# Curriculum Vitae

Gabriel J. Cuello

November 2011

# PERSONAL DATA


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|---|---|
| *Name :* | **Gabriel Julio CUELLO** |
| *Passport :* | **17 382 454 N (ARG)** |
| *Sex:* | **Male** |
| *Birth date:* | **April 1st, 1965** |
| *Birth place:* | **Buenos Aires, Argentina** |
| *Citizenship :* | **Argentine and French** |
| *Marital Status :* | **Married (2 children)** |
| *Personal address :* | **46, Boulevard du Maréchal Foch**<br>**F-38000 Grenoble, France** |
| *Work address :* | **Institut Max von Laue – Paul Langevin, BP 156**<br>**6, rue Jules Horowitz, F-38042 Grenoble Cedex 9, FRANCE**<br>**Phone: +33 (0)476207697**<br>**FAX: +33 (0)476207648**<br>**e-mail: cuello@ill.eu** |
| *Present position:* | **Scientist, Science Division, Institut Laue Langevin, France** |


## EDUCATION

- **M.Sci. in Physics**, Mathematics, Astronomy and Physics Faculty, Córdoba National University, Argentina.
  *Date*: December 23, 1987.
  *Dissertation (in Spanish)*: Determination of backscattered electron spectrum by Monte Carlo method.
  *Supervisor*: Dr. J.A. Riveros de la Vega.
- **Ph.D in Physics**, Balseiro Institute, Cuyo National University, Argentina.
  *Date*: August 8, 1996.
  *Dissertation (in Spanish)*: Synthetic function for neutron scattering in solids.
  *Supervisor*: Dr. J.R. Granada.

## PROFESSIONAL EXPERIENCE

- **1990–2002** Assistant Professor, Comahue University, Bariloche, Argentina
- **1997–1998** Post-doc Scientist, Institute for Structure of Matter, Spanish Council for Scientific Research, Madrid, Spain,.
- **1999–2002** Senior Scientist, Argentine Council for Scientific and Technological Research, Atomic Center Bariloche, Argentina,
- **1999-present** Scientist, Science Division, Institut Laue-Langevin, Grenoble, France
- **2003** Graded in 2nd position as Instrument Scientist at the Spallation Neutron Source (SNS), USA.
- **2004** Graded in 1st position as Instrument Scientist at the OPAL Reactor (ANSTO), Australia.
- **2004** Ramón y Cajal contract, Ministry for Research and Education, Spain.
- **2008-2009** Ikerbasque Senior Scientist, Spain.

## RESEARCH PROJECTS (since 2000; current projects in bold)

- ***Development of analysis tools for data treatment in advanced neutron techniques***
  Raíces Program - Argentinean Ministry for Research, 2008-2011
  Responsibility: French responsible (ILL partner)
  Budget: 14000 €
- ***César Milstein Program***
  Raíces Program - Argentinean Ministry for Research, 2011
  Responsibility: Principal investigator
  Budget: 3000 €
- ***Study of noble metals and oxide nanoparticles with exceptional magnetic properties***
  Spanish Ministry for Research and Education, 2010-2012
  Responsibility : ILL partner
  Budget: 90000 €
- ***Operation of the liquid and amorphous diffractometer***
  D4C ILL Project, 1999-present
  Responsibility: Principal Researcher
  Budget: 25000 €/year
- *Contactless furnace for high-temperature neutron scattering investigations on liquid oxides and metals*
  ANR (National French Agency for Scientific Research)-ILL Project, 2007-2009
  Responsibility: ILL partner
  Budget: 300000 €.
- *Characterisation of Groundwater/Soil Systems*
  AQUATRAIN, European Project, FP6, 2006-2008
  Responsibility: Work Package Responsible (ILL partner)
  Budget (Work Package): 224500 €
- *Local Bi- Hydration and Hydrolysis of Radionuclides in Mineral Clays*
  European Project EURATOM, FP6, 2006-2008
  Responsibility: ILL partner
  Budget: 224000 €
- *Hydration, Hydrolysis and Sorption of $Sm^{3+}$ in the Interlayer Space of the Clay Mineral*
  FUNMIG Project, ANDRA (National French Agency for Nuclear Waste Management), 2005-2008
  Responsibility: ILL Coordinator
  Budget: 84200 €
- *Stable magnetic molecular materials: Moleculas BIT*
  Spanish Ministry for Research and Education, 2006-2008
  Responsibility : ILL partner
  Budget: 110000 €
- *Hydrated structure around mercury in swelling clay minerals.*
  Collaboration Project: Université Joseph Fourier, University College of London, and ILL, 2003-2005
  Responsibility: ILL partner
  Budget: 22000 €
- *Contaminant immobilization by clay-rich materials*
  ALLIANCE Project, ÉGIDE (French Agency for International Mobility), 2004
  Responsibility: ILL Partner
  Budget: 10000 €
- *New Diffractometer for Liquids and Amorphous Systems*
  ILL Project, 1997-2000
  Resposability: Main responsible
  Budget: 600000 €

