Curriculum Vitae 2022

Name	**NÚRIA ALIAGA-ALCALDE**
Birth	July 28th, 1973
Researcher ID	H-5886-2011
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URL	http://www.icrea.cat/Web/ScientificStaff/Nuria-Aliaga-Alcalde-429 http://departments.icmab.es/funnanosurf/ http://icmab.es/staff/detail/986 http://www.academia-net.org/alias/Profil/Prof-Nuria-Aliaga-Alcalde/1199395

Education

Apr 2003 **Ph. D. Program in Chemistry**, Indiana University, Bloomington, IN, USA
Title: "*Synthesis and study of tetranuclear manganese single-molecule magnets*"

Current Positions

Sept 2012 – Present **ICREA Research Professor** (Catalan Institution for Research and Advanced Studies) at the ICMAB-CSIC (Institute of Materials Science of Barcelona) Bellaterra, Spain

Sept 2014 – Present **Group Leader of Functional Nanomaterials and Surfaces group** (FunNanoSurf), ICMAB, Bellaterra, Spain

Sept 2014 – Present **Master Professor** at the University Autonoma of Barcelona (UAB) – Master Course: NiNAv (Advanced Nanoscience and Nanotechnology course)

Previous Positions

Sept 2010 – Aug 2012 **Associate Instructor** at the University of Barcelona (UB), Spain
Sept 2007 – Aug 2012 **ICREA Research Junior** at the UB, Barcelona, Spain
Oct 2005 – Aug 2007 **Postdoctoral Research Associate** at Leiden Institute of Chemistry, The Netherlands
May 2003 – Aug 2005 **Postdoctoral Research Associate** at the Max-Planck Institute (MPI) for Bioinorganic Chemistry, Germany

Fellowships & Awards

Feb 2019 – Jul 2019 **Salvador de Madariaga grant** for a research stay at the Delft University of Technology, The Netherlands
May 2010 **Atomium Culture finalist**, Dissemination European Research (D.E.R.) Project (chemistry area) http://atomiumculture.eu/node/420
Feb 2009 – Mar 2009 **AGAUR grant** for a research stay at the MPI for Bioinorganic Chemistry, Germany
May 2003 – Aug 2005 **Postdoctoral fellowship** at the MPI for Bioinorganic Chemistry, Germany

Grants as Principal Investigator

Jun 2020 – Dec 2023 **"Screening of curcuminoid-based systems for the achievement of sensor materials (CCMoids4sense)"**
Financing agency: MICIU (ID: PID2019-108794GB-I00)
Budget: 217,800 €

Jan 2020 – Sept 2020 **"Novel optimized interfaces toward molecular-based responsive devices"**
Financing agency: CSIC, Ayudas Extraordinarias para la Preparación de Proyectos 2019
Budget: 18,358 €

Mar 2017 – Feb 2022 **"Efficient electronic transport at room temperature by T-shaped molecules in graphene-based chemically modified three-terminal nanodevices"**
Financing agency: European Research Council (ID: Tmol4TRANS)
Budget: 1,998,879 €

Jan 2017 – Sept 2021 **FUNmatApp Group**
Financing agency: Generalitat de Catalunya, (AGAUR, Grup Consolidat, ID: 2017 SGR 1277)
Budget: 20,000 €

Jan 2017 – Dec 2018 **"Estudio de nuevos sistemas curcuminoides en superficies funcionalizadas para la creación de transistores moleculares"**
Financing agency: CSIC, I-COOP+2016 (ID: COOPA20162)
Budget: 11,000 €

Jan 2016 – Dec 2018 **"Preparation of multifunctional hybrids based on curcuminoid and porphyrin systems"**
Financing agency: CSIC (ID: 201660E014)
Budget: 57,000 €

Jan 2014 – Dec 2017 **"Supramolecular Chirality in Low Dimensions and Charge Transport: Preparation of Functional Chiral Organic Materials"**
Financing agency: MINECO (ID: MAT2013-47869-C4-2-P)
Budget: 108,653.06 €

Grants/Projects as Principal Investigator, ICREA Junior Period

Dec 2011 – Dec 2012 **"Design and study of multifunctional systems containing Schiff bases, curcuminoid ligands and 4f metals towards the development of nano-devices"**
Financing agency: AECID (ID: AP/040924/11)
Budget: 26,000 €

