



Manuel Vazquez Villalabeitia

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Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

- 6 Sexenios y 7 Quinquenios de investigación
- Presidente IEEE Magnetics Society (2017-18); President-elect (2015-16); Secretary/Treasurer (2013-14); Administrative Committee member (2010-12); Founder IEEE MagSoc Spain Chapter (2007); http://www.ieeemagnetics.org/index.php?option=com_content&view=article&id=254&Itemid=173
- Salvador Velayos Award on Magnetism for his “contributions to applied magnetism & magnetism internationalization activities” (2017)
- Promotor of “Innitiative in Magnetism” at the ICMM/CSIC (2016) and of their Biannual Spring Meetings on Magnetism (2010)
- Visiting Professor to Hubei University, Wuhan, China (March 2016)
- International Head of the Laboratory Magnetic Sensors, Urals Federal University, UrFU, Yekaterinburg, Russia (2015-16) (funded by the UrFU and the Russian Federation) <http://insma.urfu.ru/en/research/research-6> and Member of the International Academic Board of the Institute of Natural Sciences and Mathematics, UrFU (from 2017)
- Secretary Commission on Magnetism, Int. Union of Pure and Applied Physics, IUPAP (2011-14); Program Committee Chair, International Conference of Magnetism, ICM, Barcelona2015
- General Chair INTERMAG’08, Madrid, May 2008
- Manager of the Strategic Action on Nanoscience and Nanotechnology (Spain Ministry Science & Technology, 2004-9); Co-manager National Plan for Materials (2001-03); Member of the NMP Commission Spanish Delegation, FM7, Brussels (2007-10)
- Co-founder (2002), and President of Spanish Club of Magnetism, CEMAG (2006-8)
- Founder of the Group on “Nanomagnetism and Magnetization Processes” (2001)
- Director of Laboratory (Institute of Applied Magnetism, UCM-RENFE-CSIC, Madrid, 1992-2000)



- Professor of Research (Inst. Materials Science at Madrid, CSIC, 1996); Scientific Investigator (1989-96)
- Visiting Researcher to Max-Planck-Institute, Stuttgart, 1989 (Invited Max-Planck-Gesellschaft); to Univ. Sao Paulo, Brazil, 1989 (Invited Professor); to Univ. Santiago de Compostela, Spain, 1996 (Invited Professor)
- Postdoc stays: Max-Planck-Institute, Stuttgart, 1981-83 (Alexander von Humboldt Fellow); NATO Invited Researcher (Techniske Danmark Un., Lyngby, 1985)
- Associate Professor (Univ. Complutense, Madrid, 1985-89); Assistant Professor (1982-84); Post-graduate Assistant Professor (1975-80)
- Contracted Associated Professor (Univ. León, Spain, 1980-81)
- Ph. D. (Physics) by Complutense University of Madrid (1980)
- IAESTE post-graduated grant (Koninklijke/Shell Lab., Amsterdam, 1974)



General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

Ver la informacion en ORCID: <https://orcid.org/0000-0001-5591-0157>; Scopus Author ID: 7401539793

Indice de Impacto: h=56; 15000 citas a mis trabajos científicos



Manuel Vazquez Villalabeitia

Surname(s): **Vazquez Villalabeitia**
 Name: **Manuel**
 ORCID: **0000-0001-5591-0157**
 Date of birth: **20/10/1952**
 Gender: **Male**
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 Personal web page: **<http://www.icmm.csic.es/gnmp/>**

Current professional situation

Employing entity: Consejo Superior de Investigaciones Científicas
Department: Instituto de Ciencia de Materiales de Madrid
Professional category: Profesor de Investigación
Start date: 1996
Dedication regime: Full time

Previous positions and activities

	Employing entity	Professional category	Start date
1	Instituto de Magnetismo Aplicado, Universidad Complutense de Madrid,	Head of Laboratory	09/1993
2	Consejo Superior de Investigaciones Científicas	Investigador científico	02/1989
3	Instituto de Magnetismo Aplicado, Universidad Complutense de Madrid,	Becado Ministerio Educación y Ciencia	12/1988
4	Universidad Complutense de Madrid	Profesor Titular	01/1985
5	Universidad Complutense de Madrid	Profesor Adjunto Interino	10/1982
6	Universidad de León	Catedrático Contratado	10/1980
7	Universidad Complutense de Madrid	Profesor Ayudante	03/1975