- *Molecular Nanomagnets*
  C.I.C.Y.T. (Nanomol) MAT 2002-00433, 2003-2006
  Resposability: Partner at ILL
  Budget: 100000 €

## STAYS IN FOREIGN CENTERS

- Institute for Structure of Matter, Council for Scientific Research, Madrid, Spain.
  Post-doc scientist. 1997–1998.
- ISIS Spallation Neutron Source, Rutherford Appleton Laboratory, Chilton Didcot, Oxfordshire, UK.
  Assiduous user 1997–1998. Instruments: MARI, LAD.
- IPNS Spallation Neutron Source, Argonne National Laboratory, Argonne, Illinois, USA.
  Qualified user 1997–1999. Instruments: QENS, HRMECS
- High-Flux Reactor, Institut Laue-Langevin, Grenoble, France.
  Assiduous user 1997–1999. Instruments: IN1, IN5, IN6, D1A, D1B.
- High-Flux Reactor, Institut Laue-Langevin, Grenoble, France.
  Responsible Scientist for D4 diffractometer, 1999–at present.
- Department of Applied Physics II, Basque Country University, Bilbao, Spain.
  Sabbatical leave 2009.

## INVITED TALKS AND SEMINARS

1. Thermal neutron scattering by solids: Development and applications of a synthetic scattering law
   Léon Brillouin Laboratory, Atomic Energy Commission, Saclay, France, 24th September 1996.
2. Thermal neutron scattering by solids: Development and applications of a synthetic scattering law
   European Conference on Neutron Scattering 1996, Interlaken, Switzerland, 11th October 1996.
3. First users' experiments at the new D4
   Workshop D4C, Grenoble, France, 15th September 2000.
4. The new diffractometer for liquids and amorphous systems at ILL
   Neutron and Muon User Meeting 2000, Southampton, England, 27th September 2000.
5. Structure of liquids and amorphous systems by neutron diffraction
   Invited talk, Spanish User Meeting, San Sebastián, Spain, 3rd October 2002.
6. ILL and neutron diffraction on liquid and amorphous materials
   Invited seminar, Córdoba University, Córdoba, Argentine, 23rd October 2002.
7. Structure of Liquids
   Invited seminar, University of Zaragoza, Zaragoza, Spain, 23rd March 2003.
8. Neutron diffraction as a tool to explore disordered matter
   Invited talk, Public University of Navarra, Pamplona, Spain, 26th March 2003.
9. Local order by neutron diffraction
   Invited talk, Spallation Neutron Source, ORNL, Oak Ridge, USA, 29th September 2003.
10. Neutron diffraction and environmental sciences
    Invited talk, Bragg Institute, ANSTO, Lucas Heights NSW, Australia, 16th March 2004.
11. Environmental applications of neutron scattering
    Invited talk, Technical University of Delft, Holland, 6th September 2004.
12. Neutrons and Solid State Physics
    Invited talk, University of Córdoba, Córdoba, Argentina, 12th October 2004.

