

Advanced MEMS for RF and Millimeter Wave Communications - AMICOM

NoE FP 6 - priority 2, IST

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AMICOM is a FP6 Network of Excellence in RF-MEMS. 28 research teams from 14 countries (including Poland and Romania) are involved in this project.

Web: <http://www.MEMSWAVE.angstrom.uu.se/>

The network of excellence is structured into three groups of activities:

1. Integrating RF-MEMS activities;
2. Joint RF-MEMS research activities and
3. Activities to spread excellence in RF-MEMS

Dissemination actions in the AMICOM Project

► The 5th edition of the MEMSWAVE workshop will be held at the Angstrom Laboratory in Uppsala, Sweden, 30th of June- 2nd of July, 2004. Web: <http://www-conference.slu.se/memswave/>
Topics on RF MEMS. The first two MEMSWAVE workshops were held in Sinaia (Romania). Following the successful format of these two previous events, it has been decided to move this workshop outside Romania.

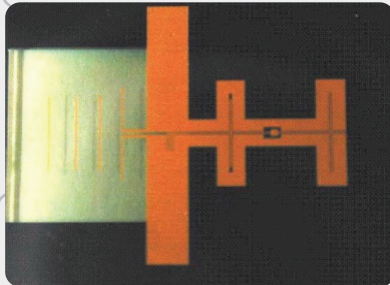
► The AMICOM summer school on RF MEMS at Heraklion, 20th to 24th of September 2004.

► Focussed session on reliability during the European Microwave Week 2004, 11th to 14th of October, in Amsterdam.

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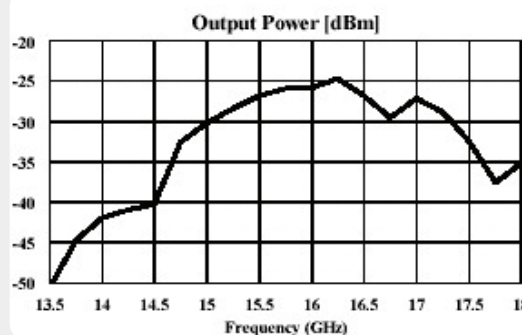
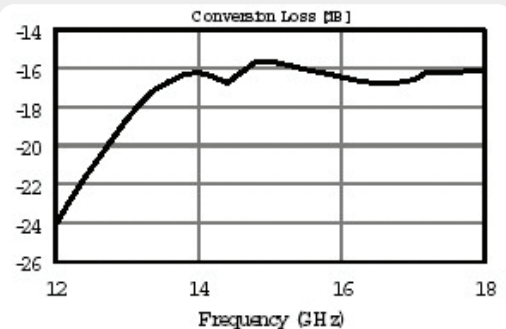
New results in joint research activities:

15 - 45 GHz frequency multiplier integrated with a micromachined Yagi-Uda antenna. (IMT-Bucharest-LAAS Toulouse)



The receiver module is based on a novel micromachined SiO₂/Si₃N₄ membrane supported Yagi Uda antenna. The active element of the transmitting front end is a hybrid interconnected GaAs Schottky antiparallel diode pair chip.

Simulated conversion loss as a function of the drive frequency



Experimental output power as a function of the drive frequency

Contact:

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Advanced Handling and Assembly in Microtechnology- ASSEMIC Marie Curie Research Training Network

Coordinator: Prof. Werner Brenner, Institute of Sensors and Actuators Systems, E-mail: Werner.Brenner@tuwien.ac.at

Be a part of ASSEMIC team and start your career in the frame of an European Project:

Coordinated by Prof. Werner Brenner from Institute of Sensors and Actuators Systems, Vienna University of Technology -ISAS is devoted to training and research in

handling and assembly at the micro-dimension, involving advanced methods and tools and providing a multidisciplinary, complementary approach.

Job opportunities:

The ASSEMIC provides extensive job opportunities for early stage and experienced researcher in multidisciplinary fields, in 10 European countries distributed all over Europe. In the frame of this project, each partner institution can only appoint foreign post-graduate researchers (applicants can only apply for a position in a different country to that of their nationality). To apply please visit the ASSEMIC website: <http://www.assemic.net> or contact the coordinator Prof. Werner Brenner (see above).

Nanostructured and Multi-Functional Polymer-Based Materials and Nanocomposites NANOFUN-POLY NoE FP 6 - priority 3, NMP

Coordinator: Prof. Jose M. Kenny, Italian Consortium for Science and Technology of Materials (INSTM), E-mail: kenny@unipg.it

The FP6 Network of Excellence NANOFUN-POLY "Nanostructured and functional polymer-based materials and nanocomposites" will organise a kick-off Meeting in Rome on June 18th, 2004. The morning session will be devoted to illustrate the European Commission strategy and regulations and the Network organization and planned activities. The first meeting of the Network Board will be held in the afternoon. All the partners of the NoE are invited to participate in the Network Kick-off Meeting satellite partner of this NoE.

NANOFUN-POLY joins forces of 25 partners from European countries, and combines knowledge and expertise from chemistry, physics, and engineering, covering experimental and applied aspects of materials science (www.NANOFUN.NET).

The research areas of excellence of NANOFUN-POLY network are:

Area 1. Polymer Chemistry: new monomers; new precursors (copolymers, dendrimers, hyperbranched polymers, microgels, nanoclusters); polymerisation routes - chain polymerisation, polycondensation, free radical and radical polymerisation, sol-gel, etc.; and formulation.

Area 2. Polymer Processing: intelligent and integrated processing;

environmentally friendly processing techniques; processing nanocomposites; coatings; patterning of polymer surfaces.

Area 3. Nanostructure-Property Relationships: new techniques of nanoscale characterization; rheology at different scales; molecular modelling and related simulation techniques.

Area 4. Applications: mechanical systems; functional coatings; membranes; optical and electrical devices; bioactivity