1 **Employing entity:** Instituto de Magnetismo Aplicado, Universidad Complutense de Madrid,
Professional category: Head of Laboratory
Start-End date: 09/1993 - 09/2000

2 **Employing entity:** Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
Professional category: Investigador científico
Start-End date: 02/1989 - 01/1997



- 3** **Employing entity:** Instituto de Magnetismo Aplicado, Universidad Complutense de Madrid, **Type of entity:** University
Professional category: Becado Ministerio Educación y Ciencia
Start-End date: 12/1988 - 01/1989
- 4** **Employing entity:** Universidad Complutense de Madrid, **Type of entity:** University
Professional category: Profesor Titular
Start-End date: 01/1985 - 02/1986
- 5** **Employing entity:** Universidad Complutense de Madrid, **Type of entity:** University
Professional category: Profesor Adjunto Interino
Start-End date: 10/1982 - 01/1985
- 6** **Employing entity:** Universidad de León, **Type of entity:** University
Professional category: Catedrático Contratado
Start-End date: 10/1980 - 09/1981
- 7** **Employing entity:** Universidad Complutense de Madrid, **Type of entity:** University
Professional category: Profesor Ayudante
Start-End date: 03/1975 - 09/1980



Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

University degree: Higher degree

Name of qualification: Licenciado en Ciencias Físicas

Degree awarding entity: Universidad Complutense de Madrid **Type of entity:** University

Date of qualification: 1974

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Ciencias Físicas

Degree awarding entity: Universidad Complutense de Madrid **Type of entity:** University

Date of degree: 1980

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
German		A1	A1	A1	A1
English		A1	A1	A1	A1
French		A1	A1	A1	A1

Teaching experience

General teaching experience

- 1 Name of the course:** Materiales Magnéticos Tecnológicos
University degree: Doctorado en Física
Start date: 05/1997 **End date:** 06/1997
End date: 06/1997
Entity: Universidad de Santiago de Compostela **Type of entity:** University
Faculty, institute or centre: Facultad de Física
- 2 Name of the course:** Hilos amorfos: sensores magnéticos
University degree: Doctorado en Física
Start date: 1995 **End date:** 1996
End date: 1996
Entity: Universidad Complutense de Madrid **Type of entity:** University



Faculty, institute or centre: Facultad de Ciencias Físicas

3 Name of the course: Teoría y Laboratorio Magnetismo/ 5 curso

University degree: Licenciatura en Física

Start date: 1985

End date: 1989

End date: 1989

Entity: Universidad Complutense de Madrid

Type of entity: University

Faculty, institute or centre: Facultad de Ciencias Físicas

4 Name of the course: Teoría y Problemas Electricidad y Magnetismo / 2 curso

University degree: Licenciatura en Física

Start date: 1985

End date: 1989

End date: 1989

Entity: Universidad Complutense de Madrid

Type of entity: University

Faculty, institute or centre: Facultad de Ciencias Físicas

5 Name of the course: Laboratorio Magnetismo / 5 curso

University degree: Licenciatura en Física

Start date: 1982

End date: 1985

End date: 1985

Entity: Universidad Complutense de Madrid

Type of entity: University

Faculty, institute or centre: Facultad de Ciencias Físicas

6 Name of the course: Teoría y Problemas Electricidad y Magnetismo / 3 curso

University degree: Licenciatura en Física

Start date: 1982

End date: 1985

End date: 1985

Entity: Universidad Complutense de Madrid

Type of entity: University

Faculty, institute or centre: Facultad de Ciencias Físicas

7 Name of the course: Teoría Física General / 1 curso

University degree: Licenciatura en Veterinaria

Start date: 1980

End date: 1981

End date: 1981

Entity: Universidad de León

Type of entity: University

Faculty, institute or centre: Facultad de Veterinaria

8 Name of the course: Laboratorio Electricidad y Magnetismo / 3 curso

University degree: Licenciatura en Física

Start date: 1974

End date: 1980

End date: 1980

Entity: Universidad Complutense de Madrid

Type of entity: University

Faculty, institute or centre: Facultad Ciencias fisicas

9 Name of the course: Problemas Electricidad y Magnetismo / 3 curso

University degree: Licenciatura en Física

Start date: 1974

End date: 1980

End date: 1980

Entity: Universidad Complutense de Madrid

Type of entity: University

Faculty, institute or centre: Facultad de Ciencias Físicas



- 10 Name of the course:** Materiales Magnéticos Avanzados
University degree: Doctorado en Física
Start date: 06/1996
End date: 06/1996
Entity: Universidad de Buenos Aires

