

Preface

This volume contains the manuscripts submitted for the Proceedings of the 16th International Conference on “Gettering and Defect Engineering in Semiconductor Technology – GADEST 2015” held from September 20th to 25th in Bad Staffelstein, Germany.

The GADEST conference series was established in 1985 by Hans Richter of the Institute for Physics of Semiconductors of the Academy of Science of the former German Democratic Republic. From its beginning, it was intended as an international forum for experts in the field of semiconductor technology, semiconductor device physics and defect physics with participants from academia as well as from industry. Also from its beginning, the GADEST conferences brought together participants from eastern and western countries. Since 1985, GADEST has been organized biennially at Garzau, German Democratic Republic (1985, 1987, 1989), Klingemühle, Germany (1991, 1993), Wulkow, Germany (1995), Spa, Belgium (1997), Höör, Sweden (1999), Catania, Italy (2001), Zeuthen, Germany (2003), Giens, France (2005), Erice, Italy (2007), Döllnsee, Germany (2009), Loipersdorf, Austria (2011), and Oxford, UK (2013). It is our particular pleasure that it returns in its 30th year again to Germany.

The topics of the conference include both fundamental and technological aspects of defects in semiconductor materials and devices. At the time of going to press, the 2015 GADEST conference will comprise two keynote lectures, 20 invited and 46 contributed oral presentations, and 40 poster presentations. Because the proceedings are distributed at the conference, an early deadline had to be met. 71 manuscripts were submitted until then and organized into the following chapters:

- Growth of Mono- and Multi-Crystalline Silicon
- Passivation and Defect Studies in Solar Cells
- Intrinsic Point Defects and Dislocations in Silicon
- Light Elements in Silicon-Based Materials
- Properties and Gettering of Transition Metals in Silicon
- Radiation- and Impurity-Related Defect Studies in Silicon and Germanium
- Thermal Properties of Semiconductors
- Luminescence and Optical Properties of Semiconductors
- Nano-Sized Layers and Structures
- Wide-Bandgap Semiconductors
- Advanced Methods and Tools for Investigation of Semiconductor Materials

The papers were directly reproduced from the manuscripts submitted by the authors. All opinions expressed in this volume are those of the authors.

I am very grateful to the members of the Executive Committee and the International Program Committee for all their help in defining the conference topics, for selecting suitable invited speakers, and for selecting the contributed presentations. In particular, I want to thank John Murphy, Martin Kittler, Hans Richter and Peter Wilshaw for their support in all stages of the conference organization. Special thanks go to Anka Wahl, Stefanie Koch and Hartmut Hermes for mastering all administrative aspects, to Heiner Ryssel and Mariya Hristova for their advice and help in design issues, as well as to the other members of the Local Organizing Committee.

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Peter Pichler
Conference Chairman
30th June 2015

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