Feb 2009 – Mar 2009 **"Development of novel nanomolecular aggregates with multi-functional properties"**
Financing agency: AGAUR, Generalitat de Catalunya (ID: 2008 BE1 00463)
Budget: 4,400 €
PI: Dr. Núria Aliaga-Alcalde

Grants as *co*-Principal Investigator

Dec 2016 – Dec 2019 **"Novel optimized interfaces toward molecular-based responsive devices"**
Financing agency: MINECO (ID: *MAT2016-77852-C2-1-R*)
Budget: 242,000 €

Jan 2017 – Dec 2019 **"Curcuminoid-MOF-based systems to control the electronic response by reliable microscaled hybrid transistors obtained using sustainable CO_2 methods"**
Financing agency: ICMAB-CSIC, Severo Ochoa (ID: *FUNMAT-FIP-2016*)
Budget: 70,000 €

Additional Participation in Grants/Projects

Nov 2019 – Dec 2021 *"Ciencia Molecular sobre Superficies: Síntesis y Funcionalidad"*
Financing agency: MICIU (OSMolSis, RED2018-102833-T)
Budget: 30,000 €
PI: Prof. Jose Ignacio Pascual Chico (ICREA Prof. N. Aliaga-Alcalde: Member of the network and leader of her team, total teams: 10)

Jan 2016 – Dec 2020 "*Functional Molecular Materials based on Curcuminoid Ligands*"
Financing agency: Fondecyt, Minister of Education of the Government of Chile (ID: 1161775)
Budget: 200,000 €
PI: Dr. Mònica Soler (ICREA Prof. N. Aliaga-Alcalde: International collaborator)

Jan 2015 – Dec 2017 "*Compuestos de coordinación de lantánidos con ligandos fluorescentes tipo chalcona: estudio de sus propiedades ópticas y magnéticas*"
Financing agency: UNAM, Universidad Nacional Autónoma de México, UNAM-DGAPA-PAPIIT IN222615

Budget: 30,000 €
PI: Dr. Laura Gasque (ICREA Prof. N. Aliaga-Alcalde: International collaborator)

Jan 2011 – May 2016 "*Synthesis and characterization of polynuclear metal complexes containing dendritic or dendronic ligands as single-molecule magnets*"
Financing agency: Fondecyt, Minister of Education of the Government of Chile (ID: 1110206)
Budget: 157,000 €
PI: Mònica Soler (ICREA Prof. N. Aliaga-Alcalde: International collaborator)

Dec 2012 – Dec 2015 "*Molecules, polymers and functional nanostructures based on coordination chemistry: design, preparation and study*"
Financing agency: MINECO (Ref. CTQ2012-32247/BQU)
Budget: 184,860 €
PI: Dr. Guillem Aromí (ICREA Prof. N. Aliaga-Alcalde: Subproject coordinator)

Additional Participation in Grants/Projects, ICREA Junior Period

Dec 2009 – Dec 2012 "*Synthesis and physico-chemical studies of molecule-based functional materials*"
Financing agency: MICINN (Ref. CTQ2009-06959/BQU)
Budget: 136,500 €
PI: Dr. Guillem Aromí

Jan 2008 – Dec 2010 "*Evaluación de compuestos de coordinación de cobre como catalizadores biomiméticos*"
Financing agency: UNAM, Universidad Nacional Autónoma de México, UNAM-DGAPA-PAPIIT 210509
Budget: 40,000 €
PI: Dr. Laura Gasque (Dr. N. Aliaga-Alcalde: International collaborator)

Sep 2007 – Dec 2009 *"Interaccions magnètiques i magnetisme molecular*"
Financing agency: CIRI-Comissió Interdepartamental de Recerca i Innovació Tecnològica de la Generalitat de Catalunya (CIRIT)
Budget: 42,000 €
PI: Dr. Joan Ribas Gispert

Participation in technology/knowledge transfer activities and exploitation of results

