Mass spectrometry: Fifth meeting of the Spanish Society of Mass Spectrometry (SEEM)

José M. Vadillo · Damià Barceló

Published online: 1 February 2012

© Springer-Verlag 2012

Keeping its biannual pattern, the Spanish Society of Mass Spectrometry (SEEM) celebrated its fifth meeting in the town of Málaga, capital of the Sunny Coast, from 11 to 14 April 2011. If the classic sentence “the ghosts of the past survive in the uncertainty of your future” applies in many vital situations, when it comes to organizing a scientific meeting, the success of previous meetings is a heavy load hanging around the organizer’s neck. For this particular conference, the outstanding organization and excellence of the work reported at previous meetings (Madrid 2002, Barcelona 2004, Oviedo 2006, and Castellón 2009) were additional weights to the difficult enterprise of fulfilling expectations. Luckily, the gracious advice of the Board of Directors of SEEM, the impressive work of the secretary and vice-president of the organizing committee (Helena Téllez-Lozano and Alegría Carrasco-Pancorbo), and the excellent logistic support of Proyectos, Incentivos y Congresos were key factors in the final success of the meeting.

Despite its youth (SEEM was officially established in 2000 during the International Mass Spectrometry Conference organized by Emilio Gelpí in Barcelona) and the dissemination of the mass spectrometrists community in Spain among diverse scientific societies (Society of Chromatography and Related Techniques; Spanish Society of Analytical Chemistry, Society of Applied Spectroscopy, Society of

Proteomics, and the Royal Society of Chemistry), the conference has grown significantly in delegates (from academia, public/private laboratories, and instrumentation companies) and currently has a national reputation as the meeting point of mass spectrometry in Spain to foster discussions, exchange experience, and improve knowledge with colleagues that share a common interest in the crazy idea of chasing ions in the gas phase. In this direction, most important were the efforts that SEEM made in helping young researchers to attend the meeting at zero cost in the belief that the mutual interaction of seniors and juniors is the only way to provide the relaxing and potential-free surface where the spark of science begins.

The conference was attended by more than 150 scientists, including about 50 young researchers (Ph.D. students and postdoctoral researchers). The scientific program was opened on the evening of April 11th with a single plenary lecture given by Professor María Teresa Galcerán (Universidad Autónoma de Barcelona, Spain), one of the most relevant scientists in Spain, on the use of mass spectrometry in analytical chemistry. Her talk, entitled “LC–MS tools for environmental and food analysis” provided a beautiful view (with many surprising examples) of the power of LC–MS in the complex context of food and environmental analysis. After her captivating talk, the attendees had the chance to enjoy an open-air mixing party under a beautiful and cloudless sky and a warm temperature.

The conference continued for two and a half days with three more exceptional plenary speakers. Akos Vertes (George Washington University, USA) shared with us the exciting world of mass spectrometry of cells and tissues by the combination of tuneable mid-infrared lasers for spatially localized sampling followed by atmospheric-pressure ionization mass spectrometry. Olev Mayboroda (Leiden University Medical Centre, the Netherlands) with an intriguing title for his talk (Metabollomics: the art of possible), took

J. M. Vadillo
Department of Analytical Chemistry, University of Málaga,
29071 Málaga, Spain

D. Barceló (✉)
Catalan Institute for Water Research (ICRA),
Parc Científic i Tecnològic de la Universitat de Girona,
Pic de Peguera 15,
17003 Girona, Spain
e-mail: dbcqam@cid.csic.es

the risk of showing (virtuously) the need for techniques other than mass spectrometry (particularly NMR spectroscopy) to solve problems in the complex world of proteomics. Finally, Bert van Vabel (Oro University, Sweden) explored with the audience the tricky problem of persistent organic pollutant analysis and the role of mass spectrometry and new ion sources to solve the problem.

The invited lecturers covered different aspects of atomic/molecular mass spectrometry in different niches. David McPhail (Imperial College, London, UK) summarized applications of ion microprobes with nanometric resolution in the Materials Sciences. Jordi Segura (Antidoping Control Laboratory, Barcelona, Spain), one of the most relevant worldwide names in dope-control analysis, provided a fine overview of the key role of MS in drug testing and the extreme difficulties of this particular field. Felix Hernández (University Jaume I, Castellón, Spain), a pioneer in the establishment of good laboratory practice in a university research laboratory in Spain, shared with us his particular vision ten years after starting this complex (but rewarding, as was apparent from his talk) experience. María Montes (University of Oviedo, Spain), one of the most active researchers in the amazing and interdisciplinary world of metallomics, presented a dynamic talk on the applications of ICP–MS in the monitoring of new clinical biomarkers. Luis Bañares (Universidad Complutense, Madrid, Spain) described the historical development of time-of-flight analyzers (with examples and slides of the seminal papers) to illustrate the modern uses in experimental physical chemistry in state-resolved reaction dynamics ion imaging studies. The last invited speaker, Albert Soler (Universidad de Barcelona, Spain) closed the conference with the always trendy topic of isotopic analysis in groundwater pollution studies. In addition, 28 other oral presentations and 80 posters were also presented during the conference. Also remarkable were the seven oral scientific presentations given by mass spectrometry instrumentation companies.

The pleasant venue for the meeting—a central hotel in nearby downtown—and the enjoyable social events (the mixing cocktail at the opening, and the conference dinner celebrated in a open-roof restaurant by the beach) clearly complemented the symposium.

We appreciate ABC very much for putting their trust again in the scientific level of mass spectrometry in Spain and giving us the chance to include some of the works presented during the conference within this special issue.

José Miguel Vadillo is Associate Professor at the Analytical Chemistry Department of the University of Málaga (Spain). He graduated in Biology at the University of Navarra and defended his PhD in Analytical Chemistry in the topic of laser-induced breakdown spectroscopy at the University of Malaga under the supervision of J.J. Laserna. After a Fulbright Fellow post-doc period at Richard Zare's laboratory at Stanford University, he was recruited with a Ramón

and Cajal research contract to the University of Malaga. His research interests mainly focus on the use of optical and mass spectrometry microprobes for direct condensed-phase analysis.

Damià Barceló Cullerés is Research Professor of the Scientific Research Council (CSIC) of the Government of Spain, at the Institute of Environmental Assessment and Water Research (IDAEA), Barcelona, Spain, and Director of the Catalan Institute for Water Research (ICRA). His fields of specialization include water quality assessment and management; fate and behaviour of emerging contaminants in surface waters, wastewaters, and groundwater; and analysis, fate, and risk of nanomaterials in the environment.

He has directed over thirty PhD students, and is regularly invited to hold short and continuous education courses at different universities, international institutions, and PITTCO. Since December 2009 he has been Visiting Professor at King Saud University, Riyadh, Saudi Arabia. In 2007 was awarded the King Jaime I Prize for the Protection of Nature by the Generalitat of Valencia, Spain.