

The 62nd JSAP Spring Meeting 2015

Call for Papers

Submission Guidelines

The 62nd JSAP Spring Meeting 2015

Dates: March 11 (Wed.) – 14 (Sat.), 2015

Venue: Shonan Campus, Tokai University

(4-1-1 Kitakaname, Hiratsuka-shi, Kanagawa, 259-1292 Japan)

3 Steps to Contribute a Presentation

Join JSAP

Regular Membership

Admission Fee: 10,000 JPY

Annual Due*: 10,000JPY

*Annual due will be waived
for the first year.

Graduate Student/ Student Membership

Admission Fee: 6,000JPY

(3,000 JPY from 2015)

Annual Due*: 6,000 JPY

(3,000 JPY from 2015)

*Annual due will be waived
for the first year.

Submit

Submission Deadline:

January 8, 2015 (5:00pm, JST)

No late submission is
accepted after the deadline.

**Online submission will be
available in mid December,
2014.**

Register

Advanced

JSAP Regular Member : 8,000 JPY

JSAP Senior Member: 4,000 JPY

Student: 3,000 JPY

Partner Society Member: 8,000 JPY

Non-member: 15,000 JPY

Onsite

JSAP Regular Member : 12,000 JPY

JSAP Senior Member: 7,000 JPY

Student : 5,000 JPY

Partner Society Member: 8,000 JPY

Non-member: 20,000 JPY

**Online pre-registration will
be available in mid December
2014.**

NOTICE

JSAP Members can register only after the payment of this year's membership fee has been confirmed.
Please complete the payment before registration.

Call for Papers

Papers are solicited for the following sessions;

1) Regular Sessions 2) Joint Sessions and 3) Symposium as shown in **Table 1-3**.

The date and section of your presentation will be determined by our program committee.

Your papers may be forwarded from a regular session to a symposium and vice versa.

Table 1. Regular Sessions

Category	Section
1 Interdisciplinary Physics and Related Areas of Science and Technology	1.1 Interdisciplinary and General Physics
	1.2 Education
	1.3 Novel technologies and interdisciplinary engineering
	1.4 Energy conversion and storage
	1.5 Resources and environment
	1.6 Instrumentation, measurement and Metrology
	1.7 Ultrasonic
2 Ionizing Radiation	2.1 Radiation physics and Detector fundamentals
	2.2 Detection systems
	2.3 Application, radiation generators, new technology
3 Optics and Photonics Former 3,4 and 5 categories were merged and reorganized as Category 3.	3.0 Optics and Photonics English Session
	3.1 Basic optics and frontier of optics
	3.2 Equipment optics and materials
	3.3 Information photonics and image engineering
	3.4 Biomedical optics
	3.5 Laser system and materials
	3.6 Ultrashort-pulse and high-intensity lasers
	3.7 Laser processing
	3.8 Optical measurement, instrumentation, and sensor
	3.9 Terahertz technologies
	3.10 Optical quantum physics and technologies
	3.11 Photonic structures and phenomena
	3.12 Nanoscale optical science and near-field optics
	3.13 Semiconductor optical devices
	3.14 Optical control devices and optical fibers
	3.15 Silicon photonics
6 Thin Films and Surfaces *English session is scheduled in the section 6.4.	6.1 Ferroelectric thin films *will be held as a joint session with 9.1
	6.2 Carbon-based thin films
	6.3 Oxide electronics
	6.4 Thin films and New materials *English session (along with Japanese session) is scheduled in this section.
	6.5 Surface Physics, Vacuum
	6.6 Probe Microscopy
7 Beam Technology and Nanofabrication	7.1 X-ray technologies
	7.2 Applications and technologies of electron beams
	7.3 Micro/Nano patterning and fabrication
	7.4 Buried interface sciences with quantum beam
	7.5 Atomic/molecular beams and beam-related new technologies
	7.6 Ion beams
8 Plasma Electronics *All-English session is scheduled in the section 13.6.	8.0 Plasma Electronics English Session *All-English Session
	8.1 Plasma production and control
	8.2 Plasma measurements and diagnostics
	8.3 Plasma deposition of thin film and surface treatment
	8.4 Plasma etching
	8.5 Plasma nanotechnology
	8.6 Plasma life sciences
	8.7 Plasma phenomena, emerging area of plasmas and their new applications
	8.8 プラズマエレクトロニクス分科内招待講演
9 Applied Materials Science	9.1 Dielectrics, ferroelectrics
	9.2 Nanowires and Nanoparticles
	9.3 Nanoelectronics
	9.4 Thermoelectric conversion
	9.5 New functional materials and new phenomena

