

## **RECENT PROGRESS AND PERSPECTIVE ON MICROWAVE APPLICATION TECHNOLOGIES IN JAPAN**

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Recently, microwave is pushed into the spotlight as a clean and highly efficient energy source in Japan. Using microwave as a heat source, we can reduce the reach time to the target temperature, and enable to realize homogeneous heating. So, it is expected to develop brand new applications to industrial, medical and science field. One of the most interesting things recently is fast chemical synthesis and reaction. On Aug. 2 to 3, 2001, The First Symposium on Microwave Science and Its Application to Related Fields was held at Kokushikan University, Tokyo Japan as an academic meeting. This was sponsored by Institute of Research and Innovation (IRI) and Japan Industrial Technology Association (JITA), and co-sponsored by Microwave Technology Forum and Institute of Electromagnetic Wave Application, Japan (IEAJ). The major fields of the presentations are (1) Organic Synthesis, (2) Medicinal or Combinatorial Chemistry, (3) Polymers & Composites, (4) Inorganic Synthesis, (5) Ceramics, (6) Microwave Physics, (7) Development of Instruments, (8) Environmental Issues, (9) Plasma Processing, (10) Influence of Electromagnetic Wave, (11) Medical Applications and (12) Food Science. The results of microwave heating and applications' study were discussed fruitfully at the first time in Japan. More than 300 attendees from Electrical and Electronic, Material, Chemical, Foods, Medical and Biological and Environment discussed passionately. At the same time, technical and product exhibition sponsored by the 11 enterprises dealing with microwave application products are opened.

On Nov. 21 to 23, 2002 International Symposium on Microwave Science and Its Application to Related Fields was held at Nara Prefectural New Public Hall located within Nara Park, which is famous for the beautiful colored leaves. There came attendees over 300 and lively discussion was done. In 2003 we held 3<sup>rd</sup> symposium at Kokushikan University, 4<sup>th</sup> at Takamatsu as a International symposium and 5<sup>th</sup> at Tsukuba. We are planning to hold next symposium at Ohtsu on Nov. 2 to 4, 2006. Microwave Technology Forum and IEAJ are now planning to make progress in together as a parent organization for to exchange mutual information including safety education.

Based on this, we are preparing to set up Japan Society of Electromagnetic Wave Energy Application as an incorporated nonprofit organization. One of our targets is to hold worldwide congress in Japan on 2008. For about detail information, you will be able to know from our HP which will open soon.