Experience supervising doctoral thesis and/or final year projects

- 1 Project title:** Single and biphasic magnetic microwires: microwave behavior and temperature dependence
Entity: Universidad Autónoma de Madrid **Type of entity:** University
Student: ElKammouni Rhimou
Date of reading: 04/2015
- 2 Project title:** Ordered magnetic antidot arrays
Entity: Universidad Autónoma de Madrid **Type of entity:** University
Student: Karla Marina Jaimes Merazzo
Date of reading: 07/2012
- 3 Project title:** Nanostructures fabrication: Porous Anodic Alumina and ZnO nanorods
Entity: Universidad Autónoma de Madrid **Type of entity:** University
Student: Nacho Minguez
Date of reading: 06/2012
- 4 Project title:** Propiedades estructurales y magnéticas de arreglos de nanohilos de Co y basados en Co
Entity: Universidad Autónoma de Madrid **Type of entity:** University
Student: Laura Gonzalez Vivas
Date of reading: 06/2012
- 5 Project title:** Propiedades magnéticas y de transporte de nuevos microhilos mono y bifásicos
Entity: Universidad Autónoma de Madrid **Type of entity:** University
Student: German Infante
Date of reading: 12/2010
- 6 Project title:** Ordered magnetic nanostructures based on anodic alumina
Entity: Universidad Autónoma de Madrid **Type of entity:** University
Student: Wagner O. da Rosa
Date of reading: 12/2009
- 7 Project title:** Ordered nanostructures based on TiO₂ and ZnO, obtained by ionic irradiation
Entity: Universidad Autónoma de Madrid **Type of entity:** University
Student: Ruy Sanz
Date of reading: 03/2009
- 8 Project title:** Magnetoelastic and magnetostatic coupling in multilayer biphasic magnetic microwires
Entity: Universidad Autónoma de Madrid **Type of entity:** University
Student: Jacob Torrejon
Date of reading: 01/2009



- 9 Project title:** Magnetization studies and Mossbauer spectroscopy in magnetic microwires
Entity: Universidad La Plata, Argentina
Student: Pedro Mendoza de Zelis
Date of reading: 04/2007

Healthcare experience

Other activities/achievements not included above

- 1 Other relevant activities:** Co-author of 8 Chapter, Books.
- 2 Other relevant activities:** Invited Speaker in 46 International Conferences; 24 of them in the last 5 years on Arrays of Magnetic Nanowires and Antidots, Magnetic Microwires and Their Applications, Giant Magnetoimpedance, Magnetic Sensors.
- 3 Other relevant activities:** Lecturer in 7 National and 5 International Schools on Magnetism and Magnetic Materials.
- 4 Other relevant activities:** Over 600 Publications in Scientific Journals (including 46 Reviews) with more than 6,000 citations.
- 5 Other relevant activities:** Over 70 Invited Seminars/Lectures in National and International Centres of Research and Technology
- 6 Other relevant activities:** Referee in various series of Conferences (Intermag, ICM, EMSA, Magn. Wires, Non-crystalline Solids) and Scientific Journals (Phys. Rev. B, Phys. Rev. Lett., Appl. Phys. Lett., J. Phys. D: Appl. Phys., J. Magn. Magn. Mat., Phil. Mag, Lett., Appl. Phys., J. Mat. Res.)
- 7 Other relevant activities:** Responsible Researcher of International Collaborations with: IBM-Stanford Spintronic Science & Applications Center (Dr. S. Parkin); Max-Planck-Institut, Stuttgart (Prof. H. Kronmüller); Max-Planck-Institute, Halle (Dr. K. Nielsch); CNRS, Strassbourg (Dr. G. Pourrouy); Institute für Festkörper u. Werkstoffeforschung, Dresden (Dr. R. Schafer); Univ. Sheffield (Prof. H. Davies); MIT, Cambridge (Dr. C. Ross); Inst. MASPEC, Parma (Dr. F. Leccabue); Univ. Buenos Aires (Dr. H. Sirkin), Centro At. Bariloche (Dr. C. Ramos); Technical Univ. Vienna (Prof. H. Pfützner); Tohoku Univ., Sendai (Prof. M. Yamaguchi); Inst. Física, Iasi, Romania (Prof. H. Chiriac); Univ. Campinas, Brazil (Prof. M. Knobel); UNAM, Mexico (Prof. R. Valenzuela); State Univ. Moscow (Prof. A. Granovsky); Inst. Phys. Budapest (Dr. A. Lovas); Univ. Kosiçe (Dr. R.Varga); Univ. Valparaíso (Prof. P. Vargas); Polish Ac. Sciences (Prof. H. Lachowicz); Czech Ac. Science (Dr. L. Kraus).
- 8 Other relevant activities:** Supervisor of 35 Ph D thesis works and around 40 visiting researchers
- 9 Other relevant activities:** University Lecturing during 14 years in: Electricity and Magnetism and Magnetic Materials (Univ. Complutense, Madrid), and General Physics (Univ. de León); Doctorate Courses in: Univ. Complutense of Madrid, Univ. Buenos Aires, Argentina, and Univ. Santiago de Compostela).