13. Neutrons and Solid State Physics
    Invited talk, University of Rosario, Rosario, Argentina, 22th October 2004.
14. Argentina's partnership at ILL
    Invited talk, Atomic Center Constituyentes, Buenos Aires, Argentina, 25th October 2004
15. Structure of liquids and amorphous systems by neutron diffraction
    Invited talk, University of Buenos Aires, Buenos Aires, Argentina, 25th October 2004.
16. Structure of liquids and amorphous systems by neutron diffraction
    Invited talk, Ceramics and Glasses Institute, Madrid, Spain, 14th January 2005.
17. Structure of liquids and amorphous systems by neutron diffraction
    Invited talk, University of Montpellier, Montpellier, France, 10th March 2005.
18. Structure of liquids and amorphous solids by neutron diffraction
    Invited talk, Sólidos 2005, Bariloche, Argentina, 2nd November 2005.
19. Neutrons for Argentina
    Invited panellist, Sólidos 2005, Bariloche, Argentina, 2nd November 2005.
20. Determination of Amorphous Structures by Neutron Diffraction
    Invited talk, Public University of Navarra, Pamplona, Spain, 4th May 2006.
21. Local environment of trapped ions in minerals by Neutron Diffraction
    Invited talk, Meeting of the Spanish Society of Neutron Techniques, Jaca, Spain, 11th Sepetmber 2006
22. Powder (Liquids) Diffraction Instruments at ILL
    Invited talk, IMPRESS Project, Rouen, France, 1st February 2007.
23. Structure of Amorphous Solids by Neutron Diffraction
    Invited talk, Corning S.A., Avon, France, 5th February 2007.
24. Neutron diffraction and applications in studies under extreme conditions
    Invited lecture, Spanish School on High Pressures, Autonomic University of Barcelona, Barcelona, Spain, 5th July 2007.
25. Structure of Amorphous Materials: Neutron Diffraction
    Invited lecture, Glassy Liquids Under Pressure: Fundamentals and Applications, Ustron, Poland, 10 - 14 October 2007.
26. Short range order by Neutron Diffraction
    Invited talk, Institute for Glass and Ceramics, CSIC, Madrid, Spain, 18 January 2008.
27. The use of neutrons in the characterisation of the condensed matter
    Invited lecture, Faculty of Science and Technology, Basque Country University, Bilbao, Spain, 24 October 2008.
28. Last developments in neutron diffraction for levitated liquids
    Invited talk, Bariloche Atomic Center and Balseiro Institute, Bariloche, Argentina, 3 April 2009.
29. Neutron Diffraction in Condensed Matter
    Invited lecture, Faculty of Sciences, Oviedo University, Oviedo, Spain, 12 January 2010.
30. Neutron scattering in Earth Sciences
    Invited lecture, LGIT, Joseph Fourier University, Grenoble, France, 20 and 22 January 2010.
31. What neutrons can tell us about liquids?
    Scientific lecture for Prof. Dr. Walter Hoyer's retirement ceremony, Technical University of Chemnitz, Germany, 27 January 2010.
32. A new neutron source in Argentina: the RA10 project
    Invited seminar, Faculty of Mathematics, Astronomy and Physics, University of Córdoba, Córdoba, Argentina, 26 August 2010.

33. Neutron Diffraction in levitated liquid materials
    Invited seminar, University of Montpellier II, Montpellier, France, 29 November 2010.
34. Structure of deuterated liquid n-butanol by neutron diffraction
    Invited talk, 5th European Conference on Neutron Scattering, Prague, Czech Republic, 20 July 2011.
35. Large Facilities and the Structure of Nano-sized Minerals
    Invited talk, SEM Workshop on Nanoparticles and the Environment, Barcelona, Spain, 7 September 2011.
36. Neutrons and Short Range Order
    Plenary talk, VII Meeting of the Argentinean Crystallographic Association, Bariloche, Argentina, 2 November 2011.
37. Neutrons and Short Range Order
    Invited talk, Constituyentes Atomic Center, Buenos Aires, Argentina, 14 November 2011.