Table 1. Regular Sessions (continued)

Category	Section	
10 Spintronics and Magnetism *English presentations are welcomed in this category. Outstanding presentations by student speakers will be awarded by Professional Group of Spintronics.	10.1	Emerging materials in spintronics and magnetism (excluding semiconductors)
	10.2	Spin torque, spin current, circuits, and measurement technologies
	10.3	Giant magnetoresistance (GMR), tunnel magnetoresistance (TMR) and magnetic recording technologies
	10.4	Semiconductors, organic, optical, and quantum spintronics
	10.5	Application of magnetic field
11 Superconductivity	11.1	Fundamental properties
	11.2	Thin and thick superconducting films, coated conductors and film crystal growth
	11.3	Critical Current, Superconducting Power Applications
	11.4	Analog applications and their related technologies
	11.5	Junction and circuit fabrication processes, digital applications
12 Organic Molecules and Bioelectronics	12.1	Fabrications and Structure Controls
	12.2	Characterization and Materials Physics
	12.3	Functional Materials and Novel Devices
	12.4	Organic light-emitting devices and organic transistors
	12.5	Organic solar cells
	12.6	Nanobiotechnology
	12.7	Biomedical Engineering and Biochips
13 Semiconductors Former 13 and 14 categories were merged and reorganized as Category 13. *All-English session is scheduled in the section 13.6.	13.1	Fundamental properties, surface and interface, and simulations of Si related materials
	13.2	Exploratory Materials, Physical Properties, Devices
	13.3	Insulator technology
	13.4	Si wafer processing /MEMS/Integration technology
	13.5	Semiconductor devices and related technologies
	13.6	Semiconductor English Session *All-English Session
	13.7	Quantum properties and fabrications of nanoscale structures and devices
	13.8	Compound and power electron devices and process technology
	13.9	Optical properties and light-emitting devices
	13.10	Compound solar cells
15 Crystal Engineering	15.1	Bulk crystal growth
	15.2	II-VI and related compounds
	15.3	III-V-group epitaxial crystals
	15.4	III-V-group nitride crystals
	15.5	Group IV crystals and alloys
	15.6	Group IV Compound Semiconductors
	15.7	Fundamentals of epitaxy
	15.8	Crystal evaluation, impurities and crystal defects
16 Amorphous and Microcrystalline Materials	16.1	Fundamental properties and their evaluation in disordered materials
	16.2	Processing technologies and devices
	16.3	Bulk, thin-film and other silicon-based solar cells
17 Nanocarbon Technology	17.1	Growth technology
	17.2	Structure control and process
	17.3	Exploration of new functions and evaluation of basic properties
	17.4	Device applications

Table 2. Joint Sessions

Joint Session K "Wide bandgap oxide semiconductor materials and devices"	21.1	This is a joint session of 6.3 Oxide-based electronics, 6.4 New thin film materials in 6. Thin Films and Surfaces and 15.2 II-VI-group crystals and multicomponent crystals in 15. Crystal Engineering.
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Table 3. Symposia

Related Category
Symposium Title
1. Applied Physics in General
Research forefront of shock wave and high & micro-gravity application science
2. Ionizing Radiation
Ionizing radiation optics

Table 3. Symposia (continued)

