1. PERSONAL DETAILS

Name: Josep Puigmartí-Luis
Place of birth: Artés (Barcelona), Spain
Date of PhD award: 16 January 2008
Nationality: Spanish
Actual address: C/ Can Tarumbot 19

Researcher ID: A-5302-2015
City: Viladecavalls (Barcelona, Spain)
Orcid ID: 0000-0002-7510-9815
Postal code: 08232
Web page:
https://www.ub.edu/cheminflowgroup/home/

2. RESEARCH AND INTERNATIONAL RECOGNITION

Prof. Dr. Josep Puigmartí-Luis is the head of the ChemInFlow group located at the University of Barcelona (UB), see website: https://www.ub.edu/cheminflowgroup/home/. He completed his PhD in supramolecular chemistry at the Institut de Ciències dels Materiales de Barcelona (ICMAB) and during that time, he realized that the control of fluid flow phenomena would be crucial to make new advances in chemistry and materials science. Therefore, the research activities of his group are centred on controlling fluid flow phenomena to command chemical processes (kinetics of reactions) and to harness the engineering of functional materials in solution and at surfaces. This research area has gained much attention in recent years, and he has contributed to its dissemination with, for example, an invited review article published in Chemical Society Reviews, where Prof. Puigmartí-Luis is the only author (Chem. Soc. Rev. 2014, 43, 2253-2271). As proof of the quality of his research work, Prof. Puigmartí-Luis was awarded the *Premi Antoni de Martí i Franquès de Ciències Químiques* award from the Institut d'Estudis Catalans in 2008 and he received the *St. Jordi award* from the Institut d'Estudis Catalans and the Societat Catalana de Química for his work on supramolecular functional materials. He received a competitive postdoctoral *ETH fellowship* in 2009 and in 2012, he was nominated as a *Ramon y Cajal (RyC) researcher*. In 2014, and after two years as RyC researcher, Prof. Puigmartí-Luis moved his group back to Switzerland, where he gained considerable experience in the management of International, European and National projects (see below). As an independent Group Leader, he has supervised senior scientists, postdocs, PhD students, master students and technicians. He also taught two courses at ETH Zürich and continuously contributes to workshops and summer schools every year. In 2015, Prof. Puigmartí-Luis was awarded an ERC Starting Grant, a *Chair of Excellence* (France) in 2018, and a *Visiting Professor at the University of Valencia* in 2019, among other merits (see below). In September 2019, Josep Puigmartí-Luis was appointed an ICREA Research Professor (Full Professor), and since August 2020, his research group has been based at the Universitat de Barcelona. Since August 2020, Prof. Puigmartí-Luis has been also affiliated with the Institut de Química Teòrica i Computacional (IQTC), serving as a distinguished representative of the IQTC, which was honoured with the "Maria de Maeztu" Unit of Excellence, CEX2019-000919-M, in 2021. Since 2023, Prof. Puigmartí-Luis joined the Management Committee of the EU4MOFs COST Action.

3. ACADEMIC EDUCATION

PhD	***Centre***	***Date***
PhD in Material Science and European Mention in the Doctoral Diploma Thesis' director Title of PhD dissertation:	Institut de Ciència de Materials de Barcelona (ICMAB-CSIC) ***Named as a Severo Ochoa Research Centre by the Ministry of Economy and Competitiveness (MINECO)*** Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain Prof. Dr. David B. Amabilino *'Molecular Organizations of Tetrathiafulvalenes in Monolayers and Fibres'* *Summa Cum Laude Distinction*	Sep 2005 – Jan 2008
Master Degree (PhD)	***Centre***	***Date***
Masters in Materials Science	Institut de Ciència de Materials de Barcelona (ICMAB-CSIC) Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain	Sep 2003 - Feb 2005
Further Higher Education degree	***Centre***	***Date***
Masters in Chemistry and Food Engineering	Instituto Químico de Sarrià (IQS) Via Augusta, 390, 08017 Barcelona, Spain	Sep 2002 – June 2003

University Degree	*Centre*	*Date*
Degree in Chemistry	Universitat Autónoma de Barcelona (UAB) Bellaterra Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain	Sep 1997 – June 2002

4. CURRENT PROFESSIONAL POSITION

Position: ICREA Research Professor at the Faculty of Chemistry, University of Barcelona
Postal Address: Martí i Franquès, 1-11, 08028 Barcelona, Spain
e-mail: josep.puigmarti@ub.edu; group web page: https://www.ub.edu/cheminflowgroup/home/

