

Editorial Forward E35

January 26, 2016 (E35). This Issue includes selected preprints and slide presentations from three recent meetings:

- The 24th International Conference on Magnet Technology (MT-24, October 18-23, 2015)
- The German Workshop on Cryoelectronic Components (KRYO 2015, September 27-29, 2015) and
- 12th European Conference on Applied Superconductivity (EUCAS 2015, September 6-10, 2015).

From MT-24 we selected thus far three plenary slide presentations and eight invited talks. The plenary presentations are on:

1. A Golden Anniversary: 50 years of superconductivity at MT (by M. Wilson),
2. Progress in conceptual design of the Korean K-DEMO program, which addresses the next step after ITER (by K. Kim), and
3. Water-cooled resistive magnets at CHMFL (Chinese High Magnetic Field Laboratory, by B. J. Gao). This talk is dealing mostly with resistive magnets and also hybrid magnets with superconducting inserts. Scientists and engineers involved in superconducting technology should know the present status of these technologies, which are important for various scientific efforts and materials characterization.

Seven of the invited talks address various superconducting magnets and magnet conductors. One summarizes the actual design efforts and developments of high-current cables based on REBCO.

From KRYO 2015 we selected one tutorial and three oral presentations. The tutorial by H. Scherer is on "Single-electron transport and the new standard for electrical current". While superconductivity is only marginally involved (in calibration), this presentation provides vital information on progress in quantum metrology where the historically first pillar is the Josephson effect, on which the voltage standard is based. One of the oral presentations is on Hf-Ti nano SQUIDs, another on escape and retrapping effects in Josephson φ junctions, and the third one on superconducting qubits.

From EUCAS 2015 we included one additional invited poster with its preprint on open-source codes for computing I_c of superconducting devices, and also winner and "runner up" preprints selected from those submitted to the SNF Contest for Best EUCAS 2015 contributed preprints. Submitted to this Contest were 34 preprints in all three categories of Electronics (E), Large Scale Applications (L) and Materials & Conductors (M). There are no Winners in E, but two Runners up qualify for prepublication. However, in L, as well as in M, there is one winner of the Contest, and 6, respectively 5 Runners up.

Preprints winning the SNF Contest have been selected for prepublication when rated "Excellent" by the SNF panel of experts while the Runners up were rated "Very Good". The grade "excellent" is conferred to contributions that meet all criteria of the Contest. The grade "very good" is given contributions of valuable content, but containing minor defects not detracting from the overall value. SNF congratulates the authors of Winners and Runners up!

In addition to all the conference contributions, No. 35 includes three highlights on results in progress deserving dissemination, and one comment on a recently published short paper highlighted as HP101.