

DEMOGRAPHIC INFORMATION**NAME:** Susana Marcos Celestino**ADDRESS:** Instituto de Optica, CSIC, Serrano 121, Madrid 28006**PLACE OF BIRTH:** Salamanca, SPAIN. **DATE OF BIRTH:** September 25, 1970**ACADEMIC RECORDS AND HONORS****EDUCATION AND TRAINING****Education**

1987/88-1991/92	B.S. Physics	University of Salamanca, Spain
1992	M. Sc. Applied Physics	University of Salamanca, Spain
1996	Ph. D. Visual Optics	University of Salamanca, Spain

Predoctoral training

1993-1996	Pre-Doctoral Fellow. Vision and Physiological Optics	Instituto de Optica, CSIC, Spain
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Postdoctoral training

1997-1999	Post-Doctoral Fellow,	Schepens Eye Research Institute. Boston, MA. USA
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ACADEMIC APPOINTMENTS

1997-2000	Research Fellow in Ophthalmology	Department of Ophthalmology. Harvard Medical School, Boston., MA, USA
1999-2005	Faculty Research Scientist	Instituto de Optica., CSICMadrid, Spain
2005	Faculty Senior Scientist	Instituto de Optica, CSIC, Spain
2006-	Professor	Instituto de Optica, CSIC, Spain
2008-	Director. Instituto de Optica, CSIC	

AWARDS AND HONORS**Fellowships**

1992	Fellowship of the Consejo Superior de Investigaciones Cientificas. Introduction to Research
1993	Research Fellowship. Universidad de Salamanca
1993-1996	Predoctoral Fellowship of the Spanish Ministry of Education and Science.
1997	Fulbright /Spanish Ministry of Education and Culture Postdoctoral Fellowship.
1997-1999	Human Frontier Science Program Long-Term Postdoctoral Fellowship
2001	Queensland University of Technology Visiting Fellowship

Awards and honors

1996	Doctoral Thesis Extraordinary Award (<i>Premio Extraordinario de Tesis Doctoral</i>). University of Salamanca, Spain.
1999	Best Paper of the Academic Year. Schepens Eye Research Institute
2001	Founders Wavefront Award (2 nd International Congress on Wavefront Sensing)
2002	Adolph Lomb Medal. Optical Society of America
2005	European Young Investigator Award (EURYI), EURHORCs-European Science Foundation
2006	EOS Fellow. European Optical Society
2007	ICO Prize. International Commission for Optics
2008	OSA Fellow. Optical Society of America

PARTICIPATION IN PROFESSIONAL SOCIETIES AND COMMUNITY SERVICES**MEMBERSHIP AND OFFICES IN INSTITUTIONS AND PROFESSIONAL SOCIETIES****Offices**

1999-2001	Vice Chair of the Applications of Vision Science Technical Group, Vision and Color Division, Optical Society of America.
2001-2003	Chair of the Applications of Vision Science Technical Group, Vision and Color Division, OSA
2004-2008	President of the National Committee of Visual Sciences, Spanish Optical Society
2003-	Chair. Department of Imaging & Vision, Instituto de Optica, CSIC
2008-	Member of the Visual Psychophysics and Physiological Optics Committee, ARVO

Memberships

- 1993- Spanish Optical Society (*Sociedad Espanola de Optica*, SEDO)
 1994- Association for Research in Vision and Ophthalmology (ARVO)
 1997- Optical Society of America (OSA)
 1997- American Physical Society (APS)
 1998- Asociación para el Avance de la Ciencia y Tecnología en España (AACTE)
 2004 European Optical Society (EOS)