5. FELLOWSHIPS AND AWARDS

Award	*Institution*	*Date*
Pathfinder EU Project	European Innovation Council / Prof. Puigmartí-Luis is the PI	2024
Visiting Professor	Beijing Institute of Technology (BIT) (China)	2024
Management Committee Member to COST Action (CA22147)	COST ACTION	2023
First-stage approval ERC Advanced grant	European Research Council	2023
Visiting Professor	Changchun University of Science and Technology (CUST) (China)	2023
Rising Star Award	IEEE 3M-NANO	2023
Advanced Research Accreditation / Accreditation as Full Professor	Agència per a la Qualitat del Sistema Universitari de Catalunya (AQU Catalunya)	2023
First-stage approval ERC Advanced grant	European Research Council	2022
Distinguished representative member of IQTC	Awarded Unit of Excellence "Maria de Maeztu" CEX2019-000919-M by Ministerio de Ciencia e Innovación	2021
Emergent consolidated research group	Funding to support the scientific activity of research groups in Catalonia (SGR-Cat 2021)	2021
Pathfinder EU Project	European Innovation Council / Prof. Puigmartí-Luis is the PI	2021
Visiting Professor	University of Valencia	2019
Chair of Excellence	Nanosciences Foundation: Université Grenoble Alpes	2018
European FET Open	EU commission / Prof. Puigmartí-Luis is the scientific & technical manager	2018
Visiting Professor	University of Angers (France) https://www.lumomat.fr/international/partenaires/	2017
Visiting Researcher	Kyoto University and iCeMS Institute (Japan)	2017
ERC Grantee	European Research Council (ERC-StG-2015, Grant number: 677020)	2015
Marie Curie Grantee	Marie Curie Career Integration Grant	2012-2014
Ramon y Cajal Researcher (Assistant Professor)	Awarded Ramón y Cajal (RyC) researcher, the prestigious Spanish tenure-track position.	2012
Beatriu de Pinós Postdoctoral Grant	Catalan Government (declined in favour of RyC researcher)	2012
Antoni de Martí y Franquès	Antoni de Martí y Franquès. Award given by the Institut d'Estudis Catalans (IEC) (www.iec.cat)	2009
'ETH Fellow'	Awarded 'ETH Fellow' for a project entitled 'In-situ formation of three-dimensional bendable networks by microfluidic guided self-assembly'. *First promotion.*	2008
Mobility Grant. U. of Liverpool (UK)	Catalan Government	2007
St. Jordi Award	St. Jordi Award given by the Catalan Society of Chemistry.	2006
Mobility Grant. KU Leuven (Belgium)	EU commission; COST Scientific Mission	2006
FI Fellowship	FI Fellowship given by the Catalan Institute of Nanotechnology (ICN) and AGAUR. *First promotion.*	2003-2007
Erasmus scholarship	European Union	2001

6. PREVIOUS PROFESSIONAL AND SCIENTIFIC POSITIONS

Position	*Institution*	*Date*
Chair of Excellence	The Nanosciences Foundation, Université Grenoble Alpes	April 2018-Dec 2022
Group Leader	Eidgenössische Technische Hochschule Zürich (ETH Zürich) Department of Chemistry and Applied Bioscience, Switzerland	August 2016-July 2020
Group Leader	Swiss Federal Laboratories for Materials Science & Technology (Empa)	March 2014-July 2016
Group Leader (RyC)	Consejo Superior de Investigaciones Científicas (CSIC) Material Science Institute of Barcelona (ICMAB)	Jan 2012-Feb 2014
Postdoctoral Researcher	Eidgenössische Technische Hochschule Zürich (ETH Zürich) Department of Chemistry and Applied Bioscience, Switzerland	August 2008-Dec 2011
Postdoctoral Researcher	Katholieke Universiteit Leuven Chemistry department, Laboratory for Photochemistry & Spectroscopy, B-3001 Heverlee, Belgium	March 2008 - July 2008

7. FUNDING

> 18,000,000 € in projects
> 9,000,000 € as **Principal Investigator**
> 15,300,000 € in the last 5 years, since 2016

[1] *PROJECT TITLE:* **SONOCRAFT: High-throughput ultrasound-based volumetric 3D printing for tissue engineering**
PROJECT NUMBER: 101187842 — SONOCRAFT
FINANCIAL ENTITY: HORIZON-EIC-2024-PATHFINDEROPEN-01 (EIC Pathfinder Open 2024)
AMOUNT: 2,999,625.00€ total
CENTRE: University of Barcelona
DURATION FROM: April 2025 *TO:* March 2029
PRINCIPAL INVESTIGATOR: **Prof. J. Puigmartí-Luis**

