

Report on the 67th Autumn Meeting (2006) of The Japan Society of Applied Physics

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Chairman, Committee on Annual Meeting

The 67th Annual JSAP Meeting (Autumn 2006) was held over four days, from August 29 (Tuesday) to September 1 (Friday) at the Ritsumeikan University Biwako / Kusatsu Campus (in Kusatsu City, Shiga Prefecture). Unlike last year's Meeting (in Tokushima), when the venue suffered a direct hit by a typhoon on the day before the Meeting, this year's Meeting enjoyed good weather on all four days, except for the occasional cloudburst. This eventful Meeting was brought to a successful conclusion, with no major incidents.

The members of the Local Steering Committee, comprised mainly of instructors from Ritsumeikan University, dedicated themselves to making preparations for the Meeting. We would like to express our deepest appreciation to Prof. Hideyuki Takakura, the Chairman of the Local Steering Committee, as well as Prof. Yasushi Nanishi, the Vice Chairman, Prof. Akihiro Morimoto, Vice Chairman in charge of Administration, and all of the other professors who acted as Committee Members, for all of their efforts. Thanks to the support and consideration of the University, we were able to use several spacious classrooms and various other facilities. We would like to thank Vice President Sadao Kawamura, who assisted in overall operations as Local Executive Committee Advisor, Prof. Yoshihiro Hamakawa, who acted as General Advisor, and the administrative staff of Ritsumeikan University, for kindly providing this year's venue.

At this Meeting, there were a total of 3,947 presentations of research results, including 3,378 regular lectures and 569 topical sessions (including 27 symposiums; calculated in 15-minute segments, representing the same time allocated to regular lectures). Active discussions took place at a total of 46 oral lecture and poster session venues. The number of papers submitted for presentations exceeded last year's figures by 200, and the Meeting was expected to see an increase in the number of participants as well. In fact, the number of participants at this Meeting far exceeded expectations, at 7,215, making this the most highly attended of any Autumn Meeting. Incidentally, the previous record for participation in an Autumn Meeting was 7,111 (1992; Kansai University). For this reason, we were unable to provide full write-ups of the proceedings to participants who arrived on the third or fourth days of the Meeting; these participants were offered a set of materials including Participation Forms and Presentation Programs at a special price. Fortunately, thanks to the kind understanding of all participants, we were able to avoid any confusion at the registration desks, but we would like to take this opportunity to apologize once again for any inconvenience that might have been caused by our underestimate of the materials required. To assist in the planning of future Meetings, we would also like to ask

for your kind cooperation in registering for Meetings as early as possible.

Figure 1 shows the movement in the number of registered participants and lectures at the Spring and Autumn Meetings over the past 15 years. In general, we can see a positive correlation between the number of participants and the number of lectures, but the number of registered participants has increased dramatically compared to the past few years. Some of the possible reasons are:

- 1) Easy access to the Meeting Venue: There was an increase in the number of participants this year as well, when the Meeting was held in the Kansai region.
- 2) Recovery in the economy: Participation by formal JSAP Members increased at this meeting, and we assume that it has become easier for Members affiliated with companies to participate.
- 3) Planning of attractive lectures: There was a dramatic increase in the number of non-member participants (about 200 more than in 2004, when the Autumn Meeting was not affected by any typhoons). We believe that the attractive themes of lectures — and symposiums in particular — drew the attention of individuals who in the past might have felt that JSAP was not relevant to their field. We would like to thank the JSAP Committee on Annual Meeting for their valuable efforts.

At this Meeting, which led to such a dramatic increase in the number of participants, 27 symposiums were planned for each of the 15 Main Classifications (or jointly for multiple classifications), along with several presentations by invited lecturers giving overviews of relevant fields or introducing the latest developments in R&D. One new aspect of this symposium was that local high school students were also invited to attend the lectures. Amid much discussion and concern recently that young people are "drifting away from sciences," we invited these students listen to these JSAP lectures in order to expand their ideas with regard to research and development, and hopefully even to become full participants in JSAP Meetings in the future. Because Ritsumeikan University provided such spacious lecture venues, attendance by the high school students did not result in any inconvenience to the other participants. We plan to continue inviting students to future Meetings to the extent that the facilities allow, and we ask for your understanding and cooperation in this regard.

In addition to the symposiums outlined above, the following special events were also held at the 67th JSAP Meeting.

