



CURRICULUM VITAE

Surname: Martínez López **Name:** Genoveva **Nationality:** Spanish

Sex: Female **Date of birth:** December 24, 1950

Passport number: 05103994

Education:

- B.S. Physics 1973, University Complutense of Madrid (UCM), Spain
- M.S. Physics 1974, UCM
- Ph.D. Physics 1980 (extraordinary prize awarded), UCM, Spain

Position: Full Professor at the Department of Física Aplicada III, UCM

Address: Facultad de Ciencias Físicas, UCM, Avda. Complutense, 28040-Madrid, Spain.

Specialization/Expertise:

- Numerical computation of electromagnetic fields (BEM, FDM).
- Charged particle optics (electrostatic lenses, Wien filters, hemispherical deflector analyzers, Nier type ion sources, high energy ion microprobes)
- Interaction of electromagnetic fields with cells (ion channels, dielectrophoresis)

Teaching:

Undergraduate courses:

- Physics Laboratory (1st year physics requirement)
- Introductory Physics (1st year biology and chemistry requirements)
- Electromagnetism (1st – 3th year physics requirement)
- Relativistic Electrodynamics (4th year physics requirement)
- Dielectrics (4th year physics requirement)
- Electric Measurements Laboratory (4th year physics requirement)
- Numerical Analysis and Programming (4th year physics requirement)
- Physical Electronics (5th year physics requirement)
- Antennas (4th year Electronics Engineering requirement)
- Microwaves Laboratory (4th year Electronics Engineering requirement)
- Electromagnetic Compatibility (4th year Electronics Engineering requirement)
- Projects (5th year Electronics Engineering, as advisor)

Postgraduate courses:

- Asymptotic and Numerical Methods in Electromagnetism
- Electrical effects in Biological Systems
- Bioelectromagnetism
- Plasma Electrodynamics
- Methods of numerical simulation in Electronics and electromagnetism
- Radiation effects on Electronic Materials and Biological Systems

Stay at research centers:

- University of Manchester: Visiting research fellow, from October-1981 to January-1982
- Universität Frankfurt am Main: Gastwissenschaftler, from October-1999 to September-2000.
- Short stays at the universities of York and Bucharest.

Scientific Consulting

- Contract with Jeol Ltd., Japan, from June-2000 to May-2005; 3 patents registered, 40 reports delivered.
- Contract with the National Institute of Metrology, Spain, from June to December 2004.

Publications:

- 74 articles with peer review (55 in major international journals, 15 in conference proceedings, 4 invited chapters in books/series)
- 40 contributions to international conferences
- 20 talks and presentations (6 invited at international conferences/workshops)

Financed projects Education/Research

- 20,000 € Innovative Education (UCM, 2005-2007)
- 90,500 € Development Cooperation with Univ. León, Nicaragua (UCM, 2007-2010)
- 15,000 € Integrated Action with Univ. York (Spanish-British bilateral coop., 1992-1993)
- 38,640 € FP6 project QLK2-CT-2001-70561RASTUD (EU, 2002-2003)
- 79.580 € BFM 2003-04648 (Ministerio de Ciencia y Tecnología, 2003-2006)
- 32,000 € Ref. 03/0295, (Ministerio de Sanidad y Consumo, 2003-2006)
- 120,000 € FIS2006-00702, (Ministerio de Educación y Ciencia, 2006-2009)
- 200,000 € FIS2009-10245, (Ministerio de Ciencia e Innovación, 2010-2012)

Hobbies: swimming, hiking, folk music, painting, literature, theater.