

SHORT CV OF PROF. MIGUEL VALCÁRCEL

PREAMBLE

His professional activities during more than 40 years have focused on higher education, scientific and technical research, academic, scientific and public service management, as well as on the transfer of knowledge, particularly in the realm of Analytical Chemistry with a view to obtaining more (bio)chemical information of a higher quality about objects and systems by using increasingly less material, human, economic and time resources, and with gradually decreasing hazards for the operator and the environment.

PRESENT SITUATION

Full Professor of Analytical Chemistry at the University of Córdoba (Spain) since 1976.
Department of Analytical Chemistry. Marie Curie Building Annex. Campus of Rabanales.
University of Córdoba. 14071 Córdoba (Spain).
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PERSONAL DATA

- Place and date of birth: Barcelona, 4 May 1946.
- Marital status: Married, with two children (37 and 35 years old) and three grandchildren.
- NGO membership: An active member of “Manos Unidas” (UN) and “Intermon-Oxfam”.
- Hobbies: Sports (cycling, playing tennis and being an unrepentant supporter of the Barcelona soccer team). All sorts of movies. Historic novels. Music (a passionate lover of Mozart's).

HIGHER STUDIES AND PROFESSIONAL OFFICES

- BSc degree (1969) and PhD degree (1971) in Chemistry from the University of Seville.
- Pre-doctoral grantee, deputy assistant professor, and temporary and definitive assistant professor at the University of Seville (1969–1975).
- Associate Professor of Analytical Chemistry at the Autonomous University of Barcelona (1975–1976).
- Full Professor of Analytical Chemistry in the University of Córdoba (Spain) since 1976.
- Research stays at the Inorganic Research Laboratories of Bayer (Leverkusen, Germany, 1969 and 1970), the Department of Chemistry of the Oklahoma State University (USA, 1985) and the Department of Pharmaceutical Chemistry of the University of Bradford (UK, 1989).

UNIVERSITY TEACHING

A substantial part of his human profile. For more **than 40 years**, he has strived to institute innovative formulae in the teaching–learning process of Analytical Chemistry in Higher Education. He has published 8 textbooks for undergraduates in Spanish and 2 in English:

- Principles of Analytical Chemistry, Springer, 2000.
- Co-editor of the 2nd edition of the textbook “Analytical Chemistry” (Wiley–VCH).

He has worked hard to increase the appreciation of doctoral studies in Spain.

Teaching of general topics such as metrology, quality, social responsibility, etc. related to Analytical Sciences.

SCIENTIFIC AND TECHNICAL RESEARCH

- **Master research lines:**
 - 1) Automation, miniaturization, simplification and quality in (bio)chemical measurement processes and, recently,
 - 2) Analytical nanoscience and nanotechnology from 1994 (first paper in Anal. Chem.).
- **Principal researcher of 25 R&D projects funded by Spanish Central and Regional Governments**
- **Principal researcher of 12 R&D projects funded by international bodies** such as the USA–Spain Joint Committee (1), European Union (6), and the Spanish Government in conjunction with those of Germany, Austria and the United Kingdom (5).
- **Supervisor of 76 PhD theses.** Twelve of the doctors are now full professors at different universities.

SCIENTIFIC PUBLICATIONS

- **Author or co-author of more than nine hundred papers** published in scientific journals. 95% indexed in international data bases. A total of 70 have been published in Analytical Chemistry (ACS).
- The most **salient scientometric figures** for his papers are as follows (ISI Web of Knowledge):
 - 875 articles in peer-reviewed journals (98% with citations).
 - 15.107 citations.
 - 12.230 citations from other authors (self-citations excluded).
 - 17.57 average citations per article.
 - *h* (Hirsch index) = 51.
- **32 plenary lectures** (7 of which were opening lectures) and **38 invited or keynote lectures** at international meetings held in USA, UK, Germany, France, Australia, Japan, Belgium, The Netherlands, among other countries. Three hundred oral communications and posters additionally contributed to a number of meetings. A member of the scientific committees of 32 international meetings.

