Welcome to the proceedings of the 16th International Conference on Product-Focused Software Process Improvement (PROFES 2015). The conference was held during December 2–4, 2015, and for the first time in Bolzano/Bozen, a charming town in South Tyrol, Italy.

PROFES 2015 provided an enthusiastic environment for practitioners, researchers, and educators to present and discuss experiences, ideas, innovations, as well as concerns related to professional software process improvement motivated by product and service quality needs. In a beautiful alpine winter atmosphere, PROFES encouraged the exchange of ideas to explore, understand, and model phenomena in software engineering in terms of process–product relationships. In these proceedings you will find the latest contributions to research and practice on the major topics of the conference including research contributions, research preview papers, and workshop papers.

To ensure that PROFES retains its high standards and keeps focusing on the most relevant research issues, the Program Committee applied a rigorous selection process, in which each submission received at least three peer reviews. Every paper that received only one or two positive reviews underwent further review in the form of discussion among the reviewers. The review process (and specially the discussion afterward) was very intensive; reviewers were very passionate and committed to ensuring the quality of the conference program. Finally, complete consensus was reached for all the papers submitted to the conference.

The Program Committee selected original research on current trends in software engineering addressing products and services, as well as studies reporting on the application of methods or technologies in real settings, replication studies, and systematic reviews. Overall, we received 50 submissions, 18 of which were selected as full papers. Ten more contributions were selected as research preview papers.

This volume presents the 28 peer-reviewed contributions of the main program of PROFES 2015. We organized the contents of the book in eight chapters, each one covering a relevant aspect of product-focused software process improvement: lessons learned from industry-research collaborations; instruments to improve the software development process; requirements, features, and release management; practices of modern development processes; human factors in modern software development; effort and size estimation validated by professionals; empirical generalization; and software reliability and testing in industry.

PROFES 2015 also had three co-located workshops that enriched and complemented the main track of the conference. We included in this volume three additional chapters including the papers presented at each workshop. The workshop main topics concerned: processes, methods, and tools for engineering embedded systems; human factors in software development processes; and software startups: state of the art and state of the practice.
We believe that the quality and relevance of the contributions included in this proceedings volume make it a valuable resource for all practitioners and researchers interested in a more in-depth understanding of the state of the art, the practice, and the future of product-focused software process improvement. We hope the reader finds it useful and insightful.

On behalf of the PROFES 2015 Organizing and Program Committees, we would like to thank the enthusiastic participation of our authors and the diligent effort of our reviewers, the generous contribution of our sponsors, and the dedication of the chairs. Finally, we would like to gratefully acknowledge the untiring support of the local organizers, publicity chairs, and all the members of the Organizing Committee who made the conference a success. A special thanks to the student volunteers, the Press and Event Management Office, and the Faculty of Computer Science of the Free University of Bozen/Bolzano, who kindly hosted the conference and provide all the facilities for its realization.

December 2015

Pekka Abrahamsson
Luis Corral
Markku Oivo
Barbara Russo
Product-Focused Software Process Improvement
16th International Conference, PROFES 2015, Bolzano, Italy, December 2-4, 2015, Proceedings
Abrahamsson, P.; Corral, L.; Oivo, M.; Russo, B. (Eds.)
2015, XXIII, 616 p. 147 illus. in color., Softcover
ISBN: 978-3-319-26843-9