10 Other relevant activities: h factor: 56; 15000 Citations

Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

- 1 Name of the project:** Desarrollo de antenas emisoras/receptoras para su aplicación en sistema de acceso seguro basado en tecnología pke
Entity where project took place: CSIC
Nº of researchers: 6
Funding entity or bodies:
 PREMO **Type of entity:** Business
Start-End date: 05/2016 - 12/2017
- 2 Name of the project:** NUEVAS FRONTERAS DEL NANOMAGNETISMO (NANOFRONTMAG-CM)
Funding entity or bodies:
 Comunidad Autónoma de Madrid, S2013/MIT-2850
Start-End date: 10/2013 - 09/2017
- 3 Name of the project:** Magnetic nanowires and their 3D arrays for advanced technologies (MAT2013)
Funding entity or bodies:
 Spanish Ministry of Economy and Competitiveness
Start-End date: 01/2013 - 12/2016
- 4 Name of the project:** Rare-earth free permanent magnets (REFREEMAGNET),
 FP7-NMP2011.2.2-4-SMALL-5
Funding entity or bodies:
 European Commission
Start-End date: 05/2012 - 04/2015
- 5 Name of the project:** Arreglos ordenados de nanodots y antidots: Imanación y Transporte,
 MAT2010-20798-C05-01.
Funding entity or bodies:
 Ministerio de Ciencia e Innovación. Investigación **Type of entity:** -
City funding entity: Madrid, Community of Madrid, Spain
Start-End date: 01/2011 - 12/2013
- 6 Name of the project:** Nanomateriales semiconductores, magnéticos y bioactivos crecidos en matrices nanoporosas, MAT2010-20798-C05-03.
Funding entity or bodies:
 Ministerio de Ciencia e Innovación. Investigación **Type of entity:** Universidad Autonoma de Madrid
City funding entity: Madrid, Community of Madrid, Spain



Start-End date: 01/2011 - 12/2013

7 Name of the project: Redes Magneticas ordenadas de nanohilos, nanotubos y antidots, 2010CL0018

Name principal investigator (PI, Co-PI....): Dora Altbir; Manuel Vazquez

Funding entity or bodies:

Bilateral project ICMM/CSIC and Universidad de Santiago de Chile.

Start-End date: 01/2011 - 12/2012

8 Name of the project: Magnetic nanoparticles combined with submicron bubbles for oncology imaging, NANOMAGDYE, FP7-NMP-2007-SMALL-1.