Related Category
Symposium Title
3. Optics and Photonics
Advanced and Practical 3D Fabrication Techniques Using Lasers
3. Optics and Photonics
Quantum Photonics: Toward a new paradigm of quantum information technology (tentative title)
3. Optics and Photonics
Polarity-reversed optical device handling quantum photons
3. Optics and Photonics
Theory and Practice of Nanoelectron-photon Interaction via Dissipation and Fluctuations
6. Thin Films and Surfaces /9. Applied Materials Science
Guidelines for Development of Ferroelectric Materials in the Following Generation
6. Thin Films and Surfaces
New functionality of oxides generated by spin-orbit interaction
6. Thin Films and Surfaces
Fabrication and characterization of nano-structures prepared with advanced shadowing deposition systems
6. Thin Films and Surfaces
Recent development of titanium dioxide
7. Beam Technology and Nanofabrication
The latest trend of the lithography technology
7 Beam Technology and Nanofabrication
State of the art technology in electron and focused-ion-beam apparatuses
8. Plasma Electronics
Synthesizing methods for fine particles and their latest applications
9. Applied Materials Science
Recent progress in researches on lattice thermal conductivity using nano-technology and computational science
10. Spintronics and Magnetism
A vision of future spintronics ~What is the next in spintronics?
11 Superconductivity
巨匠が教えてくれた高温超伝導とその未来～北澤宏一先生・前田弘先生追悼シンポジウム～(仮題) English title to be announced
12. Organic Molecules and Bioelectronics
Visualization and application of biointerfaces
13. Semiconductors
Session directed by Students and Young-Engineers on Silicon Integration Technologies
13. Semiconductors
Sensing Technologies for the Future of Automobile Society ~The Prospect and Challenge of Autonomous Driving System~
13. Semiconductors
Device & Process Technology of the Advanced Electron Devices and Its Future Scope
13. Semiconductors
Feasibility of integration of perovskite semiconductors into multinary compounds solar cells
15. Crystal Engineering
Progress of power semiconductors, toward wide band-gap materials beyond silicon

Table 3. Symposia (continued)

Related Category
Symposium Title
15. Crystal Engineering
Materials science of singularity in nitride semiconductors -Growth, processing and electronic application-
15. Crystal Engineering / 16. Amorphous and Microcrystalline Materials
Growth and characterization of bulk crystalline silicon for photovoltaic application
Joint Session K
Valence-electron metamorphology in oxide semiconductors

Submission Deadline

Thursday, January 8, 2015 (5:00pm, JST)

***No late submission is accepted.**

JSAP Young Scientist Presentation Award

JSAP Young Scientist Presentation Award will be presented to young JSAP members (under 33 years of age as of April 1, 2015) who have presented outstanding papers .

To apply for the award, please select “apply” upon online submission. Applicants for the award will be indicated as such in the program.

Please also see the guidelines on page 7.

Poster Awards

Poster Awards will be given to the outstanding posters. The nominees for Poster Awards will be selected by our program committee. No entry is required.

The authors of the nominated posters will be informed beforehand. The next screening will be done during the first 30 minutes of the session. The presenting authors of the nominated posters should be present in front of their posters during that time. Selection committee will vote and decide the final winner.

The individuals eligible for the award should be JSAP members at the time of their presentation.

Non-member co-authors should apply for our membership before their presentation if they wish to receive the award.

Please also see JSAP Poster Awards Provision on page 6.

Submission Guidelines (for contributed papers)

1 Qualification

Speakers of contributed presentation (oral and poster presentations) should be JSAP Official Members, Student Member, JSAP Sub Member (members belonging only to divisions) and JSAP's Partner Societies* Member.

*JSAP's partner societies: American Physical Society (APS), European Optical Society (EOS), European Physical Society (EPS), Institute of Physics (IOP), Korean Physical Society (KPS), Optical Society of America (OSA), Optical Society of Korea (OSK), Physics Education Society of Japan (PESJ), Physical Society of Republic of China (PSROC), Société Française de Physique (SFP), International Society for Optical Engineering (SPIE) and Taiwan Photonics Society (TPS).