Feb 2022 Patent application filed out, application number: P202230143 (Ref. Number: ES1641.1728, 22/02/2022).
Title: Dispositivo de sublimación por vacío
Owner entity: Consejo Superior de Investigaciones Científicas (CSIC)
Authors: Daniel Herrera-Miranda, Arántzazu González-Campo and Núria Aliaga-Alcalde with ownership percentage of 33% for the three members

https://www.icrea.cat/security/files/researchers/patents/vacuum-sublimation-v.pdf
https://www.icrea.cat/security/files/researchers/patents/leaflet-af-012-2022-03-30.pdf

Stays of Research

Feb 2019 – Jul 2019 Research stay at Delft University of Technology, Kavli Institute of Nanoscience, in the group of collaborator Prof. Herre van der Zant, by means of a Salvador de Madariaga grant

Feb 2018 – Mar 2018
Oct 2015 – Oct 2015
Sept 2014 – Oct 2014
Research stays as external collaborator at different periods at the Universidad de Chile – Departamento de Ingeniería Química, Biotecnología y Materiales. Facultad de Ciencias Físicas y Matemáticas, in the group of collaborator Dr. Mònica Soler, by means of Chilean Fondecyt projects (IDs: 1161775 and 1110206)

Jul 2012 – Jul 2012 Research Stay at the University of Assiut by means of an AECID project

Stay of Research, ICREA Junior Period

Feb 2009 – Mar 2009 Research stay at the MPI for Bioinorganic Chemistry by means of an AGAUR grant

Staff Supervision

Mar 2019 – *Jun 2021* **Project Manager**
- Dr. Beltzane Gracia-Cirera, Project Tmol4TRANS

Postdoctoral Associates

Oct 2014 – Present
- Dr. Rossella Zaffino, ICMAB-CSIC, Project Tmol4TRANS

Mar 2020 – Present
- Dr. Daniel Herrera-Miranda, ICMAB-CSIC, Project Tmol4TRANS

Jun 2020 – Dec 2020
- Dr. David Limón-Magaña, ICMAB-CSIC, ID: 2017 SGR 1277 (AGAUR)

Sept 2014 – Jan 2019
- Dr. Arántzazu González-Campo, ICMAB-CSIC, Project Tmol4TRANS

Ph. D. Students (theses in progress)

Feb 2022 – Present
- Aldo Campos Olguin (co-director: Dr. Mònica Soler), Beca Doctorado Nacional ANID (21221615, Doctorado en Química, Universidad de Chile)
  Title: "Diseño y síntesis de polímeros de coordinación a partir de curcuminoides"

Oct 2020 – Present
- Joseline Iribarra-Araya (co-director: Dr. Mònica Soler), Conecyt fellowship (Doctorado en el extranjero, beca Chile 2019", 72200500)
  Title: "*Design of 2D materials based on porphyrazines and derivatives with sensor properties*"

Feb 2020 – Present
- Raquel Gimeno-Muñoz (co-director: Dr. Arántzazu González-Campo), Project Tmol4TRANS
  Title: "*Design of new T-shaped Curcuminoid systems and deposition studies for the creation of sensors*"

Oct 2018 – Present
- Teresa Cardona-Lamarca (co-director: Dr. Arántzazu González-Campo), Project Tmol4TRANS
  Title: "*Curcuminoid-based materials toward their use as active components in three-terminal devices*"

Feb 2018 – Present
- Daniel Riba-López (co-director: Dr. Arántzazu González-Campo), Project Tmol4TRANS
  Title: "*Curcuminoids as active elements in molecular electronic devices*"

Ph. D. Student (theses defended)

Oct 22th 2021
- Laura Rodríguez-Cid (co-director: Dr. Concepción Domingo-Pascual), Projects: FUNMAT-FIP-2016 & Tmol4TRANS
  Title: "*Curcuminoid-MOF-based systems to control the electronic response by reliable microscaled hybrid transistors obtained using sustainable CO_2 methods*"

Jul 20th 2018
- Dr. Raúl Díaz-Torres
  Title: *"Synthesis, characterization and deposition on surfaces of curcuminoid-based systems*", UB/ICMAB-CSIC

Jul 17th 2018
- Dr. Wenjie Qian
  Title: *"Preparation and processing of molecular materials with optoelectronic properties",* UAB/ICMAB-CSIC

