Every 3 years Barcelona celebrates the EXPOQUIMIA, the largest chemical exhibition in southern Europe. On this occasion a major Conference on Instrumental Analysis (Jornadas de Análisis Instrumental, JAI) is held that takes advantage of the synergies generated by the simultaneous presence of scientists and technical staff working in analytical chemistry, commercial exhibitors of instrumentation, and companies whose main activities are related to chemistry.

From October 21 to October 23, 2008, JAI celebrated its 12th anniversary. It was organized by the Spanish Society of Chromatography and Related Techniques (SECyTA), the Society of Analytical Chemistry, the Society of Mass Spectrometry (SEEM), and Society of Proteomics and Optics, the Society of Applied Spectroscopy, and the Association of Environmental Sciences and Techniques. The conference was attended by 580 registered participants. A total of 444 communications were given, 71 in oral form and 373 as posters. A large proportion of these covered environmental applications (122) and food quality and safety (107). Others were related to developments in instrumental analysis (41), pharmaceutical products (21), clinical analysis (21), metal speciation (17), chemometrics and theoretical developments (12), nanotechnology (10), and several other topics.

In addition, interesting lectures were given by invited speakers such as Kurt Wüthrich, a Nobel laureate in chemistry (2002), from the Scripps Research Institute (La Jolla, California, USA) and the Institute of Molecular Biology and Biophysics (ETH Zürich, Switzerland), Yoshihiko Baba from the Plasma Nanotechnology Research Center of Nagoya University (Japan), Detlef Günther from the Institute of Inorganic Chemistry (ETH Zürich, Switzerland), Philip J. Marriott from the School of Applied Sciences of RMIT University (Melbourne, Australia), and Cameron McLeod from the Centre for Analytical Sciences of the University of Sheffield (UK).

Several awards were given to the participating students. There were 11 best poster prizes, some of them for specific subjects and others without topic restriction. As customary during previous JAI meetings, Analytical and Bioanalytical Chemistry was present and two ABC poster prizes (on bioanalytics and on chemical speciation) were awarded on behalf of the journal. There were also two awards for the two best oral communications in chromatography (awarded by SECyTA) and for the two best papers in mass spectrometry (awarded by SEEM).

The special issue is a collection of a few of the presentations given at the 12th JAI conference, devoted to instrumental analysis, for example, gas chromatography–mass spectrometry (GC-MS) and liquid chromatography–mass spectrometry (LC-MS) applications to determinations of trace organic compounds in environmental samples and technical formulas. Applications of GC-MS, LC-MS, and selective electrodes to the analysis of drugs and metabolites in human samples are covered. Studies of atomic fluorescence spectrometry for total determinations and speciation of hydride-forming elements in garlic still show continuing...
interest in trace element speciation analysis. The synergic selectivity afforded by the combination of room temperature phosphorescence detection and molecularly imprinted polymer recognition is described to develop a convenient carbaryl pesticide optical sensor. Finally, flow-injection analysis hyphenated with liquid-core waveguides was applied to develop cleaner analytical tools for water contamination. We hope that the readers of *Analytical and Bioanalytical Chemistry* will enjoy reading these contributions.

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