# The 17<sup>th</sup> Mediterranean Conference on Control and Automation (MED'09)

The 17<sup>th</sup> Mediterranean Conference on Control and Automation (MED'09) took place on June 24 – 26, 2009 at the Macedonia Palace Hotel in Thessaloniki, Greece. The focus of the conference was on new directions in control and automation and to promote ideas and collaboration among researchers in the Mediterranean region and throughout the globe. The conference general chairs were Vasilios Petridis of the Aristotle University of Thessaloniki, Greece and Frank Lewis of the University of Texas at Arlington, United States. The conference program chair was Thomas Parisini of the University of Trieste, Italy, with program vice – chairs Zoe Doulgeri and George Rovithakis both of the Aristotle University of Thessaloniki, Greece.

King Cassander of Macedonia founded Thessaloniki in 315 B.C. and named the new city after his wife, Thessaloniki, the sister of Alexander the Great. Throughout its long history, the city has received several designations which are indicative of Thessaloniki's grandeur and glorious past: Capital of Macedonia, Joint-administrative capital of the Byzantine Empire. Thessaloniki has witnessed in the 2300 years of its life the might and glory of the ancient Greeks, the power of Rome and the grandeur of Byzantium. Its position and the contribution it has made have helped it play a major role in world history. Standing as undeniable proof of that role are its many antiquities, monuments and other impressive archaeological finds, representing every historical period. Within fifty kilometers of Thessaloniki are the beautiful beaches of Halkidiki and several sites of exceptional historical importance. There is Olympus, the mountain of the gods and seat of ancient Greek mythology. Athos, "the Holy Mountain," is a sanctuary for a unique monastic community, safeguarding orthodox Christian tradition and priceless historical treasures. Pella, the ancient capital of the Macedonian Kingdom, features the palace of Alexander the Great, with its exquisite mosaics. Vergina became known worldwide when golden urns containing the remains of Phillip II and his wife - the parents of Alexander the Great - were unearthed during excavation of royal Macedonian tombs. The numerous historical sites, as well as the plethora of natural beauty spots and endless emerald-green shores less than an hour away, establish Thessaloniki as a fascinating journey into art, civilization and relaxation.

## **Technical Program**

MED'09 was indeed an international meeting. A total of 377 papers were received from 49 countries from Europe, America, Asia, Africa and Australia. Of these, 298 were accepted for presentation, following a peer – reviewed procedure. The countries with most accepted papers were: USA with 70, Greece with 47, France and Italy with 21, Iran with 17 and UK, Germany, Turkey, China, Morocco, Portugal, Australia, Israel, Czech Republic with 5 – 10 papers each. More than 300 participants finally attended the conference. The technical program, comprised of 54 sessions, including 12 invited, ran in six parallel tracks for three days. A half – day workshop on "UAS Civilian Applications: Fire Detection, Forest Protection, Emergency Response" organized by George Vachtsevanos of Georgia Institute of Technology and Kimon Valavanis of University of Denver, preceded the technical program. The workshop presented a comprehensive review of the current state of research in the areas of fire diction, forest protection, emergency response and traffic monitoring. Emphasis was

placed on how such systems may assist in, and prevent or minimize damages to the environment, contributing to better quality of life. The focus of the workshop was centered on single and multiple unmanned vehicles, as well as on cooperation, coordination, communication, cooperative control and swarms.

## **Plenary Talks**

The technical program featured four plenary talks:

- Petros Ioannou, "Intelligent Vehicles and Transportation Systems", Technical University of Cyprus, Cyprus and University of Southern California, USA.
- Jie Huang, "Nonlinear Regulation Control Evolution of the Internal Model Principle: From Linear to Nonlinear", Chinese University of Hong Kong, Shatin, N.T., Hong Kong.
- Tony Vardulakis, "Linear Multivariable Control. Methods & Philosophy of the Algebraic Approach", Aristotle University of Thessaloniki, Greece.
- Dr. Libor Kral, Dr. Alkis Konstantellos, "European Research Initiatives in Control and Funding Opportunities", European Commission.

as well as the talks:

- Ioan Landau, "Adaptive Regulation Rejection of Unknown Multiple Narrow Band Disturbances", Emeritus Research Director at C.N.R.S. GIPSA Lab, Grenoble, France.
- Brian Anderson, "Old and New Challenges of Adaptive Control", Distinguished Professor at the Australian National University and Distinguished Researcher in National ICT Australia Ltd.

given under a plenary session on "Adaptive and Robust Control Methods & Philosophy".

## **Sponsors**

The conference was sponsored by the Mediterranean Control Association (MCA). It was technically co – sponsored by the IEEE Control Systems Society, the IEEE Robotics and Automation Society and supported by the Aristotle University of Thessaloniki, by ARRI of the University of Texas at Arlington, and ZITI publications. For more information about MED'09, please visit <a href="http://www.med09.org/">http://www.med09.org/</a>.

#### **MED'10**

The 18<sup>th</sup> Mediterranean Conference on Control and Automation (MED'10) will be held on June 23-25, 2010, at Congress Palace, Marrakech, Morocco. For more information, please see <a href="http://www.med10.org/">http://www.med10.org/</a>.