[2] *PROJECT TITLE:* GREENS: A Training Programme on 5R's implementation in the design, manufacturing and application of micro and nanorobotic platforms (101169173 — GREENS)
FINANCIAL ENTITY: HORIZON-MSCA-2023-DN-01-01 — MSCA Doctoral Networks 2023
AMOUNT: 4,031,589.6€ total
CENTRE: University of Barcelona
DURATION FROM: February 2025 *TO:* January 2029
PRINCIPAL INVESTIGATOR: Dr. Maria Guix and **Prof. J. Puigmartí-Luis** is Co-PI

[3] *PROJECT TITLE:* *'Towards a decarbonized chemical industry: enhancing the performance of Cu oxide nanocatalysts in carbon dioxide electrolyzers'* **2023 CLIMA 00011**
FINANCIAL ENTITY: AGAUR
AMOUNT: 208.395,00 € total
CENTRE: University of Barcelona
DURATION FROM: January 2024 *TO:* January 2026
PRINCIPAL INVESTIGATOR: Dr. Roc Matheu Montserrat and **Prof. J. Puigmartí-Luis** is Co-PI

[4] *PROJECT TITLE:* *'European metal-organic framework network: combining research and development to promote technological solutions'* (EU4MOFs).
FINANCIAL ENTITY: COST Action (2023-2027), CA22147
AMOUNT: 680.000 € total
DURATION FROM: November 2023 *TO:* October 2027
PRINCIPAL INVESTIGATOR: Prof. Stefan Wuttke, **Prof. Puigmartí-Luis** (Management Committee)

[5] *PROJECT TITLE:* *'EVA: ME 3D printing technology – the revolution of actuatable composites'*
FINANCIAL ENTITY: HORIZON-EIC-2021-PATHFINDEROPEN-01 (Number: 101047081)
AMOUNT: 2,109,624 €
CENTRE: University of Barcelona
DURATION FROM: October 2022 *TO:* September 2026
PRINCIPAL INVESTIGATOR: **Prof. J. Puigmartí-Luis**

[6] *PROJECT TITLE:* SGR-Cat 2021 SGR 00270
FINANCIAL ENTITY: Agencia de Gestión de Ayudas Universitarias y de Investigación (AGAUR)

AMOUNT: 36,000 €
CENTRE: University of Barcelona
DURATION FROM: October 2022 *TO:* September 2024
PRINCIPAL INVESTIGATOR: **Prof. J. Puigmartí-Luis**

[7] *PROJECT TITLE:* *'Synthesis and controlled growth of metal-organic frameworks with microfluidic technologies' (ESTORE)*
FINANCIAL ENTITY: Ministerio de Ciencia e Innovación (Project number: PID2020-116612RB-C33)
AMOUNT: 151.250,00 €
CENTRE: University of Barcelona
DURATION FROM: September 2021 *TO:* August 2024
PRINCIPAL INVESTIGATOR: Dr. Eniko Gyorgy/ **Prof. J. Puigmartí-Luis** is the project leader at UB

[8] *PROJECT TITLE:* *'MAgnetically steerable wireless Nanodevices for the tarGeted delivery of therapeutIc agents in any vascular rEgion of the body (ANGIE)'*;
FINANCIAL ENTITY: European Commission; FET PROACTIVE; Call: H2020-EIC-FETPROACT-2019; (Project number: 952152)
AMOUNT: 4,000,000.00 € from where 550,000.00 € to University of Barcelona (UB)
CENTRE: University of Barcelona
DURATION FROM: January 2021 *TO:* December 2024
PRINCIPAL INVESTIGATOR: Prof. Salvador Pané / **Prof. J. Puigmartí-Luis** is the project leader at UB

[9] *PROJECT TITLE:* *'Microfluidic Crystal Factories (μ-CrysFact): a breakthrough approach for crystal engineering'*
FINANCIAL ENTITY: European Research Council, ERC starting grant
AMOUNT: 1,814,128.00 €
CENTRE: ETH Zürich
DURATION FROM: September 2016 *TO:* August 2022
PRINCIPAL INVESTIGATOR: **Prof. J. Puigmartí-Luis**

