



MIMOMEMS



Dr. Emil Mihai Pavelescu

- “experienced” scientist hired by IMT-Bucharest for a period of 18 months using the MIMOMEMS budget.

Experience:

1999 visiting PhD student (12 months) at FORTH/MRG, Heraklion, Greece

2001-2006 Marie-Curie Fellow, PhD student and Postdoc researcher at ORC/TUT, Tampere, Finland

2006-2009 Senior Researcher at TP/INA, Kassel, Germany.

Impressed by the state-of-the-art research facilities existent in IMT-Bucharest which will enable me the continuation and, even, the expansion of the research activities started in Tampere and Kassel.



Actual tasks in IMT:

- **Research on wide band gap (Al)GaN heterostructures grown on Si used for fabrication of MEMS and HEMT devices (XRD, AFM, SEM)**
- **Development of investigation tools (set-up for characterization of GaN-based UV photodetectors, set-up for photoluminescence)**

Future tasks in IMT:

Implementation of a laboratory for growth and investigation of GaN-based heterostructures grown on various substrates (Si, SiC, Sapphire) by molecular beam epitaxy and scanning tunneling microscopy (Romanian project for research infrastructures).