

PREFACE

This volume contains most of the invited and contributed papers presented at the 6th International Workshop on Beam Injection Assessment of Microstructures in Semiconductors (BIAMS 2000), which took place in Hotel Uminonakamichi, Fukuoka, Japan, November 12-16 in 2000. The BIAMS 2000 dealt with theoretical and experimental topics related to the assessment of microstructures in semiconductors by beam injection and related methods. The purpose was to have strong interaction between physicists and technologists for both fundamental research and industrial application. More than 100 participants got together from 12 countries over the world.

The BIAMS 2000 followed previous BIADS meeting in Paris (1988 and 1991), Bologna (1993), El Escorial (1996), and Wulkow (1998), and was held for the first time in Asia. One progress we have made is that BIAMS meeting is getting popular in Asian countries, especially in Japan.

The topics of BIAMS 2000 program were EBIC&OBIC, Cathodoluminescence, SIMS, Defects, Materials and Novel methods. The program consisted of 12 invited papers, 30 oral presentations, 37 poster sessions and 4 exhibitions.

For the last two decades of 20th century, the scanning microscopy had been developed in the field of characterization in semiconductors. As for the electrical characterization, the area to be investigated was reduced from milli-scale to micro-scale by scanning electron beam method. Then scanning probe methods such as STM and AFM enabled us to characterize the area in nano-scale. The electrical measurements in the steady state such as EBIC and OBIC was followed by the transient methods such as SDLTS. Surely in the 21st century, the development of more sophisticated methods in nano-scale will be done, which always runs parallel with the trend of integrated circuit technologies to reduce the device size. BIAMS 2000 was the last meeting on the 20th century's beam injection assessment.

We would like to thank all the participants for their friendly contributions to formal and informal discussions through the meeting. The pleasant atmosphere led to numerous contacts for the future collaboration. Also we express thank all of the local organizing committee members, our students for their help, and Fukuoka Industry, Science & Technology Foundation, Mitsubishi Foundation and many companies for their financial support.

We finally mention that the first BIAMS meeting in the 21st century will be held in Lille, France in 2002.

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