This Special Issue of the International Journal of Microwave and Wireless Technology is comprised of expanded papers from the European Microwave Week 2009 (EuMW 2009). The EuMW, an event organized by the European Microwave Association (EuMA) since 1998, was held for the first time in Rome, Italy, from September 28 to October 2, 2009. It consisted of four conferences plus an exhibition. The conferences were the European Microwave Conference (EuMC), the European Microwave Integrated Circuits Conference (EuMIC), the European Conference on Wireless Technology (EuWiT), and the European Radar Conference (EuRAD). In the space of a week, the latest technical developments in microwave field were disclosed and described in a forum with no equal in Europe. More than 1400 delegates with over 2000 registrations attended the EuMW 2009.

The highest paper submission in the history of EuMW was recorded: over 1250 papers distributed among EuMC (843), EuRAD (189), EuMIC (128), and EuWiT (91) were submitted from 56 countries. The papers underwent, as usual, a rigorous review process, directed by the Program Coordinator Prof. Guglielmo d’Inzeo assisted by 380 reviewers who oversaw 44 technical program subcommittees. The subcommittees then met in April 2009 to discuss each paper and finally selected 541 papers (which represent 43% of the total submissions) for oral presentation and 264 papers for poster presentation. Accepted papers were then assigned to sessions and tracks.

This Special Issue of the International Journal of Microwave and Wireless Technology on EuMW 2009 covers topics from tunable circuits and filters to integrated antennas, RF MEMS, nonlinear CAD techniques, UWB and radar technologies, and others, providing you some highlights of the Technical Program. Authors of the papers with the highest scores in the various topics were invited to submit updated and expanded versions of their conference papers. The expanded papers were subject to a further review process by the Editorial Board of this Journal. The accepted papers were then collected to form the issue you now have in your hands.

The EuMC celebrated in 2009 its 40th anniversary: in September 1969 the opening ceremony of the first EuMC took place at the IEE, Savoy Place, London, to what has become the most important and authoritative microwave and RF conference in Europe. In addition to the technical papers, this Special Issue also includes a historically oriented paper on “40 Years of European Microwaves. What about the future?” that tells you something about the birth and evolution of this important event for the European microwaves, in the view of some of its main actors.

We would like to thank the many reviewers, associate editors, and editors of this Journal who contributed in putting together this issue. We trust this overview of the EuMW 2009 will stimulate new ideas and insights that you can apply directly to your own work.