



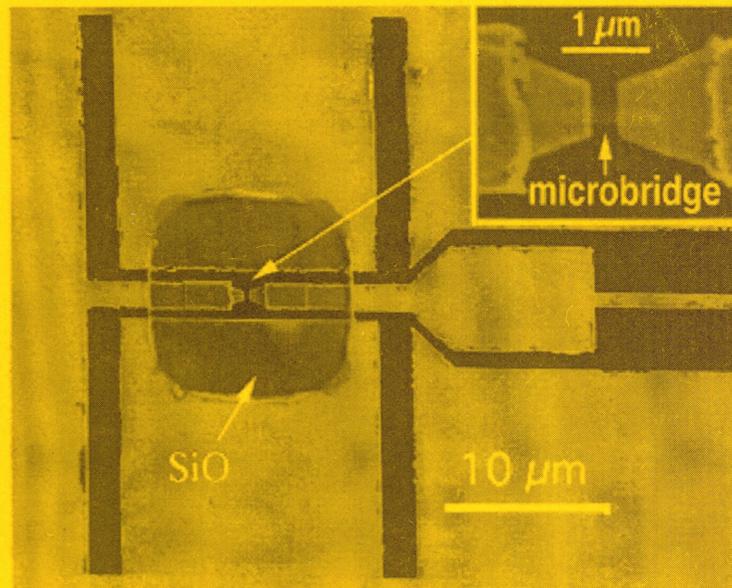
Ninth International Symposium on Space Terahertz Technology

JPL

17 - 19 March 1998
Pasadena Hilton
Pasadena, California, USA



PROCEEDINGS



Broadband 1.5 - 2.5 THz HEB Mixer

Sponsored and organized by the Center for Space Microelectronics Technology;
Jet Propulsion Laboratory, California Institute of Technology;
and National Aeronautics Space Administration Office of Space Science

PROCEEDINGS
of the
NINTH INTERNATIONAL SYMPOSIUM ON
SPACE TERAHERTZ TECHNOLOGY

Tuesday - Thursday, March 17 - 19, 1998

Pasadena Hilton Hotel
Pasadena, California, USA

Sponsored by: NASA Office of Space Science.

Organized by: The Jet Propulsion Laboratory,
California Institute of Technology

Organizing Committee: Rob McGrath (JPL)

PREFACE

The Ninth International Symposium On Space Terahertz Technology was held at the Pasadena Hilton Hotel, Pasadena, California, on March 17 - 19, 1998. The Symposium was attended by 150 scientists, engineers, and program managers from around the world. The theme of the Symposium was similar to previous years and centered on the detection, generation, and manipulation of radiation in the terahertz spectral region for ground-based, aircraft, balloon, and spaced-based applications including astronomy, planetary science, and remote-sensing of Earth's atmosphere. The Abstract Booklet contained 68 abstracts, and the program was divided into 11 oral sessions, plus, for the first time, a poster session covering a wide variety of topics including HEB mixers; Schottky diode mixers and fabrication; SIS mixers, receivers and devices; multiplier and fundamental sources; and detectors and backends. In addition, there were invited presentations that outlined the status of programs for the NASA Stratospheric Observatory for Infrared Astronomy (SOFIA) and that discussed the heterodyne instrument for the ESA Far Infrared and Submillimeter Space Telescope (FIRST).

In an attempt to design the Symposium in future years to meet the needs and desires of the participants, a survey was conducted to determine the preferred format for accommodating an increasing number of papers submitted to the Symposium. Of the four options--(a) increase the symposium to 4 days, with no parallel sessions; (b) keep the symposium at 3 days, but add parallel sessions; (c) keep the symposium at 3 days, but add more poster sessions; and (d) reject enough papers (using tighter reviewing criteria) to keep the symposium at its current size--by far the most popular option was (c) keep the symposium at 3 days, but add more poster sessions. This year we added one poster session for the first time, and it was very well received. It provided a great opportunity for increased interaction between the presenters and the audience.

The Symposium was sponsored by the NASA Office of Space Science, and the Center for Space Microelectronics Technology at the Jet Propulsion Laboratory which also organized the event. I would like to thank these organizations for their support. I would also like to thank everyone who helped to make the Symposium a success: Anders Skalare, Boris Karasik, and Imran Mehdi for setting up the technical program and organizing the lab tours; Wenonah Green and Pat McLane and her staff for handling the local arrangements and making small miracles happen; the session chairs for keeping us on schedule; and everyone who attended or contributed a presentation. Also an additional thanks to Wenonah for putting this Proceedings together, and to Tim Brice for assisting with the graphics on the Abstract Booklet.

Rob McGrath

The Tenth International Symposium On Space Terahertz Technology will be held in Charlottesville, Virginia, on March 16 - 19, 1999, and will be hosted by the University of Virginia. For more information on the next Symposium, please contact:

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