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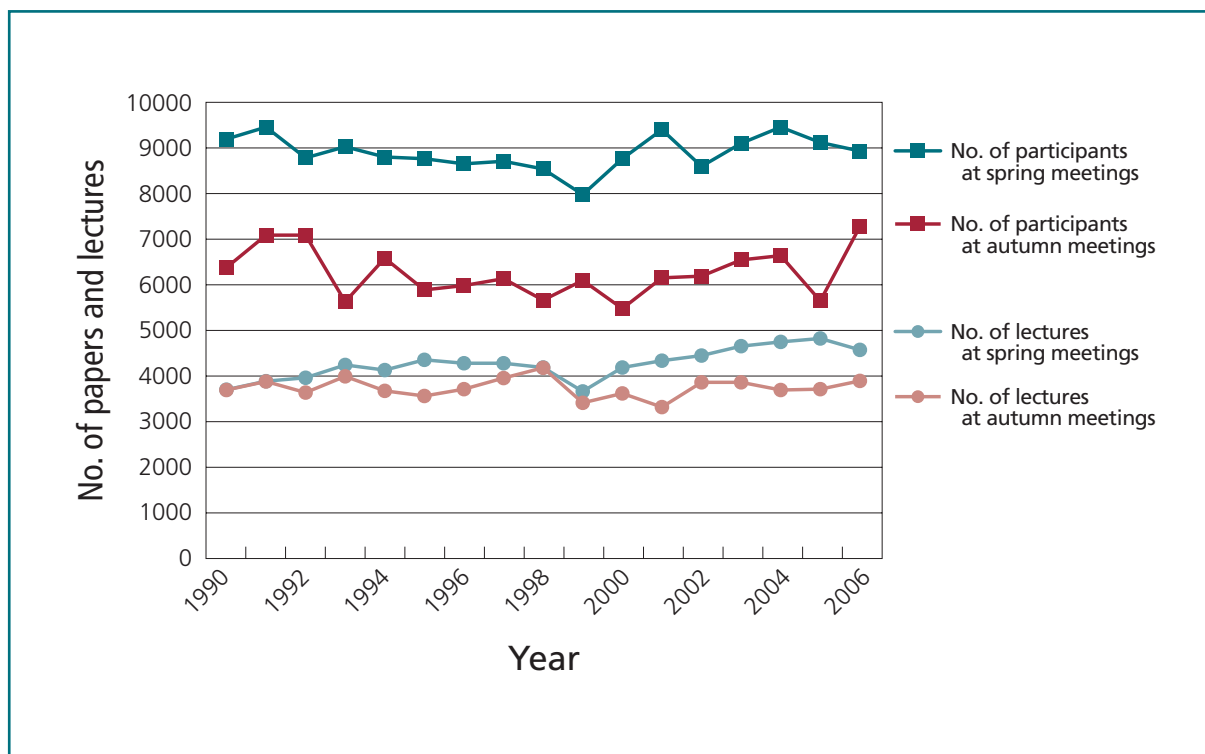


Figure 1

- (1) 39th JSAP School: "Recent Micro and Nano level micromachining technologies and industrial applications of MEMS" (held in collaboration with the Ritsumeikan University Research Institute for Micro-System Technology)
- (2) 39th JSAP School: "Evolving Display technologies: Current Status and Future Developments"
- (3) Special Symposium (held by the Committee on Annual Meeting): "JSAP and progress in scientific and technological R&D in Japan: What is required, and how can we respond?"
- (4) 8th Meeting held by the Manpower Training / Gender Equality Committee: "Thinking about careers after doctorate studies"

Each of these special events had many participants, and provided a venue for valuable exchanges of opinions and information. In the case of Event (1) above, with the kind cooperation of Ritsumeikan University, participants had a tour of the University's SR Center following the symposium. Due to space considerations at the SR Center, tour participation was limited to 40 persons, but the volume of applications far exceeded this number, so unfortunately many people were not able to attend. Nevertheless, we believe that this was a very meaningful tour for those who got in. In the case of Event (3), for the first time, persons involved in the promotion of science and technology policies (from the

Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Ministry of Economy, Trade and Industry (METI)) gathered with JSAP representatives (from the Board of Directors) for a panel discussion on creating a "Technology Roadmap." In keeping with the theme of this panel discussion, it was decided that JSAP would cooperate in the creation of an "Academia Roadmap" under METI's leadership. The Committee on Annual Meeting would like to promote similar activities in the future, while creating reports on the status of related developments. We look forward to hearing frank comments and suggestions on this matter from JSAP members.

Among the events held in conjunction with the JSAP Meeting was the 28th Paper Award Ceremony, which was held on the first day of the Meeting. Awards presented included six JJAP Paper Awards, five JJAP Incentive Awards, and three Explanatory Paper Awards. The recipients were presented with a certificate and a commemorative gift from Chairman Kenjiro Oura in recognition of their achievements, and had the opportunity to do commemorative lectures on their award-winning papers during the Meeting.

