

The Society for Microelectronics (GMe — Gesellschaft für Mikroelektronik)

E. Gornik, K. Riedling

Gesellschaft für Mikroelektronik,
c/o Institut für Industrielle Elektronik und Materialwissenschaften,
TU Wien
Gußhausstraße 27 – 29, A-1040 Wien

1. Goals of the Society for Microelectronics

The Society for Microelectronics (GMe) was founded in 1985 with the aim to “*support microelectronics technology and its applications*” in Austria. The GMe defines its tasks as follows:

- Support of university-based “high-tech” research in the areas of microelectronics, semiconductor technology, sensors, and opto-electronics;
- Operation of research facilities;
- Support and consulting for industry, in particular, for small and medium enterprises, within the area of microelectronics.

The central task of the GMe is to provide an internationally competitive *infra-structure* in the area of microelectronics technology. The GMe allocates funds to maintain research projects in the fields of semiconductor technology, sensors, opto-electronics, and ASIC design. Thus the infra-structure support generates a base for research projects that are funded by other funding agencies.

2. Activities of the Society

Due to funding constraints, the present focal point activity of the GMe is the operation of university-based laboratories for microelectronics technology. Nevertheless, the GMe tries to support the other activities mentioned above in their submission and administration of certain projects.

The main task of the GMe in the area of microelectronics technology is the operation of the cleanroom laboratories in Vienna and Linz. The GMe has coordinated the construction of the Microstructure Center (MISZ — Mikrostrukturzentrum) in Vienna; the funds were supplied by the Austrian Federal Ministry of Science and Research. The GMe now finances a significant part of the operation costs for the cleanroom laboratories in Vienna and Linz.

2.1 Microelectronics Technology — Cleanroom Vienna

The following university institutes receive support within this focal point activity:

- TU Wien:
 - Institut für Festkörperelektronik
 - Institut für Industrielle Elektronik und Materialwissenschaften

2.2 Microelectronics Technology — Cleanroom Linz

The following university institutes receive support within this focal point activity:

- Johannes Kepler Universität Linz:
 - Institut für Halbleiter- und Festkörperphysik
 - Institut für Mikroelektronik

3. Other Activities of the Society

In 2001, the biennial GMe seminar took place at the Vienna University of Technology on April 5 and 6, 2001 under the title “*GMe Forum 2001*”. The seminar presented twelve invited lectures given by international experts, and 37 oral and poster contributions which resulted from work supported by the GMe. Great emphasis was put into making the seminar more attractive to an industrial audience, thus contributing to an improved knowledge transfer between universities and industry.

One of the declared tasks of the GMe is to provide information on current Austrian academic activities in the field of microelectronics to industry, in particular to Austrian small- and medium enterprises (SMEs). To enhance the distribution of the results of the research work done with GMe support, the GMe has put the contents of its annual reports — 1995 through 2001 — and the proceedings of the latest seminars organized by the GMe in 1999 and 2001 on its Web server. In late 2000, a new GMe Web server has been introduced. This server now provides a variety of search facilities into the reports, thus acting as a Microelectronics Knowledge Base. The server has apparently been fairly well accepted by the international community. Access statistics show an average of 77 requests per day, with peaks of more than 100; an amazingly large percentage of the accesses to the GMe server — about two thirds — originates from net domains outside Austria. The GMe Web server is available under the address:

<http://gme.tuwien.ac.at/>

4. Changes to the Society’s Managing Committee

Günther BAUER, who has been the Society’s president for the past two years, stepped down by the end of 2001. His successor is Erich GORNIK, head of the Institute of Solid State Electronics (*Institut für Festkörperelektronik*) at the Vienna University of Technology, and in charge of the cleanroom laboratories at his university. Gerhard KRAINZ who represented the Wirtschaftskammer Österreich has retired in late 2001; Heinz LASEK who is affiliated to the same organization took his place. Arnold SCHMIDT who has been a long-standing member of the board stepped down from his position in the board, and Rainer URANSCHKEK who has been the representative of the Forschungs- und

Prüfzentrum Arsenal in Vienna left this institution in 2000 and therefore also the GMe's board. Ernst HAMMEL and Humbert NOLL newly joined the board as representatives of Electrovac GmbH and AMS Austria Mikrosystems AG, respectively.

We also have the sad duty to announce that Wolfgang ATTWENGER has died in the Winter of 2002. He was formerly with ÖFZ Seibersdorf and has been a member of the GMe's board from the time of the Society's foundation, and only retired from the board by the end of 1999. We will remember him as a person who untiringly promoted the issues of microelectronics during his lifetime.

5. The Annual Report for 2001 of the Society for Microelectronics

The GMe is currently supporting the microelectronics technology activities of the cleanroom laboratories in Vienna and Linz. All projects described in this report were carried out in the cleanrooms in Vienna and Linz, respectively. They are *not* specific projects of the GMe but were funded by a variety of other sources. They all have in common that they use the infra-structure provided by the GMe. It would therefore not have been possible to carry out these projects without the support by the GMe.