[10] *PROJECT TITLE:* *'New approaches to nano-engineer MOF films for electronic and biotechnology applications (M-O-Films)'*
FINANCIAL ENTITY: Nanosciences Foundation: Université Grenoble Alpes
AMOUNT: 351,000.00 €
CENTRE: Nanosciences Foundation: Université Grenoble Alpes
DURATION FROM: January 2019 *TO:* December 2022
PRINCIPAL INVESTIGATOR: **Prof. J. Puigmartí-Luis**

[11] *PROJECT TITLE:* *'Functional 2D porous crystalline materials (2DMats)'*
FINANCIAL ENTITY: Swiss National Founds
AMOUNT: CHF 600,000.00
CENTRE: ETH Zürich
DURATION FROM: January 2019 *TO:* August 2023
PRINCIPAL INVESTIGATOR: **Prof. J. Puigmartí-Luis**

[12] *PROJECT TITLE:* *'Bioactive gas delivery by microrobots equipped with porous material'*
FINANCIAL ENTITY: Kyoto University; SPIRITS 2018
AMOUNT: 25,000.00 €
DURATION FROM: September 2018 *TO:* August 2020
PRINCIPAL INVESTIGATOR: Prof. Shuhei Furukawa

[13] *PROJECT TITLE:* *'Ultra-versatile Structural PRINTing of amorphous and tuned crystalline matter on multiple substrates (SPRINT)'*
FINANCIAL ENTITY: European Commission
AMOUNT: 2,999,997.50 € (435,375.00 € to ETH Zürich)
CENTRE: ETH Zürich
DURATION FROM: September 2018 *TO:* February 2023
PRINCIPAL INVESTIGATOR: **Prof. J. Puigmartí-Luis is the Scientific and Technical manager**

[14] *PROJECT TITLE:* *'Chemobrionics (CBrio)'*
FINANCIAL ENTITY: CMST Action CA17120 (European Cooperation in Science and Technology)
AMOUNT: Approximately 100,000 €
DURATION FROM: 2018 *TO:* 2021
PRINCIPAL INVESTIGATOR: **Participant** and **Member of the Steering Committee** (Switzerland)

[15] *PROJECT TITLE:* *'CoInFun2'*
FINANCIAL ENTITY: Swiss National Founds

AMOUNT: CHF 91,886.00
CENTRE: ETH Zürich
DURATION FROM: April 2018 *TO:* March 2019
PRINCIPAL INVESTIGATOR: **Prof. J. Puigmartí-Luis**

[16] *PROJECT TITLE:* *'MOFs go Micro/Nanorobotics (MOFBOTS)'*
FINANCIAL ENTITY: ETH Zürich
AMOUNT: CHF 225,300.00
CENTRE: ETH Zürich
DURATION FROM: September 2017 *TO:* August 2020
PRINCIPAL INVESTIGATOR: **Prof. J. Puigmartí-Luis, co-applicant**

[17] *PROJECT TITLE:* *'Controlled Crystal Growth and Large-Scale Integration of Functional Materials by Microfluidic Means (CoInFun)'*
FINANCIAL ENTITY: Swiss National Founds
AMOUNT: CHF 491,900
CENTRE: ETH Zürich
DURATION FROM: May 2015 *TO:* April 2019
PRINCIPAL INVESTIGATOR: **J. Puigmartí-Luis**

[18] *PROJECT TITLE:* *'Development of spun cell-scaffolds for biomimetic 3D tissue formation for use in blood propulsion systems'*
FINANCIAL ENTITY: Empa
AMOUNT: CHF 590,000
CENTRE: Empa
DURATION FROM: 2015 *TO:* 2018
PRINCIPAL INVESTIGATOR: **J. Puigmartí-Luis, co-applicant**

[19] *PROJECT TITLE:* *'From molecules to crystals - how do organic molecules form crystals? (Crystallize)'*
FINANCIAL ENTITY: CMST COST Action CM1402 (European Cooperation in Science and Technology)
AMOUNT: Approximately 100,000 €
DURATION FROM: 2015 *TO:* 2018
PRINCIPAL INVESTIGATOR: **Participant** and **Member of the Steering Committee** (Switzerland)

[20] *PROJECT TITLE:* *'Electrochemical Processing Methodologies and Corrosion Protection for Device and Systems Miniaturization'*
FINANCIAL ENTITY: COST Action MP1407 (European Cooperation in Science and Technology) (oc-2014-1-18648)
AMOUNT: Approximately 100,000 €
DURATION FROM: 2015 *TO:* 2018
PRINCIPAL INVESTIGATOR: **Participant** (82 participants) and Member of the Steering Committee (substitute member of the Steering Committee chair in Switzerland)