The maximum number of submission per person is 3. If you wish to make 4 or more presentations, please submit a document explaining that there is no overlapping in the contents.

2 Abstract submission

All abstracts must be submitted via online submission system.

Online submission system will be available in mid December, 2014.

<http://meeting.jsap.or.jp/eng/entry.html>

Submission Deadline: Thursday, January 8, 2015 (5:00pm, JST)

(No late submission is accepted under any circumstances.)

3. Instructions for preparing abstracts (PDF)

Abstracts (PDF) are compiled into a DVD-ROM without any change. Please prepare easy-to-read abstracts according to the instructions below.

If you submit papers in joint names, please obtain consent from all authors. Also, please obtain an approval from your employer if necessary.

- 1) Title: Make it brief and precise. "Research on" should be omitted.
- 2) Affiliation and name: Use an abbreviation of your affiliation.
- 3) E-mail address: Provide e-mail addresses of the presenting author.
- 4) Main text: Provide only the summary of your presentation (original materials only) and the supporting data that is considered particularly important for leading the conclusion. Provide figures and tables with English captions.
- 5) Use one or two column format. Figures and tables can be in color.
- 6) Use the template on the website below to ensure that the abstract is correctly formatted.
- 7) The maximum size of PDF files should be 700 KB.

4. Handling of abstract (PDF)

- 1) Our program committee draws up a program according to speakers' requests. However, the program committee may forward your abstract to another category for the benefit of the overall program.
- 2) Notification of program number: You will be informed of the program number via e-mail early February. The conference program will be available on the conference website in mid February and in the March issue of our member journal "OYO BUTURI".
- 3) JSAP holds the copyright on the submitted abstracts and all the submitted abstracts will be included in the abstracts DVD-ROM and uploaded on the online conference program.
- 4) All the abstracts will be stored in the database of the National Institute of Informatics without any change.
- 5) The abstracts submitted to the JSAP-OSA Joint Symposia (held only in JSAP Autumn Meeting) will be published in OSA's Optics InfoBase. JSAP grants to OSA a perpetual, non-exclusive, royalty-free license to use them in any type of media including print or electronic.
- 6) Each author is responsible for the contents of their abstracts and the information on their application form.
- 7) JSAP will not accept any abstracts that
 - include contents that is not relevant to the field of applied physics (in a broad sense)
 - do not comply with this abstract submission guidelines
 - include contents that may damage our trust and dignity

5. Presentation method (contributed presentation)

1. Oral presentation and short oral presentation

Oral and short oral presentations will be given using a PC projector. JSAP will prepare PCs with the following specifications; Windows7 Pro with Microsoft Power Point 2007. Presenters may bring your own PCs.

2. Poster presentation

Presenters put up posters, figures, tables, and photographs in a designated display space (**180 cm (H) × 90 cm (W) for one presentation**). Presenters are required to answer questions from attendees during their session time.

6. Presentation time

1. Oral presentation

Oral presentations are assigned 15 minutes. (presentation for 10 minutes, Q&A for 5 minutes).

2.1 Poster presentation

Poster presentations are assigned 2 hours.

core time: the first half for speakers with an odd presentation number

the last half for speakers with an even presentation number

2.2 Poster presentation with short presentation

A short oral presentation (2-minute, no Q&A session) and poster presentation.