Name principal investigator (PI, Co-PI....): P. Vertesy; P. Chirico; I. Bernhard; G. Pourroy; M. Vazquez

Funding entity or bodies:

European Commission

Start-End date: 11/2008 - 10/2011

9 Name of the project: Fundamentos y aplicaciones de moléculas, nanopartículas y nanoestructuras magnéticas: de la espintrónica a la biomedicina, NANOBIOIMAGNET, (S2009/MAT-1726)

Name principal investigator (PI, Co-PI....): Manuel Vazquez; Rodolfo Miranda

Funding entity or bodies:

Comunidad de Madrid

Type of entity: -

City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 10/2009 - 09/2011

10 Name of the project: The study of high frequency behavior of magnetic nanostructures, PCI2006-A7-0694

Name principal investigator (PI, Co-PI....): Manuel Vazquez

Funding entity or bodies:

ICMM/CSIC- Univ. Tangier

Start-End date: 12/2008 - 06/2011

11 Name of the project: Integrated Lab On Chip Platforms for Medical Diagnostics, EUI2008-00120

Name principal investigator (PI, Co-PI....): R. Ibarra; P. Freitas; M. Vazquez

Funding entity or bodies:

Programa Internacionalización Investigacion Hispano-Portugués

Start-End date: 04/2008 - 03/2011

12 Name of the project: Ferromagnetic resonance studies in micro and nanowires” . 2009- 2010

Name principal investigator (PI, Co-PI....): Ludek Kraus; Manuel Vazquez

Funding entity or bodies:

Bilateral Spanish-Czech action, CSIC-ASCR

Type of entity: State agency

Start-End date: 01/2009 - 12/2010

13 Name of the project: Propiedades de magnetotransporte en micro y nanohilos magnéticos, Project MAT2007-65420-C02-01

Funding entity or bodies:

Ministerio de Ciencia e Innovación

Type of entity: -

City funding entity: Madrid, Community of Madrid, Spain

Start-End date: 10/2007 - 09/2010



- 14** **Name of the project:** Fabricación y caracterización de nanoestructuras semiconductoras funcionales, (CCG08-UAM/MAT-4024)
Funding entity or bodies: Comunidad de Madrid **Type of entity:** Universidad Autonoma de Madrid
City funding entity: Madrid, Community of Madrid, Spain
Start-End date: 01/2009 - 12/2009
- 15** **Name of the project:** Arrays of micro and nanowires for high-frequency applications
Name principal investigator (PI, Co-PI...): Masahiro Yamaguchi; Manuel Vazquez
Funding entity or bodies: Bilateral cooperation CSIC/Japanese Society for Promotion of Science
Start-End date: 01/2006 - 12/2007
- 16** **Name of the project:** High frequency studies of magnetic nanostructures . 2006-2007. I
Name principal investigator (PI, Co-PI...): Mohamed Reda Britel; Manuel Vazquez
Funding entity or bodies: Bilateral cooperation, CSIC-Univ. Tanger
Start-End date: 01/2006 - 12/2007
- 17** **Name of the project:** Uni and bi-dimensional self-organised magnetic nanosystems (MAT2004-00150)
Funding entity or bodies: MINISTERIO DE EDUCACION Y CIENCIA
City funding entity: Spain
Start-End date: 12/2004 - 12/2007
- 18** **Name of the project:** Ordered magnetic nanostructures for optomagnetic biosensor devices
Name principal investigator (PI, Co-PI...): luis Balcells; Gaspar Armelles; Manuel Vazquez
Funding entity or bodies: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
City funding entity: Madrid, Community of Madrid, Spain
Start-End date: 10/2005 - 07/2007
- 19** **Name of the project:** Development of a magnetic force microscope working under magnetic field, (PETRI95-0935.OP)
Funding entity or bodies: MINISTERIO DE EDUCACION Y CIENCIA
City funding entity: Spain
Start date: 2004
- 20** **Name of the project:** Magnetization process and transport in magnetic nanostructures, (NAN2004-09183-C10-04)
Funding entity or bodies: MINISTERIO DE EDUCACION Y CIENCIA
City funding entity: Spain
Start date: 2004



R&D non-competitive contracts, agreements or projects with public or private entities

