

Preface

This is Proceedings of the 7th Meeting of Japan CF-Research Society, JCF7, which was held at Kagoshima University, 27-28 April 2006.

Japan CF-Research Society (JCF) was established in March 1999, with its first scientific and general assembly meeting JCF1 at Osaka, aiming at the promotion of CF researches in Japan and sending information to the world. CF researches stand for investigating new kinds of nuclear reactions which are supposed to take place in the environment of condensed matter. In 1999 to 2005, we could successfully organized JCF meetings JCF1 through JCF6, in almost every year. We started to issue the printed and electronic (via internet) versions of Proceedings of JCF meetings since JCF4.

Submitted papers to JCF7 meeting were peer-reviewed by the JCF Editorial Board (Chairman; Professor Hiroshi Yamada, Iwate University). One or two reviewers were offered to review each of submitted papers, who kindly sent back comments, questions, corrections to authors via Editorial Board. After receiving revised versions, papers were accepted to publish.

The book of Proceedings JCF7 does not necessarily contain all of presentations at the JCF7 meeting. Abstracts of all presentations are available at our web-site <http://wwwcf.elc.iwate-u.ac.jp/jcf/> . The electronic version of the Proceedings is also available in the same web-site.

CF-Researches in the world is now called as Condensed Matter Nuclear Science (CMNS), since the establishment of the International Society ISCMNS (<http://www.iscmns.org/>). Accumulation of research efforts by researchers in the world since 1989, especially concrete results obtained in latest reports, has revealed the existence of new nuclear reactions in condensed matter, under strong linkage between nuclear physics and condensed matter physics and chemistry. Clean deuteron-related fusion with ⁴He ash and cold transmutations of host and added metal nuclei in metal-deuterium and metal-proton systems are actual consequences of latest CMNS studies, both in experiments and theories. JCF has been keeping in touch with linkage and collaboration with ISCMNS and world researchers.

We thank you all participants of JCF7.

Hiroshi Yamada (Prof., Iwate University), Chairman of JCF Editorial Board