The 17th International Conference of the International Society for Scientometrics and Informetrics (ISSI) took place at Sapienza University of Rome from September 2–5, 2019. For the first time, Italy hosted an ISSI conference. The first meeting of this biennial conference series was held in Belgium in 1987, and the conference will be held as a virtual event in Belgium in 2021. The meetings have been organized in Canada (1989), India (1991), Germany (1993), and (following the founding of the Society in 1993), in the USA (1995), Israel (1997), Mexico (1999), Australia (2001), China (2003), Sweden (2005), Spain (2007), South Africa (2009), Austria (2013), Turkey (2015), China (2017), and Italy (2019).

Organized under the auspices of the International Society for Scientometrics and Informetrics (ISSI), the ISSI conference has long been an important event for the entire scientific community and practitioners interested in the development and application of informetric and scientometric tools. The recent developments in the field have challenged our traditional tools and require new ways of thinking and new perspectives. Scientometrics is
playing and increasingly central role in national and international conversations. This is a powerful moment for the community to use its knowledge to guide decisions for the future.

The Society has seen many changes recently. We initiated new awards to recognize students and acknowledge high quality research. We have, for the first time, allowed for credit card registrations for membership. We have launched a new website, blog, twitter account, and listserv, while maintaining our newsletter. We also took a big leap in coordinating the flip of the Elsevier-owned Journal of Informetrics to the Society-owned journal, Quantitative Science Studies, published jointly with MIT Press. The flip was motivated by three main principles: 1) that scholarly journals should be owned by the scholarly community rather than by commercial publishers, 2) that journals should be open access under fair principles, and 3) that publishers should make their citation data freely available. Our partnership with MIT allows us to provide a platform for scientific communication in alignment with these principles. All of these initiatives have provided a value-add for the community as evidenced by the 60% increase in membership by the 2019 conference. Furthermore (and perhaps not unrelated), this conference received the highest number of submissions and registrants in ISSI history. It is obvious that the community is thriving.

The conference was attended by more than 650 participants from 44 countries from all continents. The pre-conference activities set an excellent tone for the rest of the conference, with workshops on data, open citations, and scholarship in China. The doctoral forum welcomed 14 doctoral students from 10 countries who presented on topics from technological forecasting to the geography of science. The future of the society is bright. The conference also included a special STI Indicators Conference Track organized in collaboration with the European Network of Indicator Designers (ENID). This partnership is essential for bringing together the wider community of informetric researchers and practitioners.

We continued to invest in that future in the form of student awards. Our student travel award, in its second iteration, provides monetary support for students to attend the ISSI conference. We selected two winners for the 2019 conference: Arezoo Didegah (from Yazd University in Iran) and Kai Li (from Drexel University in the United States). We also continued our longstanding tradition of awarding the Eugene Garfield Doctoral Dissertation Scholarship to an outstanding student—Jiangen He from Drexel University in the United States—and our as honorable mentions, Adele Paul–Hus from the University of Montreal in Canada and Zhichao Fang from CWTS in the Netherlands.

The topics covered by the conference expanded over the years from theoretical and quantitative analyses to the investigation of more practical and multidisciplinary aspects of information and library science, research and development management, including also science policy and ethical issues. This is witnessed by the 261 oral presentations of accepted papers that were given at the conference (selected among the 420 submissions of full papers and research-in-progress papers submitted).

For this special issue, we invited authors of full and work-in-progress papers presented at the conference to submit extended versions of their research, based on the feedback they have received from the peer-review process, as well as from the discussions held during the conference. Out of these submissions, which went through an intense peer review, longer than we might expect due to the pandemic crisis caused by the spread of the Covid-19 virus, we selected 49 original research papers that you find in this Special issue. These selected papers spread from advanced computer science techniques to quantitative models, mapping of scientific research, studies on higher education, globalization and collaboration, investigation of gender bias in science and social context of science, altmetrics and new indicators, scholarly communication, evaluation of Social Science and Humanities (SSH) and technology-related research.
In the special issue the papers are organized by 13 topics. The list below gives an overview of the major themes with their subtopics.

**Advanced methods of data exploitation and processing (5 papers)**

Automated Text Processing (3 papers)
Databases (2 papers)

**Models and indicators in scientometrics and application (11 papers)**

Novel bibliometric indicators (6 papers)
Research evaluation models (2 papers)
Higher Education Systems (3 papers)

**Mapping the structure of scientific research (8 papers)**

Research field mapping (8 papers)

**Studying the effect of globalization and collaboration in research (4 papers)**

Globalization and collaboration (4 papers)

**Analysing the patterns of scholarly communication (5 papers)**

Scholarly publishing (5 papers)

**Science in a social context (9 papers)**

Gender studies (2 papers)
Altmetrics (3 papers)
The social context of R&D (4 papers)

**Bibliometrics of SSH and technology-related research (7 papers)**

Humanities and Social Sciences (4 papers)
Technological innovation (3 papers)

We believe that the present selection will present the broad spectrum of the exiting research and current challenges in our field as reflected by the conference in Rome. The following event of this conference series will be organized in the coming year. The 18th
International Conference of the International Society for Scientometrics and Informetrics will be held in Leuven, Belgium, on 12–15 July 2021, in due consideration of the ongoing pandemic situation as a virtual event. Detailed information on organization and participation can be found on the conference website at https://issi2021.org.