## ORGANIZATION OF CONFERENCES

- Workshop D4C, Grenoble, France, 15th September 2000.
- Joint LGIT-ILL Workshop on Neutron Scattering and Molecular Dynamics in Environmental Sciences, Grenoble, France, 8th January 2007.
- Symposium SETN on Time-of-Flight Techniques in Neutron Scattering, Bilbao, Spain, 5-6 October 2007.
- 1st Annual School on Neutron Diffraction Data Treatment using the FullProf Suite, Grenoble, France, 11-15 January 2008.
- Simulation of Disordered Materials (SiMaDes) 31st January – 1st February 2008, Grenoble, France.
- 2nd Annual School on Neutron Diffraction Data Treatment using the FullProf Suite, Grenoble, France, 26-30 January 2009.
- BioNyX: Neutron and Synchrotron radiation in Biosciences, 22nd May 2009, Barcelona, Spain.
- 3rd Annual School on Neutron Diffraction Data Treatment using the FullProf Suite, Grenoble, France, 4-8 May 2010.
- 4th Annual School on Neutron Diffraction Data Treatment using the FullProf Suite, Grenoble, France, 24-29 January 2011.
- Advanced Neutron Diffraction Data Treatment using the FullProf Suite, Allevard, France, 30 January-3 February 2011.
- Analysis of Diffraction Data in Real Space (ADD2011), Grenoble, France, 12-14 October 2011.

## ADMINISTRATION

- **Jul 2003-Jul 2005** Secretary, College 6 (Liquid and amorphous sytems) at ILL.
- **Sep 2006-Sep 2008** Secretary, Spanish Society for Neutron Techniques.
- **Dec 1989-Jan 1992** Head of Physics Department at the Bariloche Regional Center, Comahue University, Argentina.
- **Feb 1994-Mar 1997** Head of Physics Department at the Bariloche Regional Center, Comahue University, Argentina.
- **Feb 1994-Jul 1996** Administration Council at the Bariloche Regional Center, Comahue University, Argentina.

- **Aug 1996-Mar 1997** Board of Directors (Professor) at the Bariloche Regional Center, Comahue University, Argentina.

## MEMBER OF COUNCILS

- **2010-present** Reviewer for the ORNL neutron scattering science program for the Spallation Neutron Source (SNS) and High Flux Isotope Reactor (HFIR) facilities.
- **2008-present** Member of the ISIS Facility Access Panel (FAP2: Disordered Materials)
- **2005-present** Scientific Council, Association "Petits Debrouillards Rhône-Alpes".
- **2006-2010** Specialist, College 6 (Liquid and amorphous systems) at ILL.
- **Sep 2004-Jun 2010** Steering Committee, Spanish Society for Neutron Techniques.
- **Aug 1996-Mar 1997** Steering Council at the Bariloche Regional Center, Comahue University, Argentina.
- **2005-2010** International Advisory Committee of the 8$^{th}$, 9$^{th}$ and 10$^{th}$ International Workshops on Non-Crystalline Solids

## PEER REVIEWING

### International Journals

Physical Review Letters**,** Physical Review B, Physica B**,** Nuclear Instruments and Methods B**,** Journal of Non-Crystalline Solids**,** Journal of Physics: Condensed Matter, Journal of Chemical Physics, Physica Status Solidi

### Founding Agencies

- Agency for Scientific and Technical Promotion (ANPCyT), Argentina
- National Scientific Council, Chili
- CCRLC, United Kingdom
- National Council for Scientific and Technical Research (CONICET), Argentina
- National Agency for Research (ANR), France

## MEMBERSHIPS

- Societé Française de Neutronique
- Sociedad Española de Técnicas Neutrónicas
- Asociación de Física Argentina

## ACADEMIC RECORDS

### Teaching

- Student Assistant, General Physics, Córdoba University, Argentina, July 1985 – February 1988.
- Graduate Assistant, General Physics, Comahue University, Argentina, April – November 1988.
- Lecturer Assistant, General Physics, Comahue University, Argentina, December 1988 – March 1990.

