

Argentina Joint Chapter IES IAS CSS RAS *Maria I. Valla, Chapter Chair (1997-1999)*

The chapter was formed in 1991. During the first years of its existence, the Argentine Section has shown the greatest increase of membership in Region 9, and this fact has been reflected in a continuous growth of the chapter which today has almost 570 Non Student Members and 360 Student Members. The members of the chapter carry on research programs at different National Universities in Argentina, as well as other technical activities related to industry. The main activity of the chapter has been the organization of tutorial courses covering different technical topics that help the professional update of our members and 1999 was a particularly active year.

In November 1999, the members of the Control System Society (CSS) Membership Activities Board selected the Argentina Joint Chapter, chaired by María Inés Valla, to receive the **1999 CSS Outstanding Chapter Award** for its "excellent lecture program and membership development". The Award consists of a grant of \$ 1,000 U.S. to subsidize travel to attend the Conference on Decision and Control awards Banquet, where a plaque is presented. In addition, the local chapter receives another \$ 1,000 U.S. to subsidize its activities.

We dedicated special efforts to Student Activities interacting with the Student Branches in different Universities in Argentina. During 1999 we had the pleasure to announce that two Student members of our chapter received, both, Awards from IEEE:

- **Mauricio Tonelli** from the UNLP was awarded *Second prize*, in the *1999 Myron Zucker Industry Applications Student Design Award* for the paper "Space Vector Modulator for Power Inverters", with the academic advise of María Inés Valla. The *Industry Applications Society* offers this award to undergraduates students who make design projects within the scope of the Society. The Award was presented at the IAS Annual Meeting which was held at Phoenix, AZ October 3-7, 1999. A Slide Presentation that briefly overviews the work can be found in Zucker Web Page www.electrostandards.com/zucker.htm.
- **Mariano Pereyra** from the UNS has been awarded *Third prize*, in the *IEEE Regional Student Paper Contest* for the paper entitled "Diseño, modelado y control de un rodamiento magnetico activo experimental" ("Design, modeling, and control of an active magnetic bearing"). The Third Prize consisted of \$150 cash honorarium for students and customized certificate, funded by the IEEE Life Members' Committee. The purpose of the IEEE Student Paper Competition is to offer student members the opportunity to exercise and improve both written and verbal communication skills.

In the future we plan to continue with similar activities. The main goal for the immediate future is to give more emphasis to the development of activities that involve other countries from Region 9.



RPIC'99 Reception at the Town Hall where they received an official certificate as "Distinguished Visitors" of Mar del Plata.

The Argentina joint Chapter CSS-IES-IAS-RAS, together with Argentina CAS chapter and Argentina Section have co-sponsored the local conference ***VIII Workshop on Information Processing and Control (RPIC'99)***, held in Mar del Plata, Argentina, September 23 to 25, 1999. The abstracts submitted for the workshop were 270, and 180 final papers were presented in 33 technical sessions. During the three days of the workshop, 245 assistants participated in the different technical and social activities. Furthermore, two special issues (with about 30 selected papers) of the *Latin American Applied Research Journal* are being prepared.

Some financial assistance was provided covering the traveling expenses of Student Members who wanted to participate of this Workshop. The expenses of 5 students from different Universities in Argentina were provided by IEEE Argentina.

Sponsored by Distinguished Lecturer Programs, the following plenary sessions were presented within RPIC'99:

- “*CNN: A Brain-like Supercomputer on a Chip*”, by Prof. Leon Chua, University of California, Berkeley.
- “*Sensorless Position Control of Induction Motor Drives*”, by Prof. Joachim Holtz, University of Wuppertal, Germany.

- *“The OMNI and OSMAN Nets for Mobile Wireless Communications and for Modeling and Diagnosis of the Brain Functions”*, by Prof. Rui J.P. de Figueiredo, Department Electrical Engineering and Computer Science, University of California, Irvine.
- *“Graph Decoding of Error Control Codes”*, by Prof. Patrick Farrell, University of Lancaster, England.

The attendance for these sessions was on the order of 100 participants. As expected the participation of the audience was very active with questions to the lecturers and discussions after their respective talks.



RPIC'99: At the Banquet

The four lecturers were awarded as “Distinguished Visitors” of Mar del Plata, the host city, in recognition of their participation in this event. They had a reception at the Town Hall where they received an official certificate of the nomination, “the key of the city” and a book about Mar del Plata.

Sponsored by the *Industrial Electronics Society’s Distinguished Lecturer Program* the chapter organized two Lectures on the subject **Dynamics and Control of Induction Motor** at the Electrical Engineering Department, National University of La Plata, La Plata, Argentina, September 28 through October 1, 1999. The lectures were given by Prof. Joachim Holtz, University Wuppertal, Germany:

- *“Dynamic analysis of induction motor using complex state variables”*
- *“Sensorless speed control of induction motor”*

These lectures were a real success, with a large participation of engineers from different Universities in Argentina, and some others from the industry.

Several Special Courses were also organized with different Universities:

- “*Electronic Systems for Power Factor Control*”, by Prof. Javier Uceda, Universidad Politécnica de Madrid, Spain. Duration: 50 hours. Electrical Engineering Department, UNLP, La Plata, Argentina, August 7-20, 1999.
- “*Nonlinear Control of Lagrange and Hamiltonian systems: passivity and energy balance*”, by Prof. Romeo Ortega, Laboratoire des Signaux et Systèmes, LSS/CNRS/Supélec, France. Duration: 30 hours. Electrical Engineering Department, UNS, Bahía Blanca, Argentina, to be held in November 23 to December 4, 1999.
- “*Control and Anti-Control of Chaos*”, by Prof. Guanrong Chen, Dept. of Electrical & Computer Engineering, University of Houston, Texas, USA. Duration: 30 hours. Electrical Engineering Department, UNS, Bahía Blanca, Argentina, to be held in December 5 to 17, 1999.