MAJOR COMMITTEE ASSIGNMENTS**Service in Scientific Societies**

- 1999 Member, Committe "Taskforce for the standarization of the eye's aberrations", Optical Society of America
 2001 Member, Committee Young Investigator Award. Optical Society of America
 2001-2004 Member of the Program Committee, "Optical Society of America Annual Meeting", Providence, RI, USA; Orlando, FL, USA; Tucson, AZ, USA
 2004, Member of the Program Committee II Topical Meeting on Physiological Optics, European Optical Society", Granada, Spain, London, UK
 2006
 2007 Member of the Edgar D. Tillyer Award Committee, Optical Society of America
 2007 OSA Representative of Aegean Summer School of Visual Optics. Optical Society of America, Heraklion, Crete
 2007- Supervisor of IOSA Optical Society of America Student Chapter at the Institute of Optics, CSIC, Madrid
 2001-2004 Member of the OSA Technical Council. Optical Society of America Annual Meeting
 2003 Co-organizer. Fall Vision Meeting Meeting, Sponsored by the Optical Society of America (Tucson, Az)
 2004 Member of the Scientific Committee. European Optical Society Topical Meeting on Physiological Optics (Spain)
 2006 Member of the Scientific Committee. 3rd European Meeting in Physiological Optics (London, UK)
 2006 Member of the Scientific Committee. VII Reunión Nacional de Óptica (Alicante, Spain). Spanish Optical Society
 2007 Chair of the Organizing Committee. Summer School of Visual Optics: from Physics to Biomedical Applications (Jaca, Spain). Spanish Optical Society
 2008- Program Committee Member Visual Psychophysics and Physiological Optics Section, Association for Research in Vision Science and Ophthalmology (ARVO)
 2008 Chair of the Edgar D. Tillyer Award Committee, Optical Society of America
 2009 Member of the EOS Fellow Committee
 2009- Founder ASETCIRC, Coordinator of Physics applied to Vision Sciences, Committee Member ASETCIRC Congress
 2010 Member of Scientific Committee. European Optical Society Topical Meeting on Physiological Optics (Stockholm, Sweden)
 2010 Member of Scientific Committee. European Optical Society Topical Meeting on EOS Topical Meeting on Advanced Imaging Techniques (Engelberg, Swizerland)
 2010 Member of Scientific Committee. International Conference of Myopia (Tubingen, Germany)

Service in Review Panels

- 2002-2008 Reviewer for European Union, (5th & 7thFrame Program), Regional Community Grants and National Grants (ANEP), Instituto de Salud Carlos III, Private Foundation Grants and European Science Foundation
 1999,2002, PhD thesis comittee member of the following Fernando Vargas Martín (Universidad de Murcia), Tobias F. Buehren (Queensland University of Technology), Catherine Jones (Queensland University of Technology), Fernando Díaz Douton , 2003, 2006 , 2007 (Universidad Politécnica de Tarrasa), Daniel Vázquez (Universidad de Santiago de Compostela), Juan Tabernero (Universidad de Murcia)
 2000, Search committee member for various positions at Consejo Superior de Investigaciones Científicas (Madrid, Spain) and Institute for Photonic Sciences, Spain (Barcelona, Spain)
 2005-2007
 2006-2009 Member of the several Review Panels for the Ministry of Education and Science (Grant study sections; Ramon y Cajal Program, Juan de la Cierva Program), Madrid, Spain
 2007 European Union Grants (7th Frame Program) Study Section, Brussels, Belgium
 2007 Member of Review Panel for "XIX Certamen de Jóvenes Investigadores", CSIC, Madrid
 2008 Member of Review Panel NIH Study Section (Gainthsburg, MD, USA)
 2007-2010 Member of Advisory Board MyEuropa Marie Curie Network

Editorial Boards

- 2002 Guest editor. Optometry and Vision Science. Special Issue: "Clinical applications of aberrations"
 2004- Member of the Board of Editors in "Vision Research"
 2006 Guest editor. Óptica Pura y Aplicada. Special Issue: "Visual Sciences Committee"