- Assistant Professor, General Physics, Comahue University, Argentina, April 1990 – September 1999.
- Lecturer Assistant, Balseiro Institute, Cuyo University, Argentina, February 1999 – January 2000.
- Lecturer Assistant, Maison de Magistères, Joseph Fourier University, France, April 2000, April 2001, April 2002, April 2003, April 2004, April 2005, March 2007, March 2011.
- Lecturer Assistant, Maison de Geosciences, Joseph Fourier University, France, January 2010.

**Participation as Member of Academic Committees**

- Nine oppositions for Professor and Assistant posts, Comahue University, in 1992–1999.
- Two Ph.D defences at Autonomous University of Madrid, Madrid, Spain.
- Two Ph.D defences at the University of Orléans, Orléans, France.
- Two Ph.D defences at the Basque Country University, Bilbao, Spain.
- One Ph.D defence at Balseiro Institute, Cuyo University, Bariloche, Argentina.

**Human resource supervision**

***Supervisor of students and trainees***

- Supervisor of Summer Fellowship.
  Student: **Juan Jerónimo Blostein**, Summer Fellowship 1997, Balseiro Institute, Cuyo Univ., Argentina.
  Subject: *Order and disorder in the omega phase: Neutron transmission in a Zr-Nb alloy.*
- Supervisor of DESS student
  Student: **Boutcha El Montaser**, ILL Fellowship, Claude Bernard University, Lyon I, France
  Subject: *Corrections in diffraction experiments on liquids and amorphous systems* (March-August 2002).
- Supervisor of DUT student
  Student: **Marion Girard**, ILL Fellowship, IUT, Grenoble, France
  Subject: *Dead-time of a microstrip detector* (April-June 2004).
- Supervisor of DEA student
  Student: **Alejandro Fernández Martínez**, ILL Fellowship, University of Oviedo, Spain
  Subject: *As uptake in calcite and gypsum* (February – December 2004).
- Supervisor of a trainee
  Student: **Alejandro Fernández Martínez**, Spanish Research Ministry Fellowship, Univ. of Oviedo, Spain
  Subject: *Structure and magnetic properties of FeB amorphous FeB alloys* (2005).
- Supervisor of a trainee
  Student: **Esperanza Pavón González**, Spanish Research Ministry Fellowship, Univ. of Sevilla, Spain
  Subject: *Hydrated lithium ions in expandable micas* (September – December, 2007).
- Supervisor of a trainee
  Student: **Ralf Witte**, ILL Fellowship, École Centrale de Lyon, France
  Subject: *Resolution function of two-axis diffractometers* (April – July, 2008).
- Supervisor of a trainee
  Student: **Lorena Murías Fernández**, University Joseph Fourier, Grenoble, France
  Subject: *Synthesis, extraction and characterisation of nano-minerals* (April 2008 – April 2009).
- Supervisor of a trainee
  Student: **Laura Onandía Fernández**, University of Basque Country, Leioa, Spain
  Subject: *Short-range order in hydroxysulfate minerals* (October 2010 – March 2011).

- Supervisor of a trainee
  Student: **Daniel Alonso Domínguez**, Complutense University of Madrid, Madrid, Spain
  Subject: *Tuning magnetic critical behaviour in Ti-manganites by doping with vacancies in A-sites* (April – June, 2011)
- Supervisor of a trainee
  Student: **Antoine Maillocheau**, University of Rennes 1, Rennes, France
  Subject: *Characterisation of heating elements for a vanadium furnace* (May – July, 2011).

