

Outline of the special session of 2004 General Conference of IEICE (The
Institute of Electronics, Information and Communication Engineers)
"Challenge to manned and unmanned space exploration technology"

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2004 General Conference of IEICE was held in Ookayama campus of the Tokyo Institute of Technology was held in March 22-25, 2004 and special session KB-4 was conducted on March 23, 2004 where chairman of this session is Professor Yoshinori Sakai (president of Communication Society of IEICE, professor of Tokyo Institute of Technology). The title of this session is "Challenge to Manned and Unmanned Space Exploration Technology".

In this session, the special invited presentation titled "Developing manned spacecraft technology, utilizing aerospace resources peacefully" (KB-4-1) by Professor Yang Hong of Chinese Academy of Space Technology (CAST) was performed by using projector including photography of

Shenzhou-5. There was not only explanation on organization of CAST but also report on manned spacecraft. CAST was founded in 1968 and has about 8000 persons. About 50 satellites have been launched to date.

By unmanned spacecraft Shenzhou-1 (November, 1999), Shenzhou-2 (January, 2001), Shenzhou-3 (March, 2002), and Shenzhou-4 (December, 2002), various functions of manned spacecraft were tested and manned spacecraft Shenzhou-5 succeeded where the first astronaut in China is Mr. Yang Liwei. Shenzhou-5 consists of three modules, an orbital module, a returnable module, and a propulsion module where a returnable module can make an astronaut return to the earth. Following the first step of manned spacecraft, the second step is to realize extravehicular activity and to conduct rendezvous and docking and the third step is to establish a space station.

Since the invited presentation on Shenzhou-5 is the first time in Japan, many people attended and we had successful presentation. Figures 1 and 2 show photography of speaker and audience in this special session.