REPORT OF RESEARCH**RESEARCH FUNDING INFORMATION (SINCE 2000)****Public Funding**

2000-2001	US-Spain Science and Technology Program 2000. SERI-Instituto de Optica Imaging techniques for early diagnosis of macular degeneration	PI
2000-2002	CAM08.7/0010.1/2000, Comunidad Autónoma de Madrid, Spain Quality of Vision after cataract surgery: evaluation in patients with intraocular lenses and new perspectives	PI
2002-2005	BFM2002-02638. Spanish Ministry of Science & Technology, Spain "Role of ocular aberrations in the development and compensation of refractive errors"	PI
2003-2004	CAM08.7/004.1/2003, Comunidad Autónoma de Madrid, Spain "Optical and visual quality in patients after cataract surgery: studies of new designs of intraocular lenses (aspheric and multifocal)".	PI
2004-2005	HA2003-0170 Integrated Action Spain-Germany, Spanish Ministry of Science & Technology "Optical quality in an experimental model for myopia"	PI
2005	GR/SAL/0387/2004, CAM "Development and application of new technologies to the evaluation of cataract surgery"	PI
2005-2008	FIS2005-04382. Ministry of Education and Science, Spain. "Propiedades ópticas del segmento anterior del ojo: aplicaciones en el desarrollo y corrección de errores refractivos y presbicia"	PI
2006-2011	EURYI Award, "Physical and Technological Approaches to the understanding and correction of myopia and presbyopia"	PI
2007-2009	PETRI. PET2006-0478. Spanish Ministry of Science and Innovation. "Multifocal intraocular lenses"	PI
2008-2011	FIS2008-02065. Spanish Ministry of Science and Innovation "Optical and visual quality in ametropia, presbyopia and pseudophakia: dynamic and adaptive effects"	PI

Private Funding

2002	Carl Zeiss, Madrid, Spain Research Contract	PI
2002	Emory Vision, Atlanta, GA, USA. Research Contract	PI
2002-2009	Alcon Research Labs, Fort Worth, TX, USA. Research Contract . 6 Contracts	PI
2007-2009	AJL Ophthalmics, Alava, Spain. Research Contract (cofunded with Ministry of Science)	PI
2008-2009	Essilor, Paris, France. Research Contract	PI

BIBLIOGRAPHY**Original Refereed Publications**

1. P. Artal, S. Marcos, R. Navarro, and D. R. Williams, "Odd aberrations and double pass measurements of retinal image quality," *Journal of the Optical Society of America A*, 12, 195-201 (1995).
2. P. Artal, S. Marcos, R. Navarro, I. Miranda, and M. Ferro, "Through-focus image quality of eyes implanted with monofocal and multifocal intraocular lenses," *Optical Engineering*, 34, 772-779 (1995).
3. S. Marcos, R. Navarro, and P. Artal, "Coherent imaging of the cone mosaic in the living human eye," *Journal of the Optical Society of America A*, 13, 897-905, (1996).
4. P. Artal, S. Marcos, I. Iglesias and D.G. Green. "Optical modulation transfer function and contrast sensitivity with decentered small pupils", *Vision Research*, 36, 3575-3586 (1996)
5. S. Marcos and R. Navarro, "Imaging the foveal cones in vivo through ocular speckle interferometry: theory and numerical simulations", *Journal of the Optical Society of America A* 12, 2329-2340 (1996)
6. S. Marcos and R. Navarro, "Determination of the foveal cone spacing by ocular speckle interferometry: limiting factors and acuity predictions" *Journal of the Optical Society of America A* 14, 731-740 (1997).
7. S. Marcos, R. P. Tornow, A. E. Elsner, and R. Navarro, "Foveal cone spacing and cone photopigment density difference: objective measurements in the same subjects" *Vision Research* 37, 1909-1915 (1997) .
8. S. Marcos, S. A. Burns, and J.C. He, "A model for cone directionality reflectometric measurements based on scattering", *Journal of the Optical Society of America A* 15, 2012 - 2022 (1998) .
9. J.C. He, S. Marcos, R. H. Webb, and S. A. Burns, "Measurement of the wave-front aberration using a fast psychophysical procedure" *Journal of the Optical Society of America A* 15, 2449-2456 (1998)
10. S. Marcos, E. Moreno, and R. Navarro, "The depth-of-field of the human eye with polychromatic light from objective and subjective measurements". *Vision Research* 39, 2039-2049 (1999) .
11. S. Marcos and S. A. Burns, "Cone spacing and waveguide properties from cone directionality measurements". *Journal of the Optical Society of America A* 16, 995-1004 (1999)
12. J.C.He, S. Marcos and S. A. Burns, "Comparison of cone directionality determined by psychophysical and reflectometric techniques". *Journal of the Optical Society of America A* 16, 2363-2369 (1999).