Sept 30th 2016
- Dr. Cristina Oliveras-González (co-director: Prof. David B. Amabilino)
  Title: *"Self-assembly of functional chromophores into chiral nanomaterials"*, UAB/ICMAB-CSIC

Master Students

Jul 2022
- Marc Surós i Roman (UB, co-director: Dr. Arántzazu González-Campo)
  Title: "*Synthesis, processing and electronic studies of curcuminoid-based 2D materials*"

Jul 2021
- Esteve Ribas-Saurí (UAB, co-director: Dr. Arántzazu González-Campo)
  Title: "*Design of 2D organic materials for sensing applications*"

Jul 2019 ■ Raquel Gimeno-Muñoz (UB, co-director: Dr. Arántzazu González-Campo)
Title: "*Disseny de nous curcuminoides amb grups donadors/acceptors i estudi de la seva immobilització en superfície*"

Jan 2018 ■ Jesse Ferreira da Silva (University of Southampton, UK)
Title: "*The synthesis and characterization of curcumin derivatives for use in single molecule break junctions*"

Jan 2018 ■ Joshua Le Brocq (University of Southampton, UK, co-director: Dr. Arántzazu González-Campo)
Title: "*An Investigation of the problems of synthesizing a hydrosilylated curcuminoid capable of chemisorption to active silica surfaces*"

Jul 2013 ■ Raúl Díaz-Torres
Title: *"Study of multifunctional systems containing curcuminoid ligands and 3d/4f Metals"*, UB

Staff Supervision, ICREA Junior Period

Feb 2011 – May 2012 **Postdoctoral Associate**
■ Dr. Melita Menelaou, UB

Apr 2010 – Jun 2010 **Master Student Exchange-Collaboration**
■ Inés Monte-Pérez, from UNAM, México

Apr 2009 – Jun 2009 **Erasmus & Granted Students**
■ Coralie Souid, from University Paul Cezanne Aix-Marseille III, France
■ Coral Herranz-Lancho, UB

Teaching/Training

Sept 2014 – Present **Master Professor** at the UAB. Course: *Advanced Nanoscience and Nanotechnology*
Topics: Molecular Magnetism – Molecular Electronics – Metal Organic Frameworks

Jan 2014 – Present **Supervisor** of last year students from the UB/UAB (TFGs, biannual work in a scientific project):
■ Víctor Riu Molinero (2020-2021, in progress, UAB)
■ Àlex Pérez Castro (2019-2020, Chemistry, UAB)
■ Marc Surós i Roman (2019-2020, Chemistry, UAB)
■ Raquel Gimeno-Muñoz (2017-2018, Chemistry, UB)
■ Davana Krasimirova Zaharieva (2016-2017, Chemistry, UAB)
■ Xavier Domingo-Onarias (2016-2017, Chemistry, UB)
■ Oriol Torrecilla (2016, Nanoscience & Nanotechnology, UAB)
■ Enric Íñiguez (TFG, 2016-2017, Nanoscience & Nanotechnology, UAB)
■ Carles Ràfols (TFG, 2016-17, Nanoscience & Nanotechnology, UAB)
■ Sònia Fornés (TFG, 2015-16, Chemistry, UB)
■ Víctor Leiva (TFG, 2015-2016, Physics, UAB)
■ Guifré Parera (TFG, 2014-2015, Nanoscience & Nanotechnology, UAB)

Teaching/Training, ICREA Junior Period

Sept 2010 – Sept 2012 **Associate Instructor** at the UB ("asociado 3+3"). Teaching freshmen students and experimental laboratories at the UB, Barcelona, Spain

Dec 2008 — Jul 2011 **Supervisor** of last year students coursing experimental courses at the UB ("Prácticas Avanzadas B" and "Estudiant Intern"):
■ Coral Herranz Lancho (2008, UB)
■ Ariadna Arbiol Roca (2008, UB)
■ Eva Guillén Piqué (2010, UB)
■ Fatiha Ouharrou (2010, UB)
■ Guillem Brandariz-de-Pedro (2011, UB)
■ Santiago Rodríguez Jiménez (2011, UB)

Organizing Conferences

2015 – 2014

Member of the Organizing Committee
SIJ2015: XII Simposio de Investigadores Jóvenes Real Academia Española de Química
2 – 6 November 2015, Barcelona, Spain (http://congresses.icmab.es/sij2015/)