A ceremony for the 20th Scientist Awards for the Presentation of an Excellent Paper were also held on the first day of the Meeting. A

total of 41 individuals were selected through a careful screening process from among 754 of the 4,028 regular lectures presented at the Spring 2006 Meeting for which applications had been received in advance. The Award winners received a certificate and a commemorative gift from Chairman Oura, and were invited to a social gathering (a new event starting from this Meeting) in celebration of their notable accomplishments. Only 5% of applicants were selected, making this a very difficult hurdle to overcome for the qualified applicants (lecturers aged 33 and under), but we look forward to seeing many more ambitious applications from outstanding young researchers in the future.

Here, I would like to analyze the Autumn 2006 Meeting from the perspective of lectures in each field. At the point when papers are received in electronic format, we ask that the lecturers indicate which of four key fields that paper is most closely related to. The results are as follows: Nanotechnology: 1,488; Telecommunications: 364; Life Sciences: 116; and the Environment: 110. Papers related to Nanotechnology therefore accounted for about 40% of the total.

The lectures in the four key fields noted above were also divided into many classifications. **Figure 2** shows the number of applications for lectures in each of the 15 major classifications and 5 Joint Sessions. We can see that dramatic differences have begun to arise in the number of presentations in each classification, as a result of new trends in the areas of research covered by each field.

Upon reflection, JSAP always anticipates new trends in research throughout the world, and as a result has succeeded in increasing its membership by attracting the interest of individuals in a broad range of fields, from industry to academia. No new classification have been created, however, since the start of the "Superconductivity Classification" in 1988 (although the names of several classifications have changed recently.) Some people have pointed out that the number of lectures by corporate researchers, and the number of participants representing companies, has been dropping at recent JSAP Meetings, and have suggested that this might be a problem. We therefore plan to conduct studies regarding ways of increasing the appeal and vitality of these Meetings, for example by initiating new classifications that anticipate the needs of the era.

We trust that these continued efforts to improve member services and to incorporate new activities will make these JSAP Meetings even more meaningful and valuable for all members in the years to come, and we ask you for your understanding and support.

Please note that the Meeting Report in the current Journal contains only an overview, but that a more complete Report, including information on the various Major Classifications, Joint Sessions, and Symposiums, will be posted on the JSAP homepage. We should add, however, that starting with the 2007 Spring Meeting, a report on the Major Classifications, Joint Sessions, and Symposiums will be included in the Journal as well.

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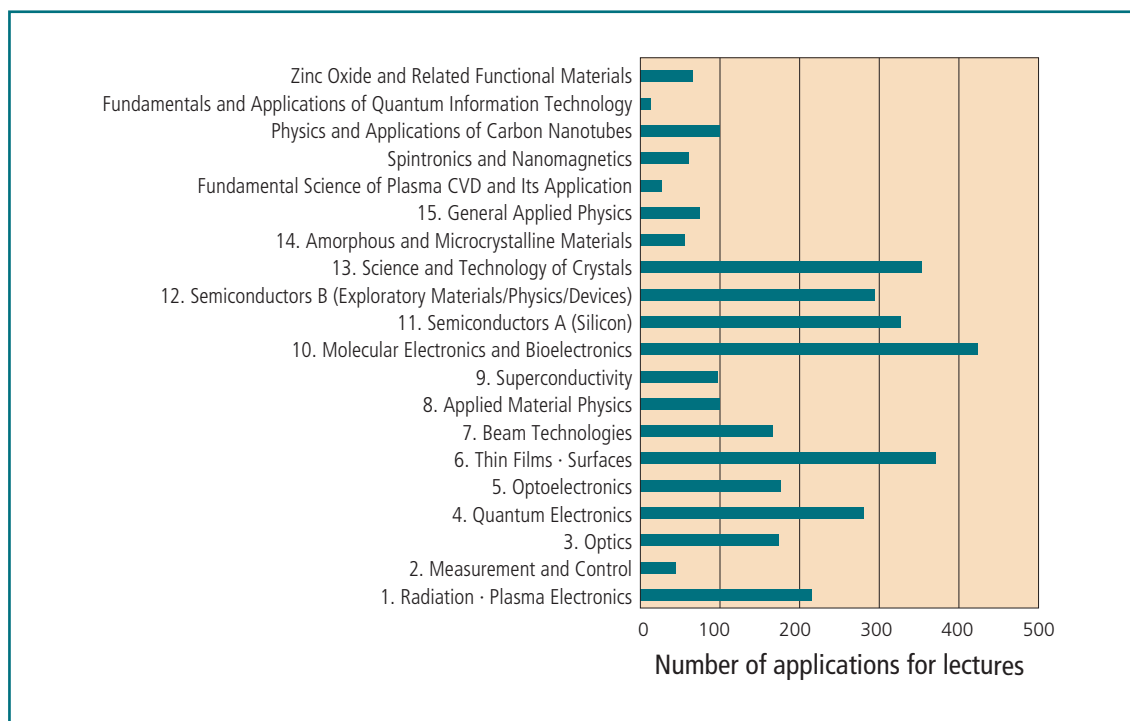


Figure 2