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13. S. Marcos, S.A. Burns, E. Moreno-Barriuso, and R. Navarro, "A new approach to the study of ocular chromatic aberrations ".*Vision Research*, 39:4309-4323 (1999).
14. J.C.He, S. A. Burns, and S. Marcos, "Monochromatic aberrations in the accommodated human eye". *Vision Research* 40, 41-48 (2000)
15. S. Marcos and S.A. Burns, "On the symmetry between eyes of wavefront aberration and cone directionality". *Vision Research* 40, 2437-2447 (2000)
16. R.A. Applegate, L.N. Thibos, Bradley, S. Marcos, A. Roorda, T. Salmon, D. A. Atchison, "Reference axis selection: A subcommittee Report of the OSA working group to establish standards for the measurement and reporting of the optical aberration of the eye," *Journal of Refractive Surgery* 16, 656-658 (2000).
17. E. Moreno-Barriuso, S. Marcos, R.Navarro, S.A. Burns "Comparing laser ray tracing, spatially resolved refractometer and Hartmann-Shack sensor to measure the ocular wavefront aberration" *Optometry and Vision Science* 78, 152 - 156 (2001)
18. J.A. Mclellan, S. Marcos, S.A. Burns. "Age-related Changes in Monochromatic Wave Aberrations of the Human Eye." *Investigative Ophthalmology and Visual Science*. 42, 1390-1395 (2001).
19. E. Moreno-Barriuso, J.M. Merayo-Llolves, S. Marcos, L. Llorente, R. Navarro, S. Barbero. "Ocular aberrations before and after corneal myopic refractive surgery: LASIK-induced changes measured with Laser Ray Tracing" *Investigative Ophthalmology and Visual Science*. 42, 1396-1403 (2001)
20. S. Marcos "Refractive Surgery and Optical Aberrations". *Optics and Photonics News* 12, 22-25 (2001).
21. S. Marcos, "Optical aberrations and visual performance following standard vision correction", *Journal of Refractive Surgery*, 17, 596-601 (2001).
22. S. Marcos, S.A. Burns, P.M. Prieto, R. Navarro, B. Baraibar. "Investigating the sources of monochromatic aberrations and transverse chromatic aberrations in human eyes." *Vision Research* 41. 3861-3871 (2001)
23. S. Marcos, S. Barbero, L. Llorente, J. Merayo-Llolves, "Optical response to myopic LASIK surgery from total and corneal aberrations". *Investigative Ophthalmology and Visual Science*, 42, 3349-3356 (2001)
24. S.A. Burns, S. Marcos, A.E. Elsner, S. Bará. "Contrast improvement for confocal retinal imaging using phase correcting plates". *Optics Letters* 27, 400-402(2002).
25. S. Barbero, S. Marcos, J.M. Merayo-Llolves, and E. Moreno-Barriuso. "A validation of the calculation of corneal aberrations from videokeratography: a test on keratoconus eyes". *Journal of Refractive Surgery* 18, 263-270 (2002)
26. S. Marcos, L. Díaz-Santana, L. Llorente, J.C. Dainty. "Ocular aberrations with Laser Ray Tracing and Shack-Hartmann: does polarization play a role?". *Journal of the Optical Society of America A*. 19 1063-1072 (2002)