- 1** **Name of the project:** Development of a new technology for the application in wireless battery charging in the range of 20-150 kHz
Degree of contribution: Researcher
N° of researchers: 5
Funding entity or bodies:
MINECO (RTC-2016-4820-4), Consortium: PREMO-ANDALTEC-CSIC-UPM, PI. (CSIC)
Start date: 2016 **Duration:** 2 years
- 2** **Name of the project:** Microhilos Magnéticos para sensores
Funding entity or bodies:
CSIC, PIE 201560E036
Start date: 05/2015 **Duration:** 2 years
- 3** **Name of the project:** Paredes de dominios en nanohilos magnéticos aislados
Funding entity or bodies:
CSIC, PIE 201460E014
Start date: 01/2015 **Duration:** 2 years
- 4** **Name of the project:** EM protection of electrical bundles to fast EM transients
Degree of contribution: Researcher
N° of researchers: 6
Funding entity or bodies:
EADS France
Start date: 2015 **Duration:** 2 years
- 5** **Name of the project:** DESARROLLO E INTEGRACIÓN DE SENSORES MULTIFUNCIONALES BASADOS EN MATERIALES NANOESTRUCTURADOS PARA MEJORAR LA CALIDAD DE VIDA EN LA EDIFICACIÓN (SAFEMAT)
Degree of contribution: Coordinator of total project, network or consortium
N° of researchers: 4
Funding entity or bodies:
UNIVERSIDAD PUBLICA DE NAVARRA
Start date: 09/2014 **Duration:** 5 months
- 6** **Name of the project:** FABRICACIÓN DE MICROHILOS DENTRO DEL PROYECTO: MODELO DE VITICULTURA DE PRECISIÓN BASADO EN DISPOSITIVOS TIC DE BAJO COSTE PARA LA MONITORIZACIÓN DEL ESTADO HÍDRICO (VITICS)
Degree of contribution: Coordinator of total project, network or consortium
N° of researchers: 5
Funding entity or bodies:
UNIVERSIDAD PUBLICA DE NAVARRA
Start date: 09/2014 **Duration:** 4 months



- 7** **Name of the project:** Displacement and Position sensing using magnetic microwires materials
Degree of contribution: Scientific coordinator
Name principal investigator (PI, Co-PI....): T. Wisspeittner; M. Vazquez
Funding entity or bodies:
Contract ICMM/CSIC and Micro-Epsilon Messtechnik GmbH, Ortenburg, Germany
Start date: 01/2011 **Duration:** 5 months
- 8** **Name of the project:** Dynamics of domain wall motion in micro and nanowires Responsables: M. Vazquez and SS Parkin
Degree of contribution: Scientific coordinator
Name principal investigator (PI, Co-PI....): S.S. Parkin; M. Vazquez
Funding entity or bodies:
Agreement ICMM/CSIC and IBM, Almaden Research Centre
Start date: 06/2010 **Duration:** 4 years
- 9** **Name of the project:** NANOBIONMAGNET
Degree of contribution: Managing coordinator
Nº of researchers: 8
Funding entity or bodies:
UNIVERSIDAD AUTONOMA DE MADRID
Start date: 04/2010 **Duration:** 4 years
- 10** **Name of the project:** Hilos submicrometricos para generador eléctrico, purificación de aguas y sensor medioambiental, PLE2009-0057
Name principal investigator (PI, Co-PI....): K. Mohri; M. Vazquez
Funding entity or bodies:
MICINN, Modalidad ACI-PLAN E (cooperación España-Japón Nanotecnología y Nuevos Materiales)
Start date: 11/2009 **Duration:** 3 years
- 11** **Name of the project:** Magnetic Nanostructures for Data Storage
Degree of contribution: Scientific coordinator
Name principal investigator (PI, Co-PI....): Fernando Castaño; Caroline Ross; Manuel Vazquez
Participating entity/entities: MIT-CSIC
Funding entity or bodies:
MISTI Global Seed Fund.
Start date: 01/2009 **Duration:** 2 years
- 12** **Name of the project:** Micro-wire systems for novel technological devices
Name principal investigator (PI, Co-PI....): Cristina Gomez-Polo; Manuel Vazquez
Funding entity or bodies:
Univ. Publ. Navarra **Type of entity:** University
Start date: 06/2007 **Duration:** 3 years
- 13** **Name of the project:** Microwires as sensing elements for low-noise sensors Junio 2007-Septiembre 2008.
Name principal investigator (PI, Co-PI....): R. Bazinet; M. vazquez
Funding entity or bodies:
Contrato con la empresa Quantec-Geotec, Montreal (Canadá)
Start date: 06/2007 **Duration:** 1 year - 3 months