2011 – 2012

Member of the Local Organizing Committee
MOLMAT 2012: Vth International Conference on Molecular Materials
3 – 6 July 2012, Barcelona, Spain (http://molmat2012.com/)

Institutional Responsibilities

2016 – Present

Member of the Gender Commission of the ICMAB
http://icmab.es/the-csic-gender-equality-certificate-to-the-icmab-was-delivered-by-the-csic-president-rosa-menendez-to-xavier-obradors

2016- Present

Member of the Nanoquim Commission of the ICMAB
https://services.icmab.es/nanoquim/

2011 – 2012

Member of the Faculty Committee
Inorganic Department, University of Barcelona, Barcelona, Spain

Commissions of Trust

Sept 2018 – Present

Member of the Editorial Board of Inorganica Chimica Acta
https://www.journals.elsevier.com/inorganica-chimica-acta/editorial-board

Sept 2016 – Present

Member of Evaluator Panel for the Chilean National Science and Technology Commission, CONECYT-Chile agency

Sept 2015 – Present

Member of Evaluator Panel for the Spanish government, Agencia Nacional de Evaluación y Prospectiva (ANEP) Plan Estatal Excelencia i+d B

Jan 2020

External Member of Evaluator Panel for BIST Ignite.

May 2015 – 2016

Member of the Editorial Board of Magnetochemistry
http://www.mdpi.com/journal/magnetochemistry/editors
http://www.mdpi.com/journal/magnetochemistry/special_issues/MOF

Referee for Major International Journals
Nanoscale, Chem. Comm., Inorg. Chem., Dalton Trans., Polyhedron among others

2012 – Present

Evaluator in Ph.D. & Master Committees

Ph.D. Xabier Rodríguez Martínez, Universitat Autònoma Barcelona, Spain (19/10/2020)
Ph.D. Andrea Moneo Corcuera, ICIQ, Spain (18/12/2019)
Ph.D. Lidia Rosado Piquer, Universitat de Barcelona, Spain (04/10/2019)
Ph.D. Frangchang Tan, Universitat Autònoma de Barcelona, Spain (16/09/2019)
Master Eugenio Cataldo, University of Delft, The Netherlands (21/06/2019)
Ph.D. I. Lucía Herrera Jiménez, Universidad de Zaragoza, Spain (13/11/2018)
Ph.D. Ignacio José Olavarria Contreras, Technische Universiteit Delft, The Netherlands (02/07/2018)
Ph.D. Marc Padilla Barriento, Universitat Autònoma de Barcelona, Spain (12/12/2017)
Ph.D. Gerard Sabeña Vila, Universitat de Girona, Spain (23/06/2017)
Ph.D. Elena Marchante Rodríguez, Universitat Autònoma de Barcelona, Spain (09/06/2017)
Ph.D. Luis Escriche Tur. Universitat de Barcelona, Spain (21/11/2016)
Ph.D. Itziar Oyarzabal Epelde. Universidad del Pais Vasco, Spain (01/12/2015)

ICREA Junior Period

Ph. D. Marta Viciano-Chumillas. LIC, Leiden, The Netherlands (10/22/2009)
Master Saskia Speed Castro. Universitat de Barcelona, Barcelona, Spain (07/16/2009)

Memberships of Scientific Societies

Member of AcademiaNet (http://www.academia-net.org/)
Member of the Real Sociedad de Química Española (Specialized Group in Nanoscience and Molecular Materials)

Dissemination of Science

2016 – Present	Theatrical reading about female researchers *Madame Châtelet y sus seguidoras en Instagram* (https://cosmocaixa.es/es/p/madame-chatelet-y-sus-seguidoras-en-instagram_a551938 https://congresses.icmab.es/watch-and-share-the-video-of-madame-chatelet-and-her-instagram-followers)
2015 – Present	Scientific talks in different schools & centers General audience (since 2015; Series title: "*a scientist in the classroom*")
2013	TV interview Scientific program: http://www.laxarxa.com/elproblemadegettier/
2010	Scientific publication at main European Newspapers (Atomium Culture): http://www.rp.pl/artykul/589474.html http://derstandard.at/1285199958727/Small-is-Good http://www.elpais.com/articulo/sociedad/Small/is/Good/Dressing/at/the/Nanoscale/elpepusoc/20110902elpepusoc_5/Tes http://www.faz.net/aktuell/wissen/atomium-culture/molekuele-vom-reissbrett-europe-s-next-top-metals-11068209.html