27. S. Barbero, S. Marcos, J.M. Merayo-Llolves. "Exploring total and corneal aberrations in an unilateral aphakic subject". *Journal of Cataract and Refractive Surgery*" 28, 1594-1600 (2002)
28. J.S. McLellan, S. Marcos, P.M. Prieto, & S.A. Burns, "Imperfect optics may be the eye's defence against chromatic blur". *Nature* 417, 174-176 (2002)
29. S. Marcos, "Are aberrations as a function of age a significant problem for refractive surgery?. *Journal of Refractive Surgery*.18, 572-578 (2002).
30. S. Marcos, "New Technology in refractive and intraocular surgeries: toward and optimization of correction? *Arch. Soc. Esp. Oftamol.* 77, 647-648 (2002). Editorial, by invitation.
31. S. Marcos, "Image quality of the human eye". *International Ophthalmology Clinics*. In press. (by invitation)
32. D.A. Atchison, S. Marcos, D.H. Scott, "The influence of Stiles-Crawford peak location on visual performance". *Vision Research* 43, 659-668 (2003).
33. L. Llorente, L. Díaz-Santana, D. Lara-Saucedo & S. Marcos, "Aberrations of the human eye in visible and near infrared illumination,". *Optometry and Vision Science* 80, 26-35 (2003).
34. C. Dorransoro, S. Barbero, L. Llorente & S. Marcos, "On-eye measurement of optical performance of Rigid Gas Permeable contact lenses based on ocular and corneal aberrometry". *Optometry and Vision Science* 80, 115-125 (2003).
35. N.J. Coletta, S. Marcos, C. Wildsoet & D. Troilo,. "Double-pass retinal image quality in the chicken eye". *Optometry and Vision Science* 80, 50-57 (2003).
36. R.A. Applegate, S. Marcos, L.N. Thibos, "Aberrometry: clinical and research applications." *Optom. Vis Sci.* 80, 85-86 (2003).
37. Thibos LN, Applegate R.A., S. Marcos, "Aberrometry: the past, the present and the future of optometry-" *Optom Vis Sci.* 80, 1-2 (2003).
38. S. Barbero, S. Marcos & I. Jiménez-Alfaro, "Optical aberrations of intraocular lenses measured in vivo and in vitro". *Journal of the Optical Society of America A*, 20, 1841-1851 (2003)
39. S. Marcos, D. Cano & S. Barbero, "The increase of corneal asphericity after standard myopic LASIK surgery is not inherent to the Munnerlyn algorithm," *Journal of Refractive Surgery* 19, 592-596 (2003)
40. L Llorente, S. Barbero, J.Merayo-Llolves & S. Marcos, "Changes in total and corneal aberrations induced by LASIK surgery for hyperopia", *Journal of Refractive Surgery* 20, 203-216 (2004)
41. D. Cano, S. Barbero & S. Marcos, "Comparison of real and simulated outcomes of LASIK refractive surgery," *Journal of the Optical Society of America A* 21, 926-936 (2004)
42. L. Llorente, S. Barbero, C. Dorransoro, D. Cano & S. Marcos "Myopic versus hyperopic eyes: axial length, corneal shape and optical aberrations," 4, *Journal of Vision* 288-298 (2004)

