



Alfonso SAN MIGUEL

Born 01/08/1964 in Madrid (Spain)

Nationality: French and Spanish

Position: Full Professor, University Lyon 1

Professional address: iLM, Campus LyonTech - La Doua, Bâtiment Lippmann, 10 rue Ada Byron
69622 Villeurbanne CEDEX, France

Phone: (+33) 4 72 44 80 57

Main present responsibilities

Coordinator of the Master “Nanoscale Engineering”, University Lyon 1 (2021-)

Scientific Director of PLECE (*Lyon Platform for Experimentation in Extreme Conditions*)

President, Rhône section of the French Physical Society (2020-)

President, Society of Friends of André-Marie Ampère which runs the Ampère’s Museum (2021-)

Education

- 1989 University Graduation : B. Sc. in Physics, University Central de Barcelona, Spain
- 1993 PhD Thesis at the University Pierre & Marie Curie, Paris 6, France
“Structural studies of ZnTe, HgTe and their alloys under high pressure
- 2000 Habilitation, University Lyon-1, France”
“Local compressibility and dimensionality”

Job carrier

- 89-90 Teacher at “*Centro de Estudios Politécnicos*” Barcelone (Spain)
- 90-93 PhD student. LURE (Orsay) and *Lab. de Physique des Milieux Condensés* (Paris VI)
- 93-97 “*Beamline scientist*” followed by “*Beamline responsible*” au *European Synchrotron Radiaton Facility* (ESRF), Grenoble
- 1997 Associated professor (Maître de Conférences), University Lyon 1
- 2003 Professor (Exceptional class – highest level, since 2012), University Lyon 1

International responsibilities

- 2016- Member of the board of the “Société Francophone d’Études du Carbone”
- 2012-2014. Member of the « Science Advisory Committee » of the European Synchrotron Radiation Facility (ESRF).
- 2007-2012. *Vice-chairman of the Special Group of Interest* « Crystallography at Extreme Conditions » of the « European Crystallography Association ».
- 2008-2011 & 2013-2015. Member of the *International Committee*” of the *European High Pressure Research Group*. (<http://www.ehprg.org/>).

Administrative Appointments – Research and Academy

- 2014-2020 Director of the Fédération de Recherche André-Marie Ampère FR3127 (UCBL, CNRS, INSA Lyon, ECL Lyon & ENS Lyon). More than 1000 members from the physics laboratories of the Lyon region.
- 2016-2020 Deputy coordinator of the Academic College “Formal and Natural Sciences” of the University of Lyon (UdL).
- 2013-2014 Deputy director of the Institut Lumière Matière, UMR UCBL CNRS 5306 (325 members)
- 2011-2012 Director of the Laboratoire de Physique de la Matière Condensée et Nanostructures (LPMCN), UMR UCBL CNRS 5586 (125 members)
- 2009-2010 Deputy director of the LPMCN

Commission of Trust (selection)

- Member of the Scientific Selection panel « Crystals and Ordered Structures » of the European Synchrotron Radiation Facility (ESRF). 2012-2013
- Member of the Scientific Selection panel «Solid state physics / Materials / Nano-sciences : electronic properties» of the SOLEIL French National facility (Saclay, France). 2006-2010
- Member of the Council of the French Physics Society. 2015-2020
- Member of the Editorial board of “European Journal of Physics, Special Topics” 2021-
- Member of the Editorial board of «Advances in Condensed Matter Physics ». 2008-2013

- Expert for European and American Research Foundations or agencies: ANR, EU. DFG. MITI-CNRS ...

Congress organization (selection)

- Co-chairman of Carb-ON.fr, online congress of the Société Francophone d'Etudes des Carbones, Oct-Nov 2020. (130 participants)
- Chairman of the "Colloque Évolutions pédagogiques 2019" CEP2019, 24/05/2019 (300 participants)
- Co-chairman of the 7th international conference on « Carbon for Energy Storage and Environment Protection » (CESEP'2017), (Lyon) du 23 au 28 octobre 2017. (145 participants)
- Co-chairman of the 2015 Meeting of the French Carbon Group (GFEC), Les Balcons de Maurienne, May 2015 (100 participants)
- Chairman of the 52^{ème} European High Pressure Research Group, Lyon in Sept. 2014. (300 participants)
- Chairman of the XV International High Pressure Conference of Physics of Semiconductors (Montpellier, June 2012) (co-chairman : L. Konczewicz) (100 participants)

Indicators

- More than 150 publications. H=38 (Google Scholar); H=34 (ISWK) .
https://scholar.google.com/citations?user=oH_1DtIAAAAJ
- 19 PhD thesis directed or under direction
- 56 Invitations to PhD jury and 21 to habilitation jurys (11 outside France)
- More than 50 Invited Conferences.

Other research responsibilities

- 2010-2015. Scientific Director of the University Lyon 1 Common Center of Diffractometry (1 engineer and a technician; 3 diffractometers)
- Founder in 2002 and scientific director of the University Lyon 1 Common Center of Extreme Conditions Experimentation, (staff : 3 engineers and 2 technicians. Center shared with the Lyon Geology Lab).
- 1999-2013. Founder and group leader of the team « Extreme Conditions and Metastability » (staff :16 people. 7 research, 3 support and 6 non-permanent)
- 1994-1997. Co-responsible of the construction of the International beamline of Energy Dispersive X-ray Absorption Beamline at the European synchrotron Radiation Facility (ESRF, Grenoble, France) together with Michael Hagelstein. (budget 2.000.000 €)

Coordination of International Research Projects

Only mentioned projects with duration of 2 years or more in which I was Principal Investigator

- 2019-2022. CAPES-COFECUB French coordinator of Franco-Brazilian project with the University Federal do Ceara (Fortaleza), Univ Federal do Piaui (Teresina) and Univ Fed. Do Para (Belem). Prof. A. Gomes de Souza Filho « ***Novel 2D materials under extreme conditions: optical and mechanical properties*** »
- 2008-2012. CAPES-COFECUB Project with the University Federal do Ceara (Brazil). Prof. A. Gomes de Souza Filho « ***Carbon nanotubes under extreme conditions: mechanical and chemical effects*** »
- 2006-2007. Hubert Curien « Picasso » project with University of La Laguna (Spain). Prof. A. Munoz « ***Cage-type nanomaterials under extreme conditions: properties and elaboration*** ».

Coordination of National Research Projects

Only mentioned projects with duration of 2 years or more in which I was Principal Investigator

- 2019-2022. ANR Project "***2-D Pressure nanoEngineering beyond Straintronics***", 3 academic partners (450.000 €)
- 2012-2016. ANR Project P2N «***Control of carbon nanotube collapse under pressure*** ». 4 academic research teams and 1 industrial partner. (740.000 €)
- 2007-2011. Project for the development of a pedagogy platform for high pressure experimentation (Pedagogic platforms supported by Region-Country Plans). (100.000 €)
- 2006-2009. ANR Project PNANO (PNAN006-0050) «***Electronic Transport in individual carbon nanotubes under pressure*** ». 3 research teams (440.000 €)
- 2003-2005 ACI Nanosciences . « ***Synthesis and properties of novel nanomaterials under high pressure and high temperature*** » (250.000 €)
- 2003-2005 ACI Young Scientist « ***Material synthesis at high pressure and high temperature (0-20 GPa, 300-2300K)*** ». (200.000 €)