[21] *PROJECT TITLE:* *'IRENA: Intelligent responsive nanofibers'*
FINANCIAL ENTITY: Swiss National Science Foundation (NRP: 406240_126128)
AMOUNT: CHF 117,523
CENTRE: Empa
DURATION FROM: 2014 *TO:* 2015
PRINCIPAL INVESTIGATOR: **J. Puigmartí-Luis**

[22] *PROJECT TITLE:* *'Supramolecular Chirality in Low and Charge Transport: Preparation of Chiral Organic Functional Materials'*
FINANCIAL ENTITY: Spanish Ministry of Science and Innovation (MAT2013-47869-C4-2-P)
AMOUNT: 89,796 €
CENTRE: Institut de Ciència de Materials de Barcelona (CSIC)
DURATION FROM: 2014 *TO:* 2017
PRINCIPAL INVESTIGATOR: **J. Puigmartí-Luis, co-applicant**

[23] *PROJECT TITLE:* *'Multistage Logic Platforms (MuLoPla)'*
FINANCIAL ENTITY: European Commission (PCIG-11-GA-2012-32139)
AMOUNT: 100,000 €
CENTRE: Institut de Ciència de Materials de Barcelona (CSIC)
DURATION FROM: 2012 *TO:* 2016
PRINCIPAL INVESTIGATOR: **J. Puigmartí-Luis**

[24] *PROJECT TITLE:* *'Microfluidic-based synthesis of molecular aggregates and nanostructures'*
FINANCIAL ENTITY: Generalitat de Catalunya, AGAUR, Beatriu de Pinós programme (2013 BP_B 00256)
AMOUNT: 91,022 €
DURATION FROM: 2013 *TO:* 2015
PRINCIPAL INVESTIGATOR: **J. Puigmartí-Luis.** Formally Co-applicant

[25] *PROJECT TITLE:* *'A novel approach for Microfluidic platforms incorporating pneumatic'*
FINANCIAL ENTITY: GICSERV-B Program: 8th call (NGG-261)
AMOUNT: One-year free access to the clean room facility at CNM-CSIC
DURATION FROM: 2012 *TO:* 2013
PRINCIPAL INVESTIGATOR: **J. Puigmartí-Luis**

[26] *PROJECT TITLE:* *Support for research of the Ramón y Cajal Fellowship*
FINANCIAL ENTITY: Spanish Ministry of Science and Innovation
AMOUNT: 208,890 €
DURATION FROM: 2012 *TO:* 2014
PRINCIPAL INVESTIGATOR: **J. Puigmartí-Luis**

[27] *PROJECT TITLE:* *Support for research of the ETH Post-Doctoral Fellowship*
FINANCIAL ENTITY: ETH Zürich
AMOUNT: CHF 193,000
CENTRE: ETH Zürich
DURATION FROM: 2009 *TO:* 2011
PRINCIPAL INVESTIGATOR: **J. Puigmartí-Luis**

7.1. FUNDINGS AS A HOST GROUP / PROMOTION AND SUPPORT OF RESEARCHERS

[1] *PROJECT TITLE:* Ayudas para contratos predoctorales para la formación de doctores/as (FPI)
FINANCIAL ENTITY: Ministerio de ciencia e innovación
PROGRAMA: Programa Estatal para Desenvolupar, Atraer y Retener Talento
CENTRE: Universitat de Barcelona
DURATION FROM: December 2023 *TO:* November 2027
PRINCIPAL INVESTIGATOR: Gemma Llauradó i Capdevila

[2] *PROJECT TITLE:* *Ramón y Cajal Fellowship. 1st position in his category.*
FINANCIAL ENTITY: Ministerio de ciencia e innovación
AMOUNT: 236,350.00 €
CENTRE: Universitat de Barcelona
DURATION FROM: January 2023 *TO:* August 2023
Declined in favour of Serra Hunter Lecturer position
PRINCIPAL INVESTIGATOR: Albert Cortijos Aragonès

[3] *PROJECT TITLE:* *"La Caixa" Junior Leader. – Incoming Fellowship. 1stposition in panel - remote evaluation*
FINANCIAL ENTITY: *La Caixa Foundation*
AMOUNT: 305,100.00 €
CENTRE: Universitat de Barcelona
DURATION FROM: July 2022 *TO:* December2022
Declined in favour of Ramón y Cajal Fellowship
PRINCIPAL INVESTIGATOR: Albert Cortijos Aragonès

