

## Preface

This volume is a collection of papers presented at the XIII<sup>th</sup> International Autumn Meeting “Gettering and Defect Engineering in Semiconductor Technology - GADEST 2009” held from September 26 to October 02, 2009 in Germany at the Hotel Döllnsee-Schorfheide, north of Berlin.

Starting from 1985 in East Germany, the GADEST conference is biennially organized. At that time, the main purpose was to hold an informal gathering between eastern and western researchers in the field of defect engineering and gettering, who were virtually separated by the Iron Wall. Also after the fall of the Wall, the conference maintained its original character and still works as a meeting point for eastern and western scientists, with the goal to gather also people coming from far East.

At the forthcoming GADEST conference fundamental aspects as well as technological problems associated with defects in electronic materials and devices will be addressed. The conference will offer ample time for discussion and informal interactions between scientists and engineers. This will ensure a lively exchange of opinions and may lead to a better understanding of the complex aspects of defect engineering which over the years was starting to shift from art into real science.

The present proceedings contain 93 contributions - among them 14 invited papers - from more than 20 different countries. The invited papers, presented by internationally recognized experts in the field, review the state-of-the-art and future trends in their respective research field. Comparing this proceedings volume with the previous GADEST volumes it is clearly visible that defect engineering in photovoltaics is becoming a topic of increasing interest.

The conference and its proceedings volume are organized in the following sessions

- Multi-crystalline silicon for solar cells
- Advanced semiconductor materials: Strained Si, SOI, SiGe, SiC
- Impurities (oxygen, carbon, nitrogen, metals) and point defects in Si and SiGe
- Modeling and simulation of growth, gettering and characterization
- Defect aspects and defect engineering
- Gettering and hydrogen passivation
- Defect and impurity characterization
- Nanostructures and new devices
- Silicon-based optoelectronics and defect luminescence

A meeting like this can never be organized without the help and support of a skilled team. We gratefully acknowledge the help of all members of the Executive Committee and of the International Program Committee in setting up the conference.

The editors wish to thank the members of the Committees for selecting the invited and the contributed paper. We also wish to thank the Local Organizing Committee whose assistance in the organization of the conference was very helpful.

Martin Kittler

Hans Richter