- 14 Name of the project:** Production of tiny glass-coated microwires as magneto-impedance sensing elements for applications in automobile and phone industries
Name principal investigator (PI, Co-PI....): M. Vazquez; Y. Honkura
Funding entity or bodies:
Contract between ICMM/CSIC and Aichi Steels (Toyota group)
Start date: 02/2006 **Duration:** 1 year

Results

Industrial and intellectual property

- 1 Title registered industrial property:** MICROACTUATOR BASED ON BIMAGNETIC COATED CORE/SHELL MICROWIRES WITH ASYMMETRIC EXTERNAL SHELL, AND THE USE OF IT
Entity holder of rights: CSIC 50% ; Baltic Federal University, Russia
Nº of application: RU2017123282
Country of inscription: Russia
Date of register: 2017
- 2 Title registered industrial property:** SENSOR DE TEMPERATURA PARA SISTEMAS MICROELECTROMECÁNICOS Y PROCEDIMIENTO DE FABRICACIÓN
Entity holder of rights: CSIC 70%; Slovak Univ. Technology 30%
Nº of application: P201431530
Country of inscription: Spain, Community of Madrid
Date of register: 2017
- 3 Title registered industrial property:** Sensor de temperatura para sistemas electromecánicos y procedimiento de fabricación
Entity holder of rights: CSIC
Nº of application: P201431530
Date of register: 2014
- 4 Title registered industrial property:** Sensores basados en placas con nanohilos magnéticos
Entity holder of rights: CSIC
Nº of application: P201431005
Date of register: 2014
- 5 Title registered industrial property:** Bimetallic wires with helical anisotropy, fabrication and applications
Type of industrial property: Patent of invention
Inventors/authors/obtainers: M. Vázquez; G. Infante; G. Badidni; M. Butta and P. Ripka.
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Date of register: 2009
Nº of patent: PCT/ES2009/070417.
PCT patent: Yes
- 6 Title registered industrial property:** Bimetallic magnetic wires with helical anisotropy, fabrication process and applications
Entity holder of rights: CSIC
Nº of application: Patent PCT/ES2009/070417.



Date of register: 2009

- 7 Title registered industrial property:** Ferromagnetic wires with shape memory prepared by quenching and drawing technique
Type of industrial property: Patent of invention
Inventors/authors/obtainers: M. Vazquez; G. Badini; C. Gómez-Polo; J.I. Perez; V. Recarte and V. Sánchez
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Date of register: 2008
Nº of patent: PCT/ES2008/070034
PCT patent: Yes
- 8 Title registered industrial property:** Multifunctional sensor based on magnetic microwires
Entity holder of rights: CSIC
Nº of application: Patent PCT/ES2006/070173
Date of register: 2006
- 9 Title registered industrial property:** Multifunctional sensor based on multilayer magnetic microwires with magnetoelastic coupling
Type of industrial property: Patent of invention
Inventors/authors/obtainers: Manuel Vazquez; Kleber Pirota; Giovanni Badini; Jacob Torrejon; Helmut Pfutner
Entity holder of rights: Consejo Superior de Investigaciones Científicas
Date of register: 2006
Nº of patent: PCT/ES2005/070173
PCT patent: Yes
- 10 Title registered industrial property:** Micro wires and a process for their preparation, UK patent
Inventors/authors/obtainers: V. Larin; A. Torkunov; L. Panina; D. Mapps; A. Zhukov; M. Vázquez; J. Gonzalez; A. Hernando; S. Frazer; S. Debues.
Date of register: 2002
- 11 Title registered industrial property:** Dispositivo para la detección de la posición de un pistón neumático
Inventors/authors/obtainers: M. Vázquez; A. Hernando; J.J. Freijo; C. Gómez-Polo; J.M. Barandiarán
Date of register: 2000
- 12 Title registered industrial property:** Viscosímetro basado en la rotación macroscópica de hilos inducida por campo magnético
Inventors/authors/obtainers: F. Castaño; M. Vázquez; A. Hernando
Date of register: 2000
- 13 Title registered industrial property:** Wireless Stress Antenna, Eu. Patent
Inventors/authors/obtainers: C. Tyren; A. Hernando; M. Vázquez and C. Quiñones
Date of register: 2000