[4] *PROJECT TITLE:* *"La Caixa" Junior Leader – Incoming Fellowship*
FINANCIAL ENTITY: *La Caixa Foundation*
AMOUNT: 237,000 €
CENTRE: Universitat de Barcelona
DURATION FROM: June 2022 *TO:* December 2022
Declined in favour of Ramón y Cajal Fellowship
PRINCIPAL INVESTIGATOR: Roc Matheu Montserrat

[5] *PROJECT TITLE:* Subprograma *Ramón y Cajal*
FINANCIAL ENTITY: Agència Estatal d'Investigació i pel Fons Social Europeu, MCIN/AEI
AMOUNT: 324,250 €
CENTRE: Universitat de Barcelona
DURATION FROM: March 2022 *TO:* February 2027
PRINCIPAL INVESTIGATOR: Maria Guix Noguer

[6] *PROJECT TITLE:* Beatriu de Pinós Postdoctoral Fellowship
FINANCIAL ENTITY: Catalan Goverment/European Commission
AMOUNT: 144,300.00 €
CENTRE: Universitat de Barcelona
DURATION FROM: January 2022 *TO:* June 2022
Declined in favour of "La Caixa" Junior Leader
PRINCIPAL INVESTIGATOR: Albert Cortijos Aragonès

[7] *PROJECT TITLE:* Juan de la Cierva - Incorporación 89% 1st position in his category.
FINANCIAL ENTITY: Science Spanish Ministry/European Commission
AMOUNT: 111,300.00 €
CENTRE: Universitat de Barcelona
DURATION FROM: January 2022 *TO:* January 2022
Declined in favour of Beatriu de Pinós (not used)
PRINCIPAL INVESTIGATOR: Albert Cortijos Aragonès

[8] *PROJECT TITLE:* María de Zambrano Grant (100%, 1st position in his category)
FINANCIAL ENTITY: Universities Spanish Ministry
AMOUNT: 140,000.23 €
CENTRE: Universitat de Barcelona
DURATION FROM: January 2022 *TO:* January 2022
Declined in favour of Juan de la Cierva (not used)
PRINCIPAL INVESTIGATOR: Albert Cortijos Aragonès

8. SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

Since 2020, 15 TFG, 4 Master students, 11 PhD, 9 Postdoctoral researchers, 3 Senior Scientist and 6 Visiting students.

Name	***Project title and/or function in the group***	***Date***
Miquel Adell	*Continuous flow synthesis of functional materials* Master Student	1 Oct 2024 – 20 July 2025
Nicolás Arisnabarreta	*Synthesis of 2D COFs in simulated microgravity* Visiting Postdoctoral Researcher from Katholieke Universiteit Leuven (Belgium)	01 April – 31 December 2024
James Nicholas	*Using microfluidic devices for self-assembly and crystal growth* Postdoctoral Researcher	1 April 2024 - present
Natalia Salvat Lozano	*Fabrication and Optimization of Thin Films for Advanced Electronic Devices* Industrial PhD student (IDEADED-UB)	Oct 2023-present
Dr. Maria Guix Noguera	*Micro-nanorobotics* Senior Scientist (Ramón y Cajal)	2022-present
Dr. Beltzane Garcia Cirera	*Project and Lab manager* Postdoctoral Researcher	1 Oct 2022-present
Thao Nguyen	*Crystal engineering* PhD student	2022-present
Tuan Ngo	*Microfluidics engineering* PhD student	Oct 2022-present
Gemma Llauradó i Capdevila	*Confined synthesis of COFs and MOFs* PhD student	2022 - present
Dr. Albert Cortijos i Aragonès	*STM/AF* Lecture Professor (Serra Hunter), Senior Scientist	2023-present
Dr. Alessandro Sorrenti	*Study of dissipative self-assembly in microfluidic devices,* Lecture Professor, Senior Scientist	2021-present
Ramon Santiago Herrera Restrepo	*Microrobots for drug delivery* PhD student	2020-present
Pedro Guilherme Reis Alves	*Numerical simulations* PhD student located in Portugal, co-supervised with Dr. Tiago Sotto Mayor	2020- present
Xu Huang	*In-flow microfluidic experiments* Visiting PhD student from Sun Yat-sen University (China)	1 Des 2023-25 Set 2025
Gabriel	*In chip blood-clot formation* Visiting Undergraduate student from Universidad Nacional Autónoma de Mexico de (Mexico)	17 June- 20 August 2024