43. S. Marcos, S. Barbero, I Jiménez-Alfaro, "Optical quality and depth of field of eyes implanted with spherical and aspheric intraocular lenses" *Journal of Refractive Surgery*, 21, 223-235 (2005)
44. E. García de la Cera, G. Rodríguez, S. Marcos, "Longitudinal changes and optical aberrations in normal and form-deprived myopic chicks". *Vision Research*, 46: 579-589 (2006).
45. P. Rosales & S. Marcos, "Phakometry and lens tilt and decentration using a custom-developed Purkinje apparatus: validation and application of the technique". *Journal of the Optical Society of America*, 23, 509-520 (2006)
46. J.S. McLellan, P.M. Prieto, S. Marcos & S.A. Burns, "Are the eye's wave aberration random?". *Vision Research*, 46, 2009-3016 (2006)
47. E. Garcia de la Cera, G. Rodriguez, L. Llorente, F. Schaeffel & S. Marcos, "Optical aberrations in the mouse eye". *Vision Res.* 46, 2546-2553 (2006).
48. P. Rosales, M. Dubbelman, S. Marcos & R. van der Heijde, "Crystalline radii of curvature from Purkinje and Scheimpflug imaging". *Journal of Vision* 6, 1057-1067 (2006)
49. C. Dorronsoro D. Cano, J. Merayo & S. Marcos, "Experiments on PMMA models to predict the impact of corneal refractive surgery on corneal shape". *Opt. Express* 14, 6142-6156 (2006).
50. S. Marcos, P. Rosales, L. Llorente & I. Jiménez-Alfaro, "Change of corneal aberrations after cataract surgery with two types of aspheric intraocular lenses." *Journal of Cataract and Refractive Surgery* 33, 212-226 (2007)
51. A. de Castro, P. Rosales & S. Marcos, Tilt and decentration of intraocular lenses in vivo: a validation study . *Journal of Cataract and Refractive Surgery* 33, 418-429 (2007)
52. P. Rosales & S. Marcos, Customized computer models of eyes with intraocular lenses, *Optics Express* 15, 2204-2218 (2007)
53. L. Llorente, S. Marcos, C. Dorronsoro & S.A. Burns. The effect of sampling on real ocular aberration measurements. *Journal of the Optical Society of America* 24, 2783-2796 (2007)
54. E. García de la Cera, G. Rodríguez, A. de Castro, J. Merayo & S. Marcos. Emmetropization and optical aberrations in a myopic corneal refractive surgery chick model. *Vision Research* 47, 2465-2472 (2007)
55. S. Barbero & S. Marcos. Analytical tools for customized design of monofocal IOLs, *Optics Express* 15, 8576-8591 (2007)
56. C. Dorronsoro & S. Marcos. Experiments on PMMA models to predict the impact of corneal refractive surgery on corneal shape: reply. *Optics Express* 15, 7245-7246 (2007)
57. S. Marcos, P. Rosales, L. Llorente, S. Barbero, I Jiménez-Alfaro. Balance of corneal horizontal coma by internal optics in eyes with intraocular artificial lenses: Evidence of a passive mechanism. *Vision Research* 48, 70-79 (2008).
58. P. Rosales, M. Wendt, S. Marcos & A. Glasser. Changes of crystalline lens radii of curvature and lens tilt and decentration during dynamic accommodation in Rhesus monkeys. *Journal of Vision* 8 (1), 1-12 (2008)
59. S. Barbero & S. Marcos. Analysis of the optical field in the human retina from wavefront aberration data. *Journal of the Optical Society of America* 25, 2280-2285 (2008)
60. S. Marcos, L. Sawides, E. Gamba, C. Dorronsoro. Influence of adaptive optics ocular aberration correction on visual acuity at different luminances and contrast polarities. *Journal of Vision* 8(13), 1-12 (2008)
61. C. Dorronsoro, J. Siegel, L. Remón & S. Marcos, Suitability of Filofocan A and PMMA for experimental models in excimer laser ablation refractive surgery, *Optics Express* 16, 20955-20967 (2008)
62. I. Grulkowski, M. Gora, M. Szkulmowski, I. Gorczynska, D. Szlag, S. Marcos, A. Kowalczyk, M. Wojtkowski, "Anterior segment imaging with spectral OCT using a high-speed CMOS camera", *Optics Express* 17,4842-4858 (2009)
63. A. Perez-Escudero, C. Dorronsoro, L. Sawides, L. Remon, J. Merayo-Lloves, S. Marcos, "Minor influence of myopic laser in situ keratomileusis on the posterior corneal surface" *Investigative Ophthalmology and Visual Science* 50, 4146- 4154 (2009)
64. S. Marcos and S.A. Burns "Cone directionality from Laser Ray Tracing in normal and LASIK patients" *Journal of Modern Optics*, 56, 2181-2188 (2009)
65. P. Rosales & S. Marcos "Pentacam Scheimpflug quantitative imaging of the crystalline lens and intraocular lens", *Journal of Refractive Surgery*, 25, 421-428 (2009)
66. E. Gamba, L. Sawides, C. Dorronsoro, S, Marcos, "Accommodative lag and fluctuations when optical aberrations are manipulated" *Journal of Vision*, 9 1-15 (2009)
67. S. Ortiz, D. Siedlecki, L. Remón, S. Marcos, "Three-dimensional ray tracing on Delauney-based reconstructed surfaces" *Applied Optics*, 48 3886-3893 (2009)
68. S. Ortiz, D. Siedlecki, L. Remón, S. Marcos, "Optical Coherence Tomography for quantitative surface topography", *Applied Optics*, 48, 6708-6715 (2009)
69. C. Dorronsoro, L. Remón, Jesús Merayo-Lloves, S. Marcos "Experimental evaluation of optimized ablation patterns for laser refractive surgery, *Optics Express* 17, 15292-15307 (2009)
70. S. Ortiz, D. Siedlecki, I. Grulkowski, L. Remon, D. Pascual, M. Wojtkowski, S. Marcos Optical distortion correction in OCT for quantitative ocular anterior segment by three-dimensional imaging . *Optics Express* Vol. 18, Iss. 3, pp. 2782–2796 (2010)