Career Breaks

Apr 2013 / Sept 2013 Maternity leave (exact dates: from 04/22/2013 to 09/22/2013)

Invited talks / Oral presentations / Seminars

46. **Keynote Speaker. October 2022**
7th Edition of the Smart Materials and Surfaces 2022, SMS Conference and Exhibition (SMS 2022) – Athens, **Greece**
"*Overview and recent findings on curcuminoids as molecular platforms for sensors and electronic components"*

45. **Keynote Speaker. August 2022**
Physics in 2D Nanoarchitectonics", Mini-Colloquium within the CMD29 conference of the European Physical Society – Manchester, **UK**
"Summary and prospects for curcuminoids in electronic devices and as 2D materials*"*

44. **Oral Communication. June 2022**
XXXVIII Reunión Bienal RSEQ (Real Sociedad Española de Química) 2022– Granada, **Spain**
"An Overview of curcuminoids in molecular electronics and current studies on graphene nanojunctions and coordination polymers-based FETs*"*

43. **Invited Speaker. December 2021**
Scientific Advisory Board Meeting 2021 – Bellaterra, **Spain**
"*CCMoids for Single-Molecule Electronic Transport using Graphene-based Three-Terminal Devices"*

42. **Oral Communication. November 2021**
ElecMol -10th International Conference on Molecular Electronics – Lyon, **France**
"*A single-molecule electronic transport survey of nanowires based on curcuminoids"*

41. Oral Communication. October 2021
SMS 2021 - Sensors 2021. 6th Edition of Smart Materials and Surfaces 2021. SMS Conference and Exhibition Virtual attendance – Milan, **Italy**
"*Extending the scope for curcuminoids: from active components on graphene devices to the creation of 2D materials*"

40. Oral Communication. September 2021
[Virtual] European Congress and Exhibition on Advanced Materials and Processes Online conference - **Austria**
"*T-shaped molecules based on curcuminoids for electronic transport and sensor purposes*"

39. Oral Communication. February 2021
SmallChem2021 - Small Chem International Online Conference - **Spain**
"*Curcuminoids: molecular platforms for electronic and sensor purposes*"

38. Invited Speaker. June 2020
13th European School on Molecular Nanoscience Virtual ESMolNa - **Spain**
"*Hybrid nanodevices based on FLG - Overview of the use of curcuminoids in cingle-molecule electron transport studies*"

37. Invited Speaker. December 2019
Institute of Material Science of Barcelona (ICMAB) – Bellaterra, **Spain**
European Research Council (ERC) funding opportunities – a 360° overview
"*Efficient electronic transport at room temperature by T-shaped molecules in graphene-based chemically modified three-terminal nanodevices*"

36. Invited Speaker. November 2018
Institute of Material Science of Barcelona (ICMAB) – Bellaterra, **Spain**
"*Exploring electronic transport using curcuminoid systems*"

35. Seminar. November 2018
Institute of Nanoscience of Aragon (INA) – Zaragoza, **Spain**
"*Curcuminoids in molecular electronics*"

34. Invited Speaker. June 2018
8th North America-Greece-Cyprus Workshop on Paramagnetic Materials – Sparta, **Greece**
"*Progress of curcuminoids in nanoscience*"

33. Invited Speaker. June 2018
2nd ELECMI International Workshop – Zaragoza, **Spain**
"*Electronic transport through single curcuminoids systems*"

32. Invited Speaker. May 2018
11th European School on Molecular Nanoscience 6th Workshop on 2D Materials – Tenerife, **Spain**
"*Curcuminoid systems in nanoscience*"

31. Oral Communication. August 2017
14th European Conference on Molecular Electronics – Dresden, **Germany**
"*Curcuminoid molecules as active components in hybrid graphene transistors*"

