

CURRICULUM VITAE (Summary) Prof. Pablo Artal

Personal data:

Surname: ARTAL First name: PABLO

Date of birth: June 12, 1961; Citizenship: Spaniard;

Affiliation and Official Address:

Laboratorio de Optica, Departamento de Física, Universidad de Murcia,

Centro de Investigación en Optica y Nanofísica (CiOyN),

Campus de Espinardo, 30071 Murcia, Spain. Phone (voice): 34968-367224; Fax: 34968-367667;

E-mail: pablo@um.es; http://lo.um.es

Summary:

Pablo Artal was born in Zaragoza (Spain) in 1961. He received his M.Sc. degree in Physics from the University of Zaragoza, Spain, and the Ph.D. degree in Physics (Optics) from the University Complutense of Madrid in 1988. He was a post-doctoral fellow at the Institut d'Optique, Orsay, France in 1989-90 and a senior researcher at the Instituto de Optica (CSIC) in Madrid from 1990 to 1994. Since 1994, he is full Professor of Optics at the University of Murcia, Spain. He spent several periods doing collaborative research in laboratories in Europe, Australia and USA. Prof. Artal was secretary of the Spanish Optical Society (SEDO) from 1990 to 1994; associated Dean of the University of Murcia Science Faculty from 1994 to 2000 and Director of the Physics Department at Murcia University from 2001 to 2003. From 2004 to 2007 he was in charge of the reviewing grant panel in Physics at the Spanish Ministry of Science. Since 2006 is the director of the Center for Research in Optics and Nanophysics at Murcia University. He is a member of SEDO, EOS, ARVO and SPIE. He was elected fellow member of the Optical Society of America (OSA) in 1999. Prof. Artal received a number of national and international research awards. Prof. Artal is the founder and director of the Laboratorio de Optica at the University of Murcia with about 20 co-workers. He has published more than 120 reviewed papers (with more than 3000 citations), presented more than 100 invited talks in international meetings and around 120 seminars in research institutions around the world. He has been funded by more than 4 Million € grant money since 1993 and is also a co-inventor in a number of international patents.

Dr. Artal's research interests are centered in the optics of eye and the retina and the development of optical and electronic imaging techniques to be applied in Vision, Ophthalmology and Biomedicine. He has pioneered a number of highly innovative and significant advances in the methods for studying the optics of the eye and has contributed substantially to our understanding of the factors that limit human visual resolution. In addition, several of his results and ideas in the area of ophthalmic instrumentation over the last years have been introduced in instruments and devices currently in use in Vision and Ophthalmology. During the last years, he built from scratch an Optics Laboratory in Murcia University (south-est Spain), a location without any previous tradition in Optics. He was instrumental to continuously attract external financial support from government and private international companies. Dr. Artal is a pioneer in exploring the human eye with new technologies and designed new ways of optical corrections that will improve vision in patients. Several of his proposed solutions and instrument are currently in use in the clinical practice. He is dedicated to the excellence in basic research to be transferred to real life applications.

Education (Academic Record):

1984: "Grado de Licenciado en Física" (M.Sc., equivalent in Physics), Univ. de Zaragoza, Spain.
1988: "Doctor en Ciencias Físicas" (Ph.D. in Physics), Univ. Complutense de Madrid, Spain. (Ph.D. advisor: Dr. J.Santamaría).

Career (Research Record):

- 1983-84: Laboratory Assistant. Optics Department, Universidad de Zaragoza, Spain.
- 1985-88: Fellow of the Spanish Ministry of Science. Instituto de Optica (CSIC), (National Research Council), Madrid, Spain.

June-October 1988: Visiting scholar. Physiological Laboratory, University of Cambridge, UK. (F.W. Campbell's laboratory).

- 1989-September 1990: Post-doctoral fellow. Institut d'Optique, Universite de Paris-Sud-CNRS, Orsay, France. (P.Chavel's laboratory).
- October 1990-February 1994: Senior Scientific Researcher (permanent position). Instituto de Optica, Consejo Superior de Investigaciones Científicas (CSIC), Madrid, Spain.
- 1998-99: Visiting professor. Center for Visual Science, University of Rochester (USA).
- March 1994-present: Full Professor of Optics (permanent (tenured) position). Laboratorio de Optica, Departamento de Física, Universidad de Murcia, Murcia, Spain.
- Short-term (over a month) visiting professor appointments:
 - March 1993: Visiting scholar. University of Newcastle, UK.
 - October 1994: Visiting professor. University of Michigan, USA.
 - December 1996: Visiting professor. Dept. of Physics, University of Heidelberg, Germany.
 - July-August 2000: Visiting professor. Queensland Univ. of Technology, Brisbane, Australia.
 - July-August 2003: Visiting professor. National University Ireland, Galway, Ireland.
- Short visits to many University and research laboratories in Spain, Europe USA, Australia and Latin America.

<u>Specialization:</u> Optics (Physics), Physiological and Visual Optics; Vision; Image Processing; Adaptive Optics, Biomedical Optics.

<u>External funding:</u> Since 1994 Prof. Artal obtained more than 4 Million € of funding from different external agencies and privates companies. The following agencies and companies funded P.Artal's research during the last years: Spanish Ministry of Education and Science; European Union, AMO (Holland & USA), CIBA Vision (USA), ESSILOR (France), Calhoun Vision (USA), Visiometrics (Spain). *(List of awarded grants available upon request)*

Achievements:

- Over 100 publications in international scientific journals (More than 3000 citations in ISI).
- Over 180 communications presented in international conferences.
- Over 100 *invited* presentations in international meetings and conferences.
- Over 100 invited seminars in Universities and research institutions.
- Several national and international patents.
- H-index = 32 (32 publications with more than 32 citations).

Miscellaneous:

- Spanish National Prize 1989 for research in Optics.
- Organizer of five international short-courses and research symposiums.
- Organizer of several international workshops in Vision & Optics.
- General Secretary of the Spanish Optical Society (SEDO) (91-94).
- Associated Dean, Science Faculty, Universidad de Murcia, Spain (94-00).
- Editor of the Journal of the Optical Society of America A (2006-present).
- Editor of the Journal of Vision (2004-present).
- Member of program committees in several international conferences.
- Guest editor for the special issues of the Journal of the Optical Society of America: Ocular aberrations and their correction (1998); Aging and Vision (2001).
- Guest editor for the special issue of the Journal of Vision on Optics (2003).
- Member of the international editorial advisory board of the journal Ophthal. & Physiol. Optics.
- Frequent reviewer for most of the international journals of Optics and Vision and Spanish and international agencies.
- Member of Physics review panel of Ramon y Cajal program (2001 & 2005).
- Member of the Spanish national panel for 2004-07 Research plan in Physics.
- Member of the external advisory board of the NSF-Center for Adaptive Optics (UCSC)
- Director of the Physics Department (University of Murcia). 2001-2003.
- Elected member (Academico) of the "Academia de Ciencias de la Region de Murcia). 2003
- Chair of the Physics grants reviewing panel in the Spanish Ministry of Education (2004-6).
- Director of the Centrer for Research in Optics and Nanophysics (CiOyN), University of Murcia (2006-)
- Fellow of the Optical Society of America since 1999.