

Editorial Foreword

(E48) Thank you for directing your attention to this Issue of the Superconductivity News Forum in these difficult times. Most likely you are working from home if you are not deemed “essential” to your company or research laboratory – or thankfully you are in an area with very few cases of the Corona Virus. One way or another, the entire SNF team wishes you and your family health and all the best as we navigate these difficult times.

We finished Issue 48 with a bit of delay due to the changing working conditions. Most of the contributions have already been made available in the Preview 1 to Issue 48, but we are glad that we could add the excellent plenary talk of Carmine Senatore about “Frontiers of Nb₃Sn Wire Technology” given at the ISS 2019.

This full Issue presents a Science and Technology Highlight from China and talks of two Asian conferences – the ISS 2019 held in Kyoto, Japan and the ACASC/ASIAN-ICMC/CSSJ Joint Conference 2020 in Okinawa, Japan. In the Technological Highlights Section ([HP 140](#)), Jianhua Liu and coworkers report on the generation of 32.35 T in a superconducting magnet at the Institute of Electrical Engineering of the Academy of Sciences (IEECAS). After the news about a 45.5 T magnet in Tallahassee ([HP139](#)), it seems that superconducting magnets start to conquer the magnetic field range up to 50 T, thus coming close to field values, otherwise only achievable by pulse magnets.

The two Asian conferences gave an overview over the current state of research in Asia in relation to the worldwide effort in the Electronics, Large Scale and Materials Research. We include three plenary and two invited talks of the ISS and from the ACASC/ASIAN-ICMC/CSSJ four plenary talks and five special talks shining light on Asian projects. The projects that are described in these talks show that superconductivity starts to enter all areas of electrical power applications – it even seems to move beyond the demonstration phase of superconducting power transmission lines: there is a report of a first permanent in-grid cable that will be installed in Chicago, Illinois, USA. All of these achievements are only made possible as a result of the continuous improvements in material science and handling of materials, mechanical and design improvements and, last but certainly not least, with the ingenious talent and cooperation of scientists and engineers.

The SNF team hopes that you will find the complete Issue No. 48 of the Superconductivity News Forum informative and timely. With most conferences currently canceled or delayed for many months, we hope you take the opportunity to submit scientific highlights or research/opinion papers to SNF. We will do our best to publish submissions quickly in the Preview to Issue No. 49 as a service in communication to the entire applied superconductivity community.

Horst Rogalla and the SNF Editorial Team