30. Oral Communication. June 2017
XXXVI Reunión Bienal de La Real Sociedad Española de Química (RSEQ) – Sitges, **Spain**
"*Two-terminal nanodevices based on few-layer graphene containing curcuminoid molecules at room temperature*"

29. Invited Speaker. May 2017
10th European School on Molecular Nanoscience - 5th Workshop on 2D Materials – El Escorial, **Spain**
"*Porphyrin and curcumin derivatives in molecular magnetism and molecular electronics*"

28. Invited Speaker. July 2016
EMN on Organic-Electronics and Photonics – San Sebastian, **Spain**
"*Single molecule measurements and studies regarding curcuminoids and porphyrin derivatives*"

27. **Invited Speaker. July 2016**
Workshop: Designing advanced functionalities through controlled nanoelement integration in oxide thin films – Bellaterra, **Spain**
"*Design and coordination of porphyrin and curcuminoid molecules: characterization and properties at the nanoscale*"

26. **Invited Speaker. July 2016**
42nd International Conference on Coordination Chemistry, ICCC2016 – Brest, **France**
"*Coordination compounds based on porphyrins & curcuminoids as appliances in molecular electronics*"

25. **Invited Speaker. November 2015**
Organic Electronics Meeting at ICMAB (ORGI 2015) / ICMAB – Bellaterra, **Spain**
"*A perspective on curcuminoid systems in molecular electronics*"

24. **Invited Speaker. October 2015**
ICMS2015 - 3rd International Conference on Materials Science – Valdivia, **Chile**
"*Design and study of molecular materials containing curcuminoid or porphyrinic groups and their potential use in molecular electronics*"

23. **Oral communication. September 2015**
ECMM2015 - 5th European Conference on Molecular Magnetism – Zaragoza, **Spain**
"*Mononuclear 3d/4f (Easy Plane & Easy Axis) single molecule magnets containing curcuminoids and their prospects in molecular electronics*"

22. **Oral communication. June 2015**
Scientific Workshop on Biomedical, Health and Bio-Related applications of Hybrid Materials/HINTBCN/ICN2 – Bellaterra, **Spain**
"*Copper curcuminoids containing anthracene groups: fluorescent molecules with cytotoxic activity*"

21. **Invited Speaker. October 2014**
ESMolNa 2014, 7th European School on Molecular Nanoscience – Alicante, **Spain**
"*Work in progress in curcuminoids toward their inclusion in nanoscience*"

20. **Invited Speaker. October 2014**
Facultad de Química y Biología, Universidad de Santiago de Chile – Santiago, **Chile**
"*Estudio y aplicaciones de sistemas funcionales curcuminoides*"

19. **Invited Speaker. October 2014**
Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile – Santiago, **Chile**
"*Diseño y estudios de compuestos de coordinación funcionales con ligandos curcuminoides*"

18. **Oral communication. June 2014**
QIES-14, 16a Reunión Científica Plenaria de Química Inorgánica / 10a Reunión Científica Plenaria de Química del Estado Sólido – Almería, **Spain**
"*Magnetic and fluorescent coordination compounds containing curcuminoids*"

17. **Invited Speaker. November 2013**
Institute of Material Science of Barcelona (ICMAB) – Bellaterra, **Spain**
"*Barnett Rosenberg I la seva troballa: el cisplatí*"

16. **Oral communication. October 2012**
V European School Molecular Nanoscience (ESMolNa) – Cuenca, **Spain**
"*Multifunctional molecular systems containing curcuminoids*"

15. **Invited Speaker. January 2011**
Seminario Internacional en Materiales Moleculares – Concepción, **Chile**
"*Diseño de sistemas multifuncionales que contienen metales 3d/4f y grupos curcuminoides*"

14. Oral communication. January 2011
XIII Encuentro de Quimica Inorgánica – Temuco, **Chile**
"*Diseño de sistemas multifuncionales que contienen metales 3d/4f y grupos curcuminoides*"

13. Invited Speaker. October 2010
Conference at the Department of Chemistry, Nankai University – Taijin, **China**
"*Multifunctional 3d/4f building blocks containing curcuminoids*"

12. Oral communication. October 2010
International Conference of Molecule-Based Magnets ICMM 2010 – Beijing, **China**
"*Multifunctional 3d/4f building blocks containing curcuminoids*"

