

KINKEN WAKATE 2018 & FINEMET 30

15th Materials Science School for Young Scientists (KINKEN WAKATE 2018) & Symposium of 30th Anniversary of Nano Crystalline Soft Magnetic Alloys (FINEMET 30) were held at IMR international center building and the auditorium on August 29-31, 2018. For providing an opportunity to learn history, fundamentals of Nano Crystalline Soft Magnetic Materials and to exchange information on own research among participants, four frontier scientists in this field were invited as lecturers.

The year 2018 was the 30th anniversary of the first paper that reported nanocrystalline soft magnetic alloys, FINEMET, by Yoshizawa et al. The importance of soft magnetic materials is still growing and further developments by young researchers are strongly expected. The aim of KINKEN WAKATE 2018 & FINEMET 30 was to learn "How did those new ideas & materials come out?" directly from the inventors or proposer of FINEMET, NANOPERM, HITPERM and Random Anisotropy Model, and to bring new idea or strategy for making something "New" to the young researcher.

KINKEN WAKATE 2018 began with an opening talk by Masato OHNUMA (Hokkaido University, Japan) and followed by four tutorial lectures.

Tutorial 1: "Fe-based nanocrystalline soft magnetic alloys and their applications"
By Yoshihito YOSHIZAWA (High Energy Accelerator Research Organization (KEK), Japan)

Tutorial 2 : "Amorphous and Nanocrystalline Materials for Soft Magnetic Applications"
By Giselher HERZER (Vacuumschmelze GmbH & Co. KG, Germany)



Fig. 1 Lecture by Giselher HERZER

Tutorial 3 : "Fe-M-B (M = IVa TO VIa METAL) NANOCRYSTALLINE SOFT MAGNETIC MATERIALS, A Review of Alloy Development"
By Kiyonori SUZUKI (Monash University, Australia)

Tutorial 4 : "METAL AMORPHOUS NANOCOMPOSITE (MANC) MATERIALS & DEVICES FOR POWER MAGNETIC APPLICATIONS"
By Michael E. MCHENRY (Carnegie Mellon University, USA)

Following to the tutorial lectures, three young researchers gave 20 minutes oral presentations on their research. Moreover, we had some students do poster presentations in the intervals.

We had 44 members of participants (9 from overseas + 35 from domestic areas), joined from 8 countries (USA, Australia, Germany, Romania, Slovakia, China, Korea and Japan). We had enthusiastic discussions and a chance to share the latest research results with the world's top scientists.



Fig. 2 Group photo