JSAP Poster Awards Provision

1. This provision provides the guidelines concerning JSAP Poster Awards.
2. JSAP Poster Awards are designed to honor JSAP members for their outstanding poster presentations which would contribute to the development of applied physics.
3. The award shall be given to the outstanding poster presentations given during JSAP's annual meetings which would contribute to the development of applied physics. The individuals eligible for the award should meet the following qualifications:
 - 1) JSAP members at the point of presentation
 - 2) Registered as authors upon submission
4. Individuals who are not JSAP members (i.e., members of JSAP Division, members of partner societies or non-members) are not eligible for the award.
5. The selection process of the award shall be specified in a separate bylaw.
6. The number of awarded posters shall be up to 2% of the total number of poster presentations.
7. The awardees shall receive a certificate issued by the President of JSAP and a commemorative gift.
8. The awards shall be given under the name of the incumbent President of JSAP at the time of the awarding.
9. The awarded posters shall be displayed at the venue during the meeting.
10. The awarded posters shall be reported to Annual Meetings Planning and Operations Committee and the Board, along with the reasons for the selection.
11. This provision can be amended by the approval of the Board.

Supplementary provision

1. This provision has been approved by the Board on 15 February 2013.
2. This provision has been in effect since 15 February 2013.
3. It was partially amended on July 8, 2014

Solicitation for 38th Young Scientist Presentation Awards

Young Scientist Presentation Awards seek to honor young JSAP members whose presentations are considered to be outstanding enough to contribute to the development of applied physics. We will be waiting for your application.

Qualifications for 38th Young Scientist Presentation Award:

Individuals eligible for Young Scientist Presentation Awards are JSAP members who gave distinguished contributed presentations (including poster presentations) during the 62nd JSAP Spring Meeting 2015 which would contribute to the development of applied physics. The applicants should meet the qualifications below:

- 1) Under 33 years of age as of April 1, 2015
- 2) Lead author of their paper
- 3) Registered speaker who actually made the presentation
- 4) Applied for Young Scientist Presentation Award upon submission

The number of awarded presentations is, in principle, limited to 1% or less of the total number of contributed presentations.

Application procedure:

Please apply upon submission with the required information.

Awarding ceremony:

The awarding ceremony will be held during The 76th JSAP Autumn Meeting 2015. The awardees will receive award certificates and commemorative gifts.

Commemorative speech:

The awardees can present commemorative speeches during The 76th JSAP Autumn Meeting 2015. The awardees will be notified of the details separately.

Application deadline:

Thursday, January 8, 2015 (5:00 pm, JST)

Please read the following provision before applying for the award.

JSAP Young Scientist Presentation Awards Provision

1. This provision provides the guidelines concerning JSAP awards to its young members.
2. This awards are designed to honor young JSAP members for their outstanding contributed presentations which would contribute to the development of applied physics.
3. Individuals eligible for Young Scientist Presentation Awards shall be JSAP members who gave outstanding contributed presentations (including poster session presentations) during the spring and autumn meetings which would contribute to the development of applied physics. The individuals should not have previously received this award, and should meet the following qualifications:
 - 1) Under 33 years of age as of the succeeding April 1st
 - 2) Lead author of their paper
 - 3) Registered as a speaker and actually made the presentation at the meeting
 - 4) Applied for Young Scientist Presentation Award upon submission (only one application per person allowed)
 - 5) JSAP member as of the date of receipt of award
4. Individuals who are not JSAP members (i.e., JSAP Sub Members, members of partner societies or non-members) are not eligible for the award.
5. The awards shall be presented at the next annual meeting and the list of awardees will be posted.
6. The awardees shall receive a certificate issued by the President of JSAP and a commemorative gift.
7. The award shall be given under the name of the incumbent President of JSAP at the time of the awarding.
8. JSAP Annual Meetings Planning and Operations Committee shall select the awardees, in principle, up to 1% of the total number of contributed submissions in the annual meeting, and recommend them to the Board along with the reasons for the recommendation.
9. The Board shall discuss the committee's recommendation and decide the awardees.
10. The Board shall immediately notify the awardees of the decision and officially announce the awardees in our member journal "*OYO BUTURI*".
11. This provision can be amended by the approval of the Board.

Supplementary provision

1. This provision has been determined by the Board on February 23, 1996.
2. This provision has been in effect since April 1, 1996.
3. It was partially amended on November 20, 2007.
4. It was partially amended on July 11, 2014