The 28th Magnetic Recording Conference (TMRC 2017)

The 28th Magnetic Recording Conference (TMRC 2017) was held at the Tsukuba International Congress Center, Tsukuba, Japan, from August 2 to 4, 2017. TMRC 2017 focused on future magnetic storage technologies for hard disk drives (HDDs) and solid-state memories. The program featured two dedicated sessions on heat-assisted magnetic recording (HAMR), two sessions related to magnetic random access memory, a session on advanced recording components/systems, and a session exploring microwave-assisted magnetic recording (MAMR) with related topics. These six oral sessions with 38 invited talks were complemented by 60 contributed posters. The keynote presentation was presented by Dr. Hirofumi Nagai from Fujitsu and was titled “AI technology innovation will change to storage and memory!?”

At the conference, a brief announcement highlighted the introduction of TDMR technology in released HDD products earlier in 2017. An informal poll was held at the conference to assess the participants’ perspectives concerning new technologies. Among the various candidate technologies from this poll, HAMR with the potential to enable higher areal density storage was predicted to arrive as a product in 2018–2020. MAMR was also projected to be introduced in the 2019–2020 timeframe. Further, heated-dot magnetic recording is expected to appear in 2025 or beyond.

The Conference was attended by a strong 266 participants including 38 students: 186 attendees from Japan, 49 from the United States, and four from Singapore, as well as attendees from Thailand, Taiwan, India, China, and others. Four students received an IEEE Magnetics Society Student Travel Grant to attend the 2017 TMRC. Two students received best poster awards. There were a total of 22 manuscripts submitted which were evaluated by two peer reviewers. Two manuscripts were rejected, five were accepted as submitted, and 15 were accepted after revisions were made by the authors to comply with the comments of the reviewers.

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Mark Kief, Conference Co-Chair
Seagate Technology
Minneapolis, MN, USA

Ikuya Tagawa, Conference Co-Chair
Tohoku Institute of Technology
Sendai, Japan