Cole Fredericks	*Development of microfluidic chips to develop new biomedical materials and synthesis of micro-robots* Visiting Undergraduate student from University of Waterloo (Canadà)	2 May 2024 – 20 Juliol 2024
Maria Aurora Guarducci	*COFs and MOFs synthesis and characterisation* Visiting PhD student from La Sapienza, Università di Roma (Italy)	Set 2023-03 May 2024
Silvia Veglioni	*Flexible electronics for in situ monitoring of clot-in-chip generation in microfluidic devices* Master student with a mobility grant from Politecnico di Torino (Italia)	Oct 2023 – 9th April 2024 presenta tesina
João Pedro Vale	*Numerical simulations* PhD student located in Portugal, co-supervised with Dr. Tiago Sotto Mayor	16th Sep 2019-8 March 2024
James Nicholas	*Self-assembly studies with microfluidic devices* PhD student	2019 - Des 2023
Miquel Adell Roca	*Microfluidic synthesis of 3D Covalent Organic Frameworks (COF's)* TFG student	Oct 2023-Jan 2024
Marco Cornejo Paredes	*Fabrication and characterization of clot-in-chip platforms* TFG student	Oct 2023-Jan 2024
Dr. Michele Mattera	*Photochemistry and self-assembly* Postdoctoral Researcher	2020- Dec 2023
Dr. Albert Cortijos i Aragonès	*STM/AFM* Senior Scientist	2021-2023
Judit Boix Comella	*Clot-in-chip fabrication by continuous flow approaches* TFG student	March 2023-June 2023
Mauri Serra Roger	*Biomolecular guest induced helical supramolecular polymers under microfluidic control* TFG student	March 2023-June 2023
Marina Luque Artero	*Controlled clot formation in microfluidic co-flowing devices* TFG student	Oct 2022-Jan 2023
Clàudia Martínez Verdi	*Biomolecular guest induced supramolecular assembly under microfluidics control.* TFG student	Oct 2022-Jan 2023
Dr. Andreas Cavegn	*Crystal engineering* Postdoctoral Researcher	2021-2022
Natalija Pantalon Juaj	*Effect of microfluidic synthetic methods on the assembly of coordination complexes* Visiting PhD student from Ruđer Bošković Institute (Croatia)	
Cesc Vidal Vilaseca	*Microfluidic-based bottom-up assembly of nanocellulose fibres* TFG student f	Feb 2022-June 2022
Diego Briseño Oloriz	*Optimization and controlled synthesis of bacterial cellulose nanofibers via a microfluidic approach* TFG student	Feb 2022-June 2022
Guillem Mangues Estany	*Fast and easy fabrication of Au tips suitable for Scanning Tunneling Microsopy and tip-enhanced Raman spectroscopy by electrochemical etching.* TFG student	Oct 2021-Jan 2022
Dr. Yonca Belce	*Surface Chemistry* Postdoctoral Researcher	2020-2022
Dr. Octavio Graniel Tamayo	Postdoctoral Researcher Located in France hired through the Chair of Excellence	2019-2022
Martí Sanz Mir	*Controlled growth of MOF crystals under microgravity mimicking conditions using microfluidic environments* Master student	2021- 2022
Gemma Llauradó i Capdevilla	*Confined synthesis of functional matter and its effects on morphogenesis* Master student	Feb 22 – Jul. 22
Gemma Llauradó i Capdevila	*Microfluidic Flow Focusing for the Continuous Synthesis of a MOF* Optional master subject – Recerca pràctica	Set 2021 – Jan 2022
Martí Sainz Mir	*Controlled growth of MOF crystals under microgravity mimicking conditions using microfluidic environments* Optional master subject – Recerca pràctica	2021-2022
Dr. Pablo Bulit	*Self-assembly and porous materials* Postdoctoral Researcher	2019-2021
Lídia de Gregorio Perpiñá	*Synthesis and optimization of Layered Double Hydroxides (LDH) microstructures using* TFG student	2020- 2021