***Supervisor of PhD students***

- Supervisor of PhD student
  Student: **Viviana Cristiglio**, ILL and CNRS Fellowship, University of Orléans, France
  Subject: *Structure of liquids at very high temperatures using levitator devices* (2004 – 2008).
- Supervisor of PhD student
  Student: **Alejandro Fernández Martínez**, University Joseph Fourier, Grenoble, France
  Subject: *Selenium adsorption on imogolites. Redox and charge transfer processes* (2006 – 2009).
- Supervisor of PhD student
  Student: **Michael Wilkinson**, University College London, London, UK
  Subject: *Structure and dynamics of aromatic organic molecules in aqueous liquids and nanoscale confinement* (2007 – 2009).
- Supervisor of PhD student
  Student: **Edurne Iturbe Zabalo**, Basque Country University, Bilbao, Spain
  Subject: *Neutron diffraction in multiferroics* (2009 – present).

***Supervisor of post-docs and researchers***

- Supervisor of Post-doc
  Post-doc: **Dr. María Ángeles Arillo**, contract of the Complutense University of Madrid, Madrid, Spain
  Subject: *Order-disorder transition and magnetic ordering in lithium-titanium ferrites* (2003).
- Supervisor of Post-doc
  Post-doc: **Dr. Gabriela Aurelio**, Bariloche Atomic Center, Argentine Council for Scientific and Technical Research CONICET, Bariloche, Argentina
  Subject: *Phase separation in manganites* (2005).
- Supervisor of Post-doc
  Post-doc: **Dr. Oleg Sobolev**, Joseph Fourier University contract, Grenoble, France
  Subject: *Hydration of ions in clay minerals* (2005 – 2008).
- Supervisor of a Researcher
  Researcher: **Dr. Gabriela Aurelio**, Bariloche Atomic Center, Argentine Council for Scientific and Technical Research CONICET, Bariloche, Argentina
  Subject: *Selenium uptake in calcite* (2006 – 2010).
- Supervisor of a Post-doc
  Post-doc: **Dr. Ludmilla Aristilde**, University of California at Berkeley, CA – USA, Fullbright Fellowship, 2008
  Subject: *Molecular structure and dynamics of antibiotics bound to clay minerals*
- Supervisor of a Post-doc
  Post-doc: **Dr. Alexei Bytchkov**, CNRS Lille, 2010 – 2011
  Subject: *Hydration of nano-scale minerals*

***Others***

- Supervisor of a **beamline team**
  The team is composed of about four people: instrument technician, software engineer, mechanical engineer, and electronic engineer.
  The task is the operation of the D4C two-axis diffractometer, giving service to about 60 users during 200 days/year.

**Dictated International postgraduate courses**

1. Interaction of neutrons with matter, Balseiro Institute, Cuyo University, Argentina.
   August – September 1999, 60 hours.
2. Tutorial HERCULES: Structure of liquids and amorphous systems by neutron diffraction experiments, Maison de Magistères, Joseph Fourier University, Grenoble, France.
   April 2000, 6 hours; April 2001, 6 hours; April 2002, 6 hours; April 2003, 6 hours; April 2004, April 2005, 6 hours; March 2007, 9 hours, March 2011, 9 hours.
3. Neutrons and Solid State Physics, University of Córdoba, Córdoba, Argentina, 12-15 October 2005, 30 hours.
4. Neutrons and Solid State Physics, University of Rosario, Rosario, Argentina, 20-22 October 2005, 30 hours.
5. Tutorial: Data treatment of neutron diffraction experiments on amorphous systems, University of Buenos Aires, Buenos Aires, Argentina, 25$^{th}$ October 2005, 3 hours.
6. Neutron Scattering in Condensed Matter, Basque Country University, Bilbao, Spain, October-November 2009, 16 hours.
7. Neutron Scattering in Earth Sciences, Doctoral School, Joseph Fourier University, Grenoble, France, 20-22 January 2010, 8 hours.
8. Neutron scattering in Condensed, Doctoral School, Polytechnic University of Catalonia, Barcelona, France, 13 June-1 July 2011, 40 hours.
9. Applications of Neutron Scattering in Earth and Environmental Sciences, Doctoral School, University of Córdoba, Córdoba, Argentina, 27 – 28 October 2011, 6 hours.
10. X-ray and neutron diffraction on polycrystalline systems, III School of the Argentinean Crystallographic Association, , 7 – 18 November 2011, Balseiro Institute, Cuyo University, Argentina, 60 hours.

