

International Workshop on Cooling–system for HTS Applications 2015 (IWC-HTS 2015)

14-16 October, 2015

October 25, 2015 (HE106). International Workshop on Cooling–system for HTS Applications 2015 (IWC-HTS 2015) was held on 14-16 October 2015 at Kunibiki Messe (Shimane Prefectural convention Center), Matsue, Shimane, Japan. The workshop was organized by the local committee on behalf of Cryogenics and Superconductivity Society of Japan (CSSJ).

The purpose of the workshop was to make an opportunity for discussion between cooling-system researchers and HTS application researchers. An improvement of cooling-system is essential on commercializing of HTS applications, and discussion of focusing to cooling-system is very important. Total system of the HTS applications was thoroughly discussed at this workshop for accelerating the practical commercialization.

The workshop included the following categories.

1. Fundamental Aspects of Heat Load in HTS Applications and Cryogenics
2. HTS Applications in View of Heat Load
3. Cryogenic Structure and Heat Transfer
4. Cryogenic Cooling Systems for HTS Applications

The number of attendees was 117 from 10 countries, such as Europe, Korea, USA, China, and Japan. The main topics were discussed by the 37 talks (2 plenary, 9 invited and 26 contributed) and 26 posters. The 7 industrial exhibitors were Suzuki Shokan Co., Ltd., HITACHI, Ltd., MAYEKAWA MFG CO. LTD., Taiyo Nippon Sanso Corporation, NIKI GLASS CO., LTD. /SUNPOWER and JECC TORISHA Co., Ltd. The sponsorship from 6 companies supported this workshop, the companies were MAYEKAWA MFG CO. LTD., Taiyo Nippon Sanso Corporation, NIKI GLASS CO., LTD. /SUNPOWER, JECC TORISHA Co., Ltd., DH Industries/STIRLING CRYOGENICS and Sumitomo Heavy Industries, Ltd.

The [technical program](#) started with a plenary talk by Mr. Wolfgang Stautner of GE Global Research. He mentioned that HTS application would not work without cryogenics, and cryogenics needs to be involved at the early design stages of the application. This talk was very much fitted with the workshop aim. Another plenary talk was given by Prof. Mathias Noe of Karlsruhe Institute of Technology. His talk was titled “Fundamental Aspects of Thermal Load in HTS and Cryogenics”. He started from the motivation of cooling HTS, and explained the thermal load contributions and specific applications. The speakers were researchers and engineers from universities, institutes, and industries. They talked from the side of HTS application, from the cooling system side. It is encouraging that almost every speaker understands the purpose of this workshop, and their talks were very much suited with solving the problem of cooling HTS applications.

We had high quality discussions during the workshop, and on behalf of the organizing committee, I would like to thank everyone who helped organize and participate in the workshop to make it such a great

success. The International Advisory Committee decided this workshop will be continued and held every 2 years. We hope this workshop will provide the chance for discussion of commercialization of HTS applications.



The participants of International Workshop on Cooling-system for HTS Applications 2015

Dr. Yasuharu Kamioka

Chair of International Workshop on Cooling-system for HTS Applications 2015

Executive Director of Cryogenics and Superconductivity Society of Japan

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