

IMT AND CAS (AFTER 1997)

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CAS'40, 14th of October, 2017

THE CHANGES BROUGHT BY IMT IN THE CAS LANDSCAPE

- (A) Enlarging the profile (the field of research).
 - (B) Introducing the satellite events, related to European projects.
 - (C) Reinforcing the IEEE formalism

 - **ADDENDUM: CAS and the Romanian Academy**
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(A) Enlarging the Profile. From semiconductor devices and circuits to „micro- and nanotechnologies” (including MEMS), according to the field of research of IMT.

Two examples

(1) The MEMSWAVE workshops related to the MEMSWAVE European project.

The first MEMSWAVE Workshops (basically devoted to RF MEMS) were financed from European Project MEMSWAVE coordinated by IMT- Bucharest (Dr. Alexandru Muller).

Official announcement. A Romanian project among the ten finalists of the Descartes Prize. The prize is awarded to scientific projects that have involved pan-European collaboration and address the concerns of citizens while contributing to Europe's competitiveness. The two winners were selected from a short list of 10 by Grand Jury, originally selected from 108 applications, the highest figure in the prize's three-year history. Among the ten finalists, there was a Romanian project, entitled MEMSWAVE and led by Dr. Alexandru Muller from the National Institute for Microtechnologies, IMT Bucharest. This project - which uses the micromachining capabilities of semiconductor material to develop new communication technologies - involves researchers from Romania, Greece, Italy, Sweden, Hungary and Ukraine.

(2) Micro- and nanotechnologies week (Sinaia, 6-12 October 2002)

2.a The Workshop MicroMechanics Europe (MME'2002), at the Casino, Sinaia, with the financial support of the Ministry of Education and Research. The event was open with a message from Mr. Serban Constantin Valeca, Minister Delegate for Research.

MME 2002: 68 regular papers and 7 invited papers Over 90 participants from 19 countries.

MME reached now the 28th edition in Uppsala, Sweden (august 2017) under the new name of **Micromechanics and Microsystems Europe**. With MNE 2002, in Sinaia, the event was located for the first time in Eastern Europe. On this occasion, Dr. Alexandru Muller was elected as a member of the Steering Committee of the MNE workshop.

2.b The International Semiconductor Conference (CAS'2002), an IEEE event with the financial support of the Ministry of Education and Research.

CAS 2002 displayed a total number of 98 papers (86 regular and 12 invited). The authors are from 23 countries on 4 continents (18 countries from Europe, 1 from America, 3 from Asia; one paper comes from Australia). The quality of papers accepted for publication in the Proceedings was guaranteed by the evaluation made by 42 referees (including members of the International Advisory Committee and of the Technical Program Committee).

At its "silver jubilee", the Conference contained many sessions devoted to nanoscience and technology, MEMS, advanced materials etc. (apart from the traditional topic of semiconductor physics, semiconductor devices and microelectronics).

Highlights of CAS'25 (2002):

- **Opening Plenary Session MICROSYSTEMS: VISIONS FOR 2010**, A. El-Fataty, BAE SYSTEMS, Advanced Technology Centre, UK, & Vice Chairman of the NEXUS Association.
- **Plenary Session "Nanoscience and nanotechnologies"** (1) NANOTECHNOLOGY IN THE EUROPEAN RESEARCH AREA, Anne de Baas (photo), European Commission DG Research G2, Brussels, Belgium; (2) PHANTOMS: NANOTECHNOLOGY NETWORK FOR INFORMATION PROCESSING AND STORAGE, A. Correia, A. Gil, CMP Cientifica S.L., (IST Nanoelectronics Network), Madrid, Spain.
- *Launching of the book "Micromachined Circuits for Microwave and Millimeter Wave Applications"* The book, edited by D. Dascalu, H. Hartnagel, A. Muller and R. Plana and published by the *Romanian Academy* in the *Series for Micro and Nanoengineering*, contents mostly (but not exclusively) extended versions of the papers presented in Sinaia in October 2001 at both CAS 2001 and MEMSWAVE Workshop. the best project illustrating the European cooperation).

2.c Events organized in cooperation with the National Programme MATNANTECH (New Materials, Micro and Nanotechnologies), by IMT-Bucharest (Ministry of Education and Research) and MATNANTECH (National Programme coordinated by the Faculty of Industrial Chemistry, University "Politehnica" of Bucharest) and consisted of the following events:

- 1) An exhibition of posters (projects and participants in MATNANTECH) at the Sinaia Hotel (6-11 October);
- 2) A round table discussion: "The role of the national scientific networks in promoting international cooperation" (Sinaia Hotel, 10 October), including the official launching of the Centre of Research in Nanobiotechnologies (CENOBITE), a MATNANTECH project;
- 3) Poster sessions (CAS) on "nanoscience and technology" and "advanced materials", on 9th and 10th of October.

(B) Satellite events of CAS

Satellite events related to various European projects:

WAPITI (STREP), PATENT (NoE), 4M (NoE), AMICOM (NoE), INTEGRApplus (IP), MEMS-4-MMIC (STREP), SMARTPOWER (IP), MIMOMEMS (CSA), SOI-HITS (IP), NANOCOM (ENIAC).

NoE=Network of Excellence; IP=Integrated Project; CSA=Coordination and Support Project (MIMOMES=European Centre of Excellence in IMT).

Important: one session of the satellite event – open to CAS participants

Other satellite events.

In 2008: *IEEE EDS Mini-Colloquium NADE –Nanoelectronic Devices Present and Perspectives*” (organized in cooperation with IEEE EDS Romania Chapter).

In 2010: *”New trends in automotive electronics”*(organized in cooperation with Infineon Technologies Romania).

C. Reinforcing the IEEE formalism

2013: IMT was strongly involved in the organization of European Conferences ESSCIRC-ESSDERC (for the first time in Eastern Europe). The electronic system for evaluation of papers, preparing the proceedings etc. was also implemented for CAS (since the 2013 edition)

CAS papers in the IEEExplore



ADDENDUM
CAS and the Romanian Academy





IMT is organizing CAS

..... under the aegis of the
Romanian Academy
(see www.imt.ro/cas)



Contribution of the Romanian Academy, as such, to the set-up and development of CAS? *This is not the case!*

A relatively high number of member of the Academy had scientific contributions to various editions of CAS.

Just a couple of them were involved in the organization of the Conference as members of the Romanian Academy.

CAS'20 (1967)

Constantin Bulucea (right), CAS founder meets Acad. **Mihai Draganescu**, former President of the Romanian Academy

Dr. Bulucea is now Honorary Member of the Romanian Academy



Members of the Romanian Academy

Prof. Mihai Draganescu (deceased)

Prof. Radu Grigorovici, Honorary President of CAS (deceased)

Prof. Andrei Tugulea

Prof. Alexandru Timotin (deceased)

Prof. Dan Dascalu, Conference Chairman

Corresponding members of the Romanian Academy

Adrian Rusu, Chair of the Technical Committee (deceased)

Mihai Mihaila

Andrei Silard (deceased)

Honorary members

Constantin Bulucea, CAS founder

Mihail Roco

CAS 2003

From left to right:
Dan Dascalu, Adrian
Rusu, Cornel
Cobianu, Gh.
Brezeanu
(courtesy to Dr.
Marius Bazu for the
two excellent photos)



„The rest is silence“ (Shakespeare, Hamlet)?!

Oh, not at all!

See the paper devoted to CAS' 40 published by „Academica“
(Romanian Academy), September 2017