**Languages**

- Spanish: speak, read and write
- English: speak, read and write
- French: speak, read and write
- Italian: basic knowledge

## REFERENCES

Prof. Laurent Charlet, Laboratoire de Géophysique Interne et Tectonophysique (LGIT), CNRS-Université Grenoble I
Phone: +33 (0) 476828020, Fax: +33 (0) 476828101, E-mail: charlet38@gmail.com

Prof. Philip Salmon, Department of Physics, University of Bath, BA2 7AY Bath, UK
Phone: +44 (0)1225 383698, Fax: +44(0) 1225 386110, E-mail: P.S.Salmon@bath.ac.uk

Prof. F. Javier Bermejo, Department of Electricity and Electronics, University of the Basque Country, Box 644, E-48080 Bilbao, Spain
Phone: +34 946 012554, E-mail: jbermejo@we.lc.ehu.es

Prof. Neal Skipper, Department of Physics and Astronomy, University College London, Gower Street, WC1E 6BT London, UK
Phone: +44 (0)20 7679, E-mail: n.skipper@ucl.ac.uk

Prof. Andrew Harrison, Director of Science, Institut Laue-Langevin, F-38042 Grenoble, France
Phone: +33 (0) 476207100, E-mail: harrison@ill.eu

Dr. Juan Rodríguez Carvajal, Diffraction Group, Institut Laue-Langevin, F-38042 Grenoble, France
Phone: +33 (0) 476207205, Fax: +33 (0) 476207648, E-mail: jrc@ill.eu

Prof. Marie-Louise Saboungi, Director of Centre de Recherche sur la Matière Divisée, CNRS and University of Orléans, F-45067 Orléans, France
Phone: +33 (0) 238255377, E-mail: saboungi@cnrs-orleans.fr

Prof. Josep Lluis Tamarit, Universitat Politècnica de Catalunya, E-08028 Barcelona, Spain
Phone: +34 93 4016564, Fax: +34 93 401 18 39, E-mail: jose.luis.tamarit@upc.edu

Prof. Christian Vettier, Deputy Director for Science, ESS Scandinavia, 223 50 Lund, Sweden
Phone: +46 (0)46 222 8312, E-mail: Christian.Vettier@esss.se

Prof. Rolando Granada, Bariloche Atomic Center, 8400 Bariloche, Argentine
Phone: +54 (0)2944 445216, E-mail: granada@cnea.gov.ar

# List of Publications in Indexed Journals

## Short Overview

***Number of articles:*** 167 ***Number of cites:*** 1170 ***h-index:*** 17

### *Most cited articles:*

*Low-temperature specific heat and glassy dynamics on a polymorphic molecular solid*
C. Talón, M. A. Ramos, S. Vieira, G. J. Cuello, F. J. Bermejo, A. Criado, M. L. Senent, S. M. Bennington, H. E. Fischer, and H. R. Schober
**Physical Review B 58**, 745-755 (1998) 71 cites

*Topological versus chemical ordering in network glasses at intermediate and extended length scales*
P. S. Salmon, R. A. Martin, P. E. Mason, and G. J. Cuello
**Nature 435**, 75-78 (2005). 75 cites

*D4C: A very high precision diffractometer for disordered materials*
H. E. Fischer, G. J. Cuello, P. Palleau, D. Feltin, A. C. Barnes, Y. S. Badyal, and J. M. Simonson
**Applied Physics A**: Material Science & Processing **74**, S160-S162 (2002). 51 cites

### *Other relevant articles:*

*Structure factor determination of amorphous materials by neutron diffraction*
G. J. Cuello
**Journal of Physics: Condensed Matter 20**, 244109-1-9 (2008).

