application to Industry Highlight Talk: Prof. Ulin
12:10 - 13:10	(Lunch)
13:10 - 15:00	<u>Session 8 Application to Engineering (III):</u> Ion Propulsion and Others Highlight Talk: TBD
15:00 - 15:20	(Coffee Break)
15:20 - 17:10	<u>Session 9 Application to Engineering (IV):</u> Purification, Recycling Tech. and Others Highlight Talk: Prof. Schmidt
17:10 - 17:30	<u>Closing Remarks</u>

INVITED TALK & HIGHLIGHT TALK

Invited Talks

I	Basic properties:	Prof. Doke
II	Radiation Detectors:	Dr. Akimov
III	$\mu + e \rightarrow \gamma$:	Prof. Mori
IV	Medical Applications:	TBD
V	PET:	Dr. Murayama
VI	Application to Industry	Prof. Dmitrenko
VII	Ion Propulsion:	Prof. Kuninaka

Highlight Talks

Session 1: Basic Physical Properties of Xe (I)

Dr. Atrazhev

Session 2: Basic Physical Properties of Xe (II)

Prof. Miyajima

Session 3: Application to Science

Prof. Hasebe and Prof. Suzuki

Session 4: Application to Medical Science

Prof. Morita

Session 5: Radiation Detectors

Dr. Bolotnikov

Session 6: Application to Engineering I

Prof. Thers

Session 7: Application to Engineering II

Prof. Ulin

Session 8: Application to Engineering III

TBD

Session 9: Application to Engineering IV

Prof. Schmidt

- Time for each presentation includes questions and discussions.
Oral presentation: 20 min, Highlight talk: 30 min, Invited talk: 40 min
- This program may be changed according to the situation.

REGISTRATION

Registration Fee

Registration fee should be paid on site only by cash of Japanese yen. Credit cards and bankcards are not accepted. The fee includes conference attendance and proceedings.

	by Dec. 24, 2004 (E-mail, FAX) or Jan. 14, 2005 (web-site)	After the date	Banquet
General	30,000 yen	40,000 yen	8,000 yen
Student	15,000 yen	20,000 yen	8,000 yen

To receive the early registration rate, registration forms must be submitted via the web site **by January 14, 2005** or e-mailed or faxed by **December 24, 2004**. After this date, a higher rate will be applied.

Note: additional fee of 8,000 yen to attend the banquet.

Registration via web-site

The web site for the registration will be opened from November 1 and available here:

<http://xesat.cosmic.rise.waseda.ac.jp/registration.html>

An acknowledgment for your registration will be e-mailed to you automatically after on-line registration. If you do not receive the confirmation within 2 days, please e-mail to xesat@kurenai.waseda.jp or FAX +81-3-5286-3897 to confirm your registration.

Registration by E-mail or FAX

If you intend to make a registration by e-mail or FAX, please send your information to

XeSAT2005 Secretary Advanced Research Institute for Science and Engineering, Waseda Univ.	
E-mail	xesat@kurenai.waseda.jp
FAX	+81-3-5286-3897

and fill the following items (*required).

1. First Name *
2. Surname *
3. Title
4. Company / Institute
5. Address *
6. Zip code *
7. Country *
8. Phone number *
9. FAX number
10. E-mail address *
11. Registration Fee *: General or Student (Please choose one)
12. Arrival Date

Note: It takes about a week to send you an acknowledgment.

SUBMISSION OF ABSTRACT AND PROCEEDINGS

Preparation of abstract

Please prepare your abstract according to the example shown in the last page. Make sure your abstract is formatted properly before submission. In particular, please note the following format requirements:

- Your submission must be in **PDF** format. We cannot handle other formats such as Microsoft Word or other formatted files than PDF format. If you prepare your abstract using Microsoft Word or other applications on Windows system, or old-version Mac OS, the file should be converted to PDF formatted file using the Adobe Acrobat product before submission.
- Your submission should be formatted to fit on "A4" size paper, which is 210 mm wide by 297mm tall. Please be sure you have a margin of at least **30** mm on all edges (top, bottom, left, and right).
- The abstract is limited to **1 page** containing:
 - Title of the paper.
 - Author's names and affiliation.
 - The contact e-mail address.
 - A photo of the speaker
- Abstract templates are available:
MS-WORD format: http://xesat.cosmic.rise.waseda.ac.jp/docs/abstract_template.doc
PDF format: http://xesat.cosmic.rise.waseda.ac.jp/docs/abstract_template.pdf
- In the booklet distributed at the conference room, the abstracts are printed in black-and-white. So, please be careful to prepare your abstract so that figures and pictures in the abstract are not ambiguous even in black-and-white version.
- See the instruction below for details.

Submission of abstract

Before submitting your abstract, you should complete the registration at <http://xesat.cosmic.rise.waseda.ac.jp/regist/> to get your account. If you intend to present two or more papers, you are not necessary to register again. Your abstract should be submitted at <http://xesat.cosmic.rise.waseda.ac.jp/abstract/> before January 14, 2005.

Preparation for Proceedings

Papers should be of novelty, fundamental insights, and high potentiality to applications. New-idea is encouraged. The camera-ready copy should be brought **on site** by **both two copy of camera-ready manuscript and a record media (CD or FD only)**. It must not exceed **4** pages for general speakers and poster presentations, and **8** pages for invited and highlight speakers. More details will be shown after Dec. 1. Notice updates of XeSAT web site.

AUTHOR'S INSTRUCTIONS FOR PREPARING XeSAT2005 ABSTRACTS

A. Author*, B. Author and C. Author¹

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This is a template for the preparation of the abstract of XeSAT2005. The abstract must contain (1) the presentation title, (2) names of the authors, (3) authors' affiliations, and (4) contact information for the corresponding author, including authors' e-mail address at footnote. Once the abstract is prepared, please convert the abstract to PDF format. All abstracts must be submitted in electronic form via the web site. Only PDF formatted files will be accepted. (LaTeX, Microsoft Word or text files will NOT be accepted).

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- Equations and figures may be included
- "References" heading in bold type at 10 pt as shown below
- References numbered and indented as shown below, no line spacing between listed references
- Display a photo of the speaker at right bottom in the abstract. The size of photo is 30 mm × 25 mm.

References

- [1] F. W. Sexton, D. M. Fleetwood, M. R. Shaneyfelt, P. E. Dodd, and G. L. Hash, "Single event gate rupture on thin gate oxides," IEEE Trans. Nucl. Sci., vol. 44, no. 6, pp. 2345-2352, Dec. 1997.
- [2] J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp. 68-73.



Name of the
speaker

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