Bibliometric information. Total number of citations: 1928; h-index=26. (Web of Science, February 2009)

Book chapters and reviews: 12
Abstracts in International Conferences: 110
Invited Lectures at International Meetings Total: 62
Session Presider at International Meetings: 20
Formal seminars at International and National Institutions:: 70
Teaching: Internationally and nationally

Patents

- 1.- Application/Patent #: 200401441 / WO 2005/122873 . S.Marcos, C. Dorronsoro, D. Cano. "A procedure to avoid aberration induction in laser refractive surgery systems". Priority Date: June 11, 2004. CSIC-International
- 2.- Application number: P200701217. Sergio Barbero, Susana Marcos, Carlos Dorronsoro. "Optimized intraocular lens design" Priority date. Mayo 8 2007. National. Licensed to a AJL, Ophtalmics,; International, Nov 12 2007
- 3.-Application number: P200800951. U. Acuña, F. Amat, E. Carrillo, V. Hornillo, S. Marcos, JM Requejo, L Rivas, JM Saugar, C del Aguila y J. Merayo . "Fluorescent compounds for infection diagnosis; procedures and applications". Priority date.: April 4, 2008, CSIC, National
- 4.- Application number: EP08306010. G. Marin, M. Hernandez, P. de Gracia, S. Marcos, C. Dorronsoro "A method for providing a spectacle ophthalmic lens by calculating or selecting a design", December 23 2008, Essilor International (Compagnie General d'Optique), International
- 5.- Application number: P200930055, C. Dorronsoro, S. Marcos, "Instrumento para la simulacion de correcciones oftalmicas multifocales", CSIC, April 8, 2009

MSc. THESIS Supervision

Sergio Barbero (2003); Carlos Dorronsoro (2003); Elena García de la Cera (2003); Daniel Cano (2004); Patricia Rosales (2005). Sergio Ortiz (2005).; Lucie Sawides (2006); Alberto de Castro(2007); Alfonso Pérez-Escudero(2007); Enrique Gamba (2007); Sabine Kling(2009).

PhD THESIS Supervision

Sergio Barbero (2004); Patricia Rosales (2008); Elena García de la Cera (2008); Lourdes Llorente (2009); Carlos Dorronsoro (2009)