11. Invited Speaker. September 2009
The Catalan Institute of Nanoscience and Nanotechnology, CIN2 – Bellaterra, **Spain**
"*Synthesis and characterization of 3d compounds containing curcuminoids*"

10. Invited Speaker. August 2009
USACH, University of Santiago de Chile – Santiago, **Chile**
"*Synthesis and characterization of 3d compounds containing curcuminoids*"

9. Invited Speaker. June 2009
Third North America-Greece-Cyprus Workshop on Paramagnetic Materials – Protaras, **Cyprus**
"*Development of nanomolecular aggregates with multifunctional properties*"

8. Invited Speaker. May 2008
Organic and Inorganic Departmental Meeting of the University of Barcelona, – Barcelona, **Spain**
"*Estructura geomètrica i electrònica d´un compost de ferro amb estat d´oxidació V*"

7. Invited Speaker. February 2008.
Inorganic Department of the University of Girona – Girona, **Spain**
"*The geometric and electronic structure of [(Cyclam-acetato)Fe(N)]$^{+}$; a genuine iron(V) species with ground state Spin S = ½*"

6. Seminar. July 2007
IC3 meeting, Coordination and Bioinorganic Chemistry, Leiden Institute of Chemistry, Leiden University – Leiden, **The Netherlands**
"*A Tale of two curcuminoids*"

5. Seminar. November 2005
IC3 meeting, Coordination and Bioinorganic Chemistry, Leiden Institute of Chemistry, Leiden University – Leiden, **The Netherlands**
"*From Bloomington to Leiden: Mn, Fe and Pt search*"

4. Seminar. February 2005
Annual group meeting, Max-Planck Insitute für the Bioanorganischemie – Muelheim and the Ruhr, **Germany**
"*The geometric and electronic structure of [(Cyclam-acetato)Fe(N)]$^{+}$; a genuine iron(V) species with ground state spin S = ½*"

3. Seminar. December 2003
Annual group meeting, Max-Planck Insitute für the Bioanorganischemie – Muelheim and the Ruhr, **Germany**
"*Synthesis and characterization of novel mono-, di- and trinuclear Mn complexes*"

2. Seminar. May 2002
Inorganic Chemistry Seminar, University of Florida – Gainesville, **USA**
"*New tetranuclear manganese single molecule magnets with the $[Mn_4O_3X]^{6+}$ core structure (X = Cl^-, $^-O_2CC_6H_4$-p-R and $^-O_2CC_6H_4$-o-R)*"

1. Seminar. September 2000
Inorganic Chemistry Seminar, Indiana University – Bloomington, Indiana, **USA**
"*Preparation and magnetic properties of low symmetry $[Mn_4O_3]$ complexes with S=9/2*"

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BRIEF SUMMARY

1. I am the leader of the group *Functional Nanomaterials & Surfaces* (FunNanoSurf) at the Institute of Materials Science of Barcelona (ICMAB-CSIC).
http://departments.icmab.es/funnanosurf/

2. I have a total of **87 peer-reviewed articles** in major international journals, 67 as a totally independent researcher. I have been **cited more than 4000 times** and more than **97% of citations of my work are without self-citations** of all authors.

3. **H-index of 28**.

4. **One patent application** (not yet published), P202230143 (Ref. Number: ES1641.1728, 22/02/2022). Title: Dispositivo de sublimación por vacío.

5. List of the most relevant journals (and number of publications):
Nature (1) – Science (1) – Angewandte Chemie International Edition (3) – Journal of the American Chemical Society (3) – ACS Nano (1) – Nano Letters (1) – Chemical Science (2) - Physical Review Letters (2) – Crystal Growth & Design (4) – Chemical Communications (2) – ACS Sustainable chemistry & Engineering (1) – Chemistry - A European Journal (8) – Dalton Transactions (8) – Inorganic Chemistry (10) – RSC Advances (2) – Physical Review B (2), **iScience (1) – ACS Applied Electronic Materials (1) – ACS Applied Nano Materials (1)**, among others.

6. I have provided a total **of 46 Keynotes/Oral Presentations/Seminars/Invited talks in national and international conferences and congress** (Asia, Europe, North and South America).