- Two hundred lectures as guest speaker in Spain and fifty at international institutions.
- Author or co-author of the following **eight scientific books in English**:
 - Automatic Methods of Analysis (Elsevier)
 - Flow Injection Analysis (Wiley).
 - Non-chromatographic Continuous Separation Techniques (Royal Society of Chemistry, UK).
 - Flow-Through (Bio)Chemical Sensors (Elsevier).
 - Supercritical Fluid Extraction (Springer).
 - Metrology in Chemistry (OOPEC).
 - Analysis and Detection in Capillary Electrophoresis (Elsevier).
 - Gold Nanoparticles in Analytical Chemistry (Elsevier).
- Co-author of **22 chapters in research monographs in English**.

R&D MANAGEMENT IN SPAIN

- President of the Doctoral Committee of the University of Córdoba (1995–1998).
- Director of the Andalusian Institute of Fine Chemistry (Andalusian Regional Government) (1996–2011).
- Director of the Research and Scientific Cooperation Office of the University of Córdoba (1998–2002).
- Member of the Chemistry Committee of CNEAI (National Council for the Individual Assessment of Research Activities) (1990).
- Coordinator of the “Chemistry Area” of ANEP (Spain’s National Agency for Assessment and Prospection of Research) (2003–2005).
- Coordinator of the Teacher Assessment Program in ANECA (National Agency for Certification and Accreditation) (2005–2007).
- Coordinator of the ad-hoc commission for the establishment of a new Agency for Evaluation of R&D&I in Spain (Ministry of Education and Science) (2006–2007).
- President of the Commission of Evaluation of Scientific Research in the Castilla–León Agency, since 2009 until now.

INTERNATIONAL SCIENTIFIC OFFICES

- *Chairman of the Division of Analytical Chemistry of the Federation of European Chemical Societies (1998–2005).*
- *Member of the Study Group on “Education” of the DAC-FECS during ten years.*
- Spain's representative in the Management Committee of the European Union’s SMT Programme (BCR) (1988–95).
- Member of the High-Level Expert Group of the Growth Program (European Union) (1999–2003).
- Member of the Executive Committee of EURACHEM (1982-1999).
- Associate Editor of the journal Trends in Analytical Chemistry (impact factor 7,311, 2013) since 1999.
- Associate Editor of the “Encyclopedia of Analytical Chemistry” since 2008.
- Member of the Editorial Board of the scientific journals: The Analyst (RSC), Talanta (Elsevier), Analisis (Elsevier), Analytical Biochemistry and Chemistry (Springer).

- Member of the jury of the Merck International Award in 1998, 2000, 2002, 2004, 2007 and 2009.
- Member of IUPAC's Commission V (1988–1994).

NATIONAL ACADEMIC AND SCIENTIFIC AWARDS

- Extraordinary Graduate (1970) and Doctorate (1972) awards, and “Ciudad de Sevilla” Award to outstanding studies (1971).
- “Maimonides Award” for Scientific and Technical Research (Andalusian Regional Government, 1992).
- “Solvay Award” for Chemical Research (CEOE, 1997).
- Member of the Royal Academy of Mathematical, Physical and Natural Sciences of Madrid (2010).
- National Award “Enrique Moles” in Chemical Sciences and Technologies (Ministry of Education and Science, 2005).
- “Averroes Gold Medal” to a scientific career (2006).
- Citizen of the Year in Córdoba (2005).
- Doctor "honoris causa" by the University of Valencia (2011).

INTERNATIONAL SCIENTIFIC AWARDS

- Fellow and Chartered Chemist of the Royal Society of Chemistry (UK, 1986).
- “Enrich Planquette Award” (Austrian Society of Chemistry, 1996).
- Gold Medal of the University of Warsaw (2000).
- Medal of the Portuguese Society of Chemistry (2000).
- “Robert Boyle Medal” of the Royal Society of Chemistry (UK) (2004).
- DAC-EuCheMS Award (2015).