Scientific and technological activities

R&D management and participation in scientific committees

Scientific, technical and/or assessment committees

- 1** **Committee title:** Elected Member Administrative Committee IEEE Magnetic Society
Start-End date: 11/2009 - 10/2012
- 2** **Committee title:** Co-founder and President of Spanish Club of Magnetism
Start-End date: 2002 - 2006
- 3** **Committee title:** Secretary Commission on Magnetism, Int. Union of Pure and Applied Physics, IUPAP
Start date: 11/2011
- 4** **Committee title:** Founder of IEEE Magn. Soc. Spain Chapter
Start date: 2007

Organization of R&D activities

- 1** **Title of the activity:** Program Chair ICM2015 Barcelona
Start-End date: 2012 - 2015
- 2** **Title of the activity:** Editor Intermag'03, Boston
City convening entity: Boston,
Start-End date: 2003 - 2003
- 3** **Title of the activity:** General Chair INTERMAG'08, Madrid
Start date: 05/2008
- 4** **Title of the activity:** Member Advisory Committee of Joint European Magnetic Symp, JEMS
Start date: 2006
- 5** **Title of the activity:** Advisory and Program Committees Member: European Magnetic Sensor & Actuators Conf. Athens
Start date: 2002
- 6** **Title of the activity:** Editor and Program Member, Intermag '02, Amsterdam
Start date: 2002



- 7 Title of the activity:** Co-Chairman Symposium on Soft Magnetic Materials, JEMS, Grenoble,
Start date: 09/2001
- 8 Title of the activity:** Chairman Intern. Workshop on Magnetic Wires, San Sebastian
Start date: 2001
- 9 Title of the activity:** Co-Chairman Symposium U: Ferromagnetic Materials, MRS Spring Meeting, San Francisco
Start date: 2001
- 10 Title of the activity:** Session Chair in different INTERMAG Conf.
Start date: 1993

R&D management

- 1 Name of the activity:** Member of the NMP Commission Spanish Delegation, FM7, Brussels
Start date: 2007 **Duration:** 3 years
- 2 Name of the activity:** Manager of the Strategic Action on Nanoscience and Nanotechnology (Spain Min. Sci. & Innov.)
Start date: 2004 **Duration:** 5 years
- 3 Name of the activity:** Co-manager National Plan for Materials (Spanish Ministry Science and Technology)
Start date: 2001 **Duration:** 2 years

Other achievements

Stays in public or private R&D centres

- 1 Entity:** Universidad Santiago de Compostela **Type of entity:** University
City of entity: Santiago de Compostela, Spain
Start-End date: 05/1997 - 06/1997
Funding entity: Universidad Santiago de Compostela
Name of programme: de la entidad: Universidad de Santiago de Compostela Categoría/puesto o cargo: Profesor invitado
Goals of the stay: Guest
Provable tasks: Profesor invitado
- 2 Entity:** Max-Planck-Institut für Metallforschung **Type of entity:** State agency
City of entity: Stuttgart, Germany
Start-End date: 07/1989 - 08/1989
Name of programme: de la entidad: Max-Planck-Institut für Metallforschung Categoría/puesto o cargo: Becado Max-Planck Gesellschaft
Goals of the stay: Post-doctoral
Provable tasks: Becado Max-Planck Gesellschaft



- 3** **Entity:** Danmarks Tecniske Hojskole **Type of entity:** University
City of entity: Lyngby (Copenague), Denmark
Start-End date: 10/1985 - 01/1986
Goals of the stay: Post-doctoral
Provable tasks: Becado N.A.T.O. Danmarks Tecniske Hojskole
- 4** **Entity:** Max-Planck-Institut für Metallforschung **Type of entity:** State agency
City of entity: Stuttgart, Germany
Start-End date: 09/1981 - 09/1983
Goals of the stay: Post-doctoral
Provable tasks: Becado Alexander von Humboldt
- 5** **Entity:** Koninklijke/Shell Laboratories **Type of entity:** R&D Centre
City of entity: Amsterdam, Holland
Start-End date: 07/1974 - 09/1974
Goals of the stay: Doctorate
Provable tasks: Becado I.A.E.S.T.E. Koninklijke/Shell Laboratories
- 6** **Entity:** Universidad de Sao Paulo
City of entity: Sao Paulo, Brazil
Start date: 03/1989
Goals of the stay: Guest
Provable tasks: Investigador Invitado