

Dr Antonio Segura Carretero: is a full professor in the Analytical Chemistry Department of the University of Granada (Spain) and Coordinator of Research of the CIDAF (Research and Development Centre for Functional Food).

After defending his doctoral thesis in 1996 (Extraordinary Doctoral Award), earned a post as a full-time associate professor in the Analytical Chemistry Department of the University of Granada, taking on a full teaching load plus research and management duties. In the next three years, during the summer, he stayed three times, for four months each, at: the University of Córdoba with Dr Valcárcel and Dr Rios, where he began analytical studies using capillary electrophoresis; at the University of Oviedo within the framework of the European Project MEMOSEA; and at the University of Plymouth with Dr Paul Worsfold, delving into the development of luminescent methodologies. In this same period, he was developing three lines of work (molecular luminescence, chemical sensors, and separation techniques) which have constituted the foundation of his research CV within the framework of the new research group which have been financed with successive projects and/or contracts in which he was/is the main researcher.

In addition to participating in all the phases of incubation, execution, and conclusion of 40 projects and 35 research contracts, fundamental in the development of the research group that began in 1996, he has been the main researcher of 30 research projects that have won competitive national awards (the first beginning in 1999) and in 30 contracts, all of research transfer. The research conducted has had not only a pure nature but also has included applied aspects, particularly in recent years through collaboration with major companies of different sectors (e.g. Cervezas Alhambra S.L., Bruker Daltonics, Verbionat, Innofood, Oleoestepa, Maeva). In fact, continuously since 1999, he has directed projects as the main researcher (currently two projects of excellence awarded by the regional government of Andalusia and three at the national level in Spain) as well as several contracts (currently four with the Port of Authority of Motril, Maeva, and Oleoestepa) with an array of companies with which he has maintained on-going relations as a scientific consultant at different levels, notably Bruker Daltonics regarding mass spectrometry applied to bioactive compounds, Cervezas Alhambra S.A., and LAB S.L. in setting up applied analytical methodologies.

Notably, as a result of this research direction, in 2001 he earned the Young Researcher Award in Analytical Chemistry of GRASEQA, the Andalusian Society of Analytical Chemists.

He has been the director of all the research lines which have been developed and which have attained international recognition especially in the Analysis of Bioactive Compounds and Metabolomic Studies (collaborating with the Oncology Institute of Catalonia and Reus Hospital). Today, he continues to collaborate with a high number of researchers both on a national as well as an international level, as reflected in the different projects and publications that have been completed or are under way: e.g. University of Bologna (Italy), Technological Institute of Graz (Austria), Ionian University (Greece). Currently, he is the coordinator of the Leonardo Student-Exchange Program between the University of Bologna and the University of Granada.

In addition, he has had the opportunity to conduct research with varied analytical techniques (especially electrophoretic separation techniques coupled with different detection and chromatographic systems, LC and nanoLC; and, recently, with time-of-flight ion-mass spectrometry with nuclear magnetic resonance). The experience acquired and the success

achieved in instrumental development (the activity of analytical chemists developing new instrumentation is still scant in Spain, compared with other countries where the development of analytical instrumentation is strongly encouraged and supported) extends to the field of nanotechnology (e.g. analytical synthesis and use of nanoparticulate materials in sensors) and the field of metabolomics (e.g. pharmacokinetics of bioactive compounds in both *in vitro* and *in vivo* models).

Also, the continuity of his research work (three six-year evaluation periods-20 years) are reflected in the number of publications and presentations at congresses. In particular, of the 260 works published in indexed journals, 230 fall within the first third of the JCR within its respective areas of knowledge and of these more than 150 are in the upper 10%.

Finally, the quantity and variety of congresses is reflected in more than 450 communications in the form of posters and 150 oral presentations and speaking invitations, with continuous personal participation in many cases.

In terms of teaching, he has taught for 16 academic years (three five-year teaching evaluations) as a full-time professor of Analytical Chemistry (two as full professor). The teaching has been divided into different levels (first and second cycle, doctoral and university-extension courses) and involving different degrees and faculties due to the inter-faculty nature of the Analytical Chemistry Department. In several cases, he has taught certain courses for the first time in a new study plan of the University of Granada, both for the Bachelor's Degree in Chemistry as well as in Pharmacy and Fine Arts, within the degree of Restoration, e.g. "Analytical Chemistry", Instrumental Analytical Chemistry I", Experimentation in Analytical Chemistry I", "Chemical Analysis", and Chemical Nature of Materials and Coatings". Among other courses, he has also taught the Introduction to Experimentation in Analytical Chemistry II and Chemistry. Thus, he has participated in teaching five doctoral courses in three different lines: luminescence and capillary electrophoresis for the analysis of bioactive compounds and pesticides (during the last four years the doctoral programmes in which he participated within the Doctoral Programme of Quality of Mention by the MEC and one of these was inter-university) and currently is responsible for two research lines of the Master's in Chemistry of the University of Granada while teaching the course of Bioanalysis.

Within this framework of quality of teaching, it bears highlighting that, in accordance with the Teaching-Assessment Certificate of the University of Granada, the evaluation has been excellent in the courses in which information is available. Furthermore, in an effort to maintain a high level of teaching quality and to adapt the courses to new technologies as well as to go deeply into the implications of EEES, he regularly attends courses designed to bring professors up to date, offered by the Vice-Rectorate of new technologies and quality. In addition, he has developed two projects of teaching innovation and has been a member of the commission of adaptation to the EEES in the Bachelor's degree of Fine Arts.

Within the sphere of teaching, he has co-directed 22 doctoral theses, in the different research lines. Of these, 20 theses (each have given rise to seven scientific publications in major indexed journals), 12 have been Doctorates of European Mention, and two have won the San Alberto Magno Award. Currently, he is co-directing 6 doctoral theses in different phases. He has been the co-director of 40 dissertations (including Diploma for Advanced Studies and Master's) and has co-tutored eight work plans in the Master's in Chemistry.

Also, he has been the editor of two books and has co-authored 23 chapters in different monographs both in Spanish and English, notable: *Beer in Health and Disease Prevention, Methods and Protocols*, Volume 1: *Optical-Based Detectors*; and *Olives and Olive Oil In Health and Disease Prevention*.

Finally, his teaching has been complemented by inter-university and international courses as well as with the organization of several accredited elective university-extension courses, including three presentations of the Course of Expert in Functional and Nutraceutical Food.