## Foreword

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The Japan Society of Applied Physics

Welcome to 'The Japan Society of Applied Physics International' (JSAPI)! The creation of this booklet, the very first issue of JSAPI, is part of the millennium celebrations of The Japan Society of Applied Physics (JSAP).

JSAPI will act as a forum for communication between The Japan Society Applied Physics and the international science and engineering community world-wide. It is therefore appropriate for me to take this rare opportunity to give you a brief introduction to JSAP and tell you something of what we are doing.

JSAP was founded in 1932 as the publishing body for 'OYO BUTURI' ('Applied Physics') and, in 1946, JSAP was formally established as a Japanese academic society. 'OYO BUTURI' continues to be the current membership journal of JSAP.

What distinguishes JSAP from most other physical societies in Japan and elsewhere is that we aim to bridge the gap between science and engineering with physics as the main common denominator. In fact, 60% of our members belong to industry. Today, the total number of members of JSAP stands at about 23,000 and, between them, they represent a very wide range of scientific and engineering endeavour.

Although only 1% of the members of JSAP live outside Japan, there exist innumerable connections between many of our members and individuals and organizations overseas. Indeed, we have seen a significant growth in the number of overseas participants in our academic meetings. And that is what has motivated us to reach out more directly, through JSAPI, to people outside Japan.

JSAP, being an interdisciplinary society, covers a very broad spectrum of topics, ranging from solid-state electronics, through bio- and molecular electronics, optics, photonics, quantum electronics, radiation technology, plasma electronics and measurement and control technology on the one hand, to crystal technology, vacuum and thin film technology, superconductivity, and particle beam technology on the other. I believe that a wide-ranging, interdisciplinary approach to problems, such as that followed by JSAP, is essential if we are to meet the formidable challenges that we all face in this new century.

JSAP holds a major meeting in Spring and Fall every year and sponsors a number of international conferences and workshops, such as the VLSI Symposium, the Solid State Devices and Materials Conference, and the Optical Memory Symposium. The Spring and Fall meetings are our main venues for the exchange of scientific information. There you can discuss, for example, the latest R&D results of our members.

The Spring meeting, which is held in or near Tokyo, attracts more than 8,000 participants and well over 4,000 presentations of original and review papers. At the Fall meeting, which is held outside Tokyo, there are a further 3,500 or so presentations and, all told, about 6,000 scientists and engineers gather to take part in the academic events and enjoy the local cuisine. In these meetings, as in other JSAP meetings, most of the papers are presented in Japanese, but participants are free to contribute to any of the discussions in English.

Our monthly membership journal, 'OYO BUTURI', is mainly writ-



ten in Japanese. JSAP also publishes 'The Japanese Journal of Applied Physics' (JJAP) in cooperation with The Physical Society of Japan. JJAP is a two-part English-language research journal devoted to the coverage of topics in all fields of applied physics; Part 1 is essentially a regular monthly publication of research papers, while Part 2 is a semi-monthly publication of letters. Annually, JJAP publishes as many as 10,000 pages of original articles and is frequently cited in other international journals. An interesting feature of JJAP is that ten special issues per annum are devoted to the publication of papers based on presentations at JSAP-sponsored international conferences. One of the divisions of JSAP, The Optical Society of Japan, publishes the international journal 'Optical Review'.

In order to promote more intimate interactions within JSAP, we have created seven regional chapters and ten subject divisions. Currently active are the divisions of optics, radiation science, solid state physics and applications, thin film and surface physics, materials science and crystal technology, education in applied physics, organic molecular electronics and bio-electronics, superconductors, plasma electronics and silicon technology. They each have their own publications and their own programs of meetings. Other activities of JSAP include promoting the public understanding of science. We hold science and technology expositions for children, science classes for elementary school teachers and open lectures for general audiences. In cooperation with other technical societies, we are planning to develop web-sites at which volunteer members of JSAP will answer questions on science and technology posed by children and laypersons. In view of the increasing importance of science and technology on the one hand and the diminishing interest of young people in this area on the other hand, I envision that we will become more active in raising the level of public awareness of science and technology.

JSAP has signed reciprocal privilege agreements with a number of national and international societies: IEEE, IEEE (LEOS), IEEE (EDS), EPS, APS, IOP, OSA and KPS. Nonetheless, we expect to see more competition between academic and technical societies world-wide. It is my belief that this will become an unfortunate trend. Science and technology should not be monopolized by a small number of large countries but should be shared by all people. Academic societies such as ours have an important responsibility in this regard and a key role to play in disseminating knowledge and maximizing the benefits of science and technology for everyone. This we can do by promoting mutual appreciation and understanding through the internationalization of our scientific efforts.

I hope you will enjoy this booklet. Please let us know how we can make the forthcoming issues serve you better.