*Hydration of $Hg^{2+}$ in aqueous solution studied by neutron diffraction with isotopic substitution*
O. Sobolev, G. J. Cuello et al.
**Journal of Physical Chemistry A 111**, 5123-5125 (2007)

*Arsenite sorption and co-precipitation with calcite*
G. Román-Ross, G. J. Cuello et al.
**Chemical Geology 233**, 328-336 (2006).

*Identification of the relative distribution of rare-earth ions in phosphate glasses*
R. A. Martin, P. S. Salmon, H. E. Fischer, and G. J. Cuello
**Physical Review Letters 90**, 185501 (2003).

*Chemical isomerism as a key to explore free-energy landscapes in disordered matter*
C. Talón, F. J. Bermejo, C. Cabrillo, G. J. Cuello et al.
**Physical Review Letters 88**, 115506 (2002).

*Purely dynamical signature of the orientational glass transition*
M. Jiménez-Ruiz, A. Criado, F. J. Bermejo, G. J. Cuello et al.
**Physical Review Letters 83**, 2757-2760 (1999).

*Quantitative evaluation of anharmonic and disorder effects on glassy dynamics*
H. E. Fischer, F. J. Bermejo, G. J. Cuello et al.
**Physical Review Letters 82**, 1193-1196 (1999).

*Emergence of structural anisotropy in optical glasses treated to support second harmonic generation*
C. Cabrillo, G. J. Cuello et al.
**Physical Review Letters 81**, 4361-4364 (1998).

## *Last 10 articles:*

*167. Cordierite synthesis. A time-resolved neutron diffraction study*
J. M. Benito, X. Turrillas, G. J. Cuello, A. H. de Aza, S. de Aza, M. A. Rodríguez
Journal of the European Ceramic Society **32**, 371-379 (2011).

*166. Structural investigation in Cu-In-Sn alloys around 60 at.% Cu for Pb-free transient liquid phase bonding*
S. Sommadossi, G. Aurelio, G. J. Cuello
Journal of Physics: Conference Series **325**, 012026 (2011).

*165. Dislocations and point defects in neutron irradiated single crystalline Mo at elevated temperatures*
O. A. Lambri, G. J. Cuello, G. I. Zelada-Lambri, P. B. Bozzano, J. A. García
Journal of Physics: Conference Series **325**, 012017 (2011).

*164. Proposal for instruments for small and medium size neutron facilities*
G. J. Cuello, J. Dawidowski, J. R. Granada, J. R. Santisteban, J. J. Blostein, L. A. Rodríguez Palomino
Journal of Physics: Conference Series **325**, 012013 (2011).

*163. Magnetic structure and magneto-volume anomalies in $Er_2Fe_{17}$ compound*
P. Álvarez, P. Gorria, J. Sánchez Marcos, I. Puente-Orench, J. A. Rodríguez-Velamazán, G. J. Cuello, J. L. Sánchez-Llamazares, J. A. Blanco
Journal of Physics: Conference Series **325**, 012011 (2011).

*162. Tuning magnetic critical behaviour in Ti-manganites by doping with vacancies in A-sites: $Sr_{1-x}??_xLaMnTiO_{6-d}$ ($0 < x \leq 0.15$)*
D. Alonso-Domínguez, I. Álvarez-Serrano, G. J. Cuello, M. García-Hernández, M. L. López, C. Pico, M. L. Veiga
Materials Chemistry and Physics **130**, 280-284 (2011).

*161. Interplay between intra- and intermolecular structures of 1,1,2,2-tetrachloro-1,2-difluoroethane*
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