



# MECOM 2005

## VIII Argentinian Congress on Computational Mechanics Buenos Aires, Argentina, November 16-18, 2005

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under AMCA  
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The VIII Argentinian Congress on Computational Mechanics took place in Buenos Aires, Argentina, from November 16th to 18th, 2005. Sponsored by AMCA, Argentine Association for Computational Mechanics, this edition of the regionally renowned MECOM series played somehow the role of a "birthday party" for celebrating AMCA's 20th anniversary.

MECOM 2005 was organized and hosted by the School of Engineering and Sciences and the Center for Advanced Studies of Universidad Argentina de la Empresa (UADE), a non-profit private university. The responsibility of the organization rested mainly in the local organizing committee, composed by Axel Larreguy (Chairman), Paola Dellepiane (Secretary), and Marcelo Raschi (Logistics), with the help of Sergio Idelsohn (AMCA/President), Lelia Zielonka (AMCA/Secretary), and many other people from the administrative sectors of UADE.

Besides the usual ordinary sessions on Fluid Mechanics, Solid Mechanics, etc., there were sixteen Invited Sessions, organized by researchers from Argentina and other American countries. The sessions covered a wide range of subjects, including Moving Interfaces, Water Resources, Environmental Engineering, Constitutive Modeling of Materials, Dynamic of Structures, Heat Transfer in Industrial Processes, Mathematical Aspects of FEM, Turbulent Flows, Atmospheric Dispersion Processes, Petroleum Reservoir Simulation, Automobile Industry, Distributed Computing, Biomedical Devices, and Space Technology. The invited session organizers were responsible for collecting and managing the reviewing process of about two thirds of the papers presented, thus playing a key role in the success of the conference.

There was also a special Poster Session, devoted to articles in which the first author was an undergraduate or a graduate student, with prizes for the best articles.

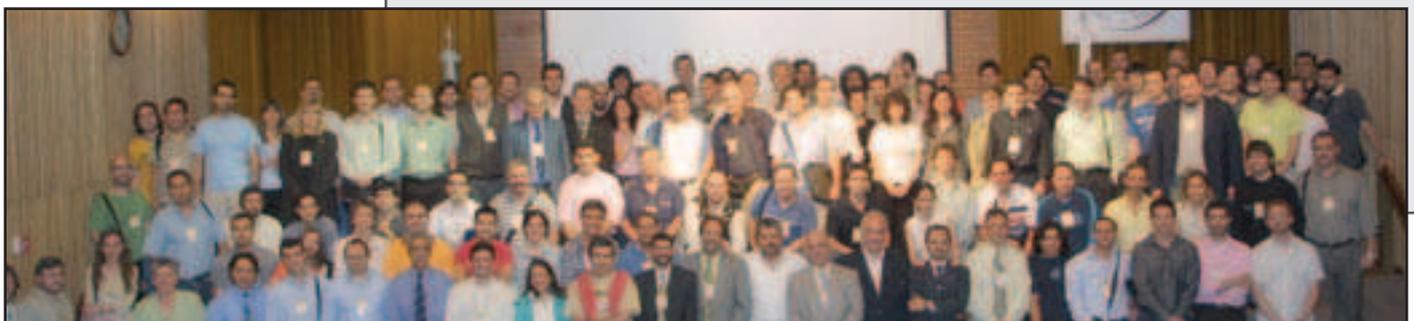
Among the national and foreign experts that attended the conference, it is important to highlight the names of the plenary speakers, which were Xavier Oliver (Universidad Politécnica de Catalunya, Spain), Miguel Cerrolaza (Universidad Central, Venezuela), Rainald Löhner (George Mason University, USA) and Kenneth Runesson (Chalmers University of Technology, Sweden).

The conference largely exceeded its original national scope, as papers have been received from many American and European countries. Most of the more than 300 contributions came mainly from Argentina, Brazil, Venezuela, and Chile, but some have also been received from USA, Spain, Uruguay, Ecuador, México, Canada, Italy, and Germany. More than 220 researchers and students shared knowledge and experiences in oral presentations that, due to the large numbers of contributions and the little time available, had to be organized in up to 5 parallel sessions.

The congress was a big success in terms of the number of abstracts received. Most of them were accepted and are collected in the Book of Abstracts, which is part of Vol. XXIV of the Mecánica Computacional Series edited by AMCA. The volume is completed with a CD that includes the accepted full papers.

MECOM2005 is now history, but it made its contribution to the never ending task of keeping the local and regional numerical community in touch and growing. It is time to look forward to ENIEF2006, which will most certainly success in continuing with this effort. ●

**Figure 1:**  
*Participants at MECOM  
2005*



## **XV Congress on Numerical Methods and their Applications**

*Santa Fe, Argentina, 7-10 November 2006*



**Figure 2:**  
*Opening ceremony*



**Figure 3:**  
*Poster session*



**Figure 4:**  
*Profs S. Idelsohn, X. Oliver & C. García*



**Figure 5:**  
*Lecture by R. Lohner*

AMCA, the Argentinian Association for Computational Mechanics announces the ENIEF 2006: XV Congress on Numerical Methods and their Applications, to be held at Santa Fe, Argentina, on November 7-10, 2006.

The local organization was given to the International Center for Computational Methods in Engineering (CIMEC), belonging to INTEC, which is an institute of the National University of Litoral (UNL) and the National Council for Scientific and Technological Research (CONICET), of Argentina.

The first ENIEF Congress took place in 1983. Since then fourteen ENIEF and eight MECOM (Argentinian Congress on Computational Mechanics) has been organized by AMCA.

### **Topics**

The conference topics include application of numerical methods in engineering problems, among them: Solid and fluid mechanics; Heat and mass transfer; Structural analysis; Bioengineering; Multiphysics problems, Multiscale modeling, Mesh generation and error estimation, Industrial and environmental applications; Mathematical foundations; Inverse problems and optimization; Software development; High performance computing.

### **Location**

Santa Fe is one of the historic cities of Argentina. It was founded in 1573 by the Spanish conqueror ("Adelantado") Juan de Garay, having at present some 400,000 inhabitants. Several examples of colonial architecture can still be seen like the "Convento de San Francisco", with its remarkable museum and church. In front of them stands the important "Museo Histórico Provincial". The ruins of "Cayastá", are located at the place of the first foundation of this city, 80 km far from the present location. Santa Fe is surrounded by water (rivers and lagoons) and near the Paraná River, one of the broadest and longest rivers of the world. Sports, games, and social activities, are mainly related to rivers, including fishing. Fish is a well-known food specialty of the city.

### **Student Paper Awards**

Following what was initiated in ENIEF 2004, a Poster Session will be organized for undergraduate students with awards for the best papers.

### **Instructions and deadlines**

Participants should submit a one page abstract not later than April 15, 2006. Full papers will be received by July 15 and submitted to a reviewing process to be included in the proceedings. Submissions are accepted in Spanish, Portuguese and English.

### **Information**

Web: <http://www.cimec.org.ar/enief2006>  
E-Mail: [cimec@ceride.gov.ar](mailto:cimec@ceride.gov.ar)