Gemma Llauradó i Capdevilla	*Development of a redox active colloidal system for dissipative self-assembly* TFG student	Feb 212020-Jul 2021
David Mínguez Colomer	*Controlled growth of Covalent Organic Frameworks Nanoparticles* TFG student	Oct 2020-Jan2021
Martí Sainz Mir	*Controlled growth of MOF crystals under microgravity mimicking conditions using microfluidic environments* TFG student	2020-2021
Dr. David Rodriguez	*Covalent and non-covalent synthesis of 2D materials* Postdoctoral Researcher	2019-2021
Dr. David Aguilà Aviles	*Coordination complexes* Postdoctoral Researcher	2020-2021
Dr. Alessandro Sorrenti	*Self-assembly and out of equilibrium studies* Postdoctoral Researcher	2017-2021
Anastasia Terzopoulou	*MOFs go Microrobotics* PhD student	2017-2021

As an ERC fellow at ETH Zürich

Name	***Project title and/or function in the group***	***Date***
Dr. Alessandro Sorrenti	*Self-assembly and out of equilibrium studies* Postdoctoral Researcher	2017-2020
Dr. David Rodriguez	*Covalent and non-covalent synthesis of 2D materials* Postdoctoral Researcher	2019-2021
Dr. Carlos Franco Pujante	*Synthesis of new coordination polymers* Postdoctoral Researcher	2017-2020
Semih Sevim	*Development of new technology-driven synthetic tools* PhD student	2017-2020
Anastasia Terzopoulou	*MOFs go Microrobotics* PhD student	2017-2021
Alexander Hernández Oendra	*Microfluidics as a tool to control self-assembly* Master student	2017
Lewis Jones	*Controlled growth of metal-organic materials in microchannels* Master student	2017
Afshin Abrishamkar	*Microfluidics as a tool to control self-assembly* PhD student	2014-2018

As a group leader at Empa

Name	***Project title and/or function in the group***	***Date***
Dr. Giuseppino Fortunato	*Projects related to electrospinning methods* Senior Scientist	2014-2016
Dr. Haijiang Zhang	*The Triplejet* Postdoctoral Researcher	2015-2016
Bhuwan Ghimire	*Microfluidics as a tool to control self-assembly* PhD student	2015-2017*
Afshin Abrishamkar	*Microfluidics as a tool to control self-assembly* PhD student	2014-present
Gökce Yazgan	*IRENA: Intelligent responsive nanofibers* PhD student	2014-2016
Manel Beldi	*Membranes à Morphologie Variable obtenues par Electrospinning* Master student	2014

** Mr. Bhuwan Ghimire terminated his PhD project due to personal reasons related with his health.*

During Postdoctoral position at ETH Zürich

Name	***Project title***	***Date***
Urs Hartfelder	*'Metal Organic and Hybrid Nanowires on Microfluidic Devices'* Co-directed with Prof. P. S. Dittrich Experimental work	2010

Tessa Neumann	*'Microfluidics for the synthesis of hybrid materials by gold and silver reduction'* Co-directed with Prof. P. S. Dittrich Master student	2009

During PhD

Name	***Project title***	***Date***
Christophe Theron	*Síntesi de derivados del tatratiafulvaleno* Co-directed with Prof. Dr. David B. Amabilino Master student	2007

Six PhD candidates have successfully completed their studies under the guidance of Prof. Puigmartí-Luis: A. Abrishamkar (2018), S. Sevim (2020), A. Terzopoulou (2021), J. Nicholas (2023), Maria Aurora Guarducci (2024), and Ramón Santiago Herrara Restrepo (2024). Dr. A. Abrishamkar garnered seven awards and honours during his Ph.D., while Dr. S. Sevim and Dr. J. Nicholas also received recognition from their Ph.D. work (see section 8.1). This clearly indicates the extraordinary capacity of Prof. Puigmartí-Luis to educate and train students at a very competitive level.

8.1. AWARS TO Ph.D. STUDENTS OF THE GROUP AND OTHER GROUP MEMBERS

- ***Mr. James Nicholas*** *received two Awards for:*
Best oral presentation at the Thursday Morning Science (TMS) Day (Sep 2023). TMS is an event organised by the Università degli Studi dell'Aquila and it is a multidisciplinary scientific conference with topics related to chemistry, physics, biology, and biotechnology.
Best poster in Organometallic Chemistry from all the communications presented at Symposium S11: New Functional Systems from Self-Assembly during the XXXVIII BIENNIAL MEETING OF THE SPANISH SOCIETY OF CHEMISTRY conference in June 2022.

- ***Dr. Albert C. Aragonès*** *received* the Young Researcher Award from "la Real Sociedad Española de Química (RSEQ)" in (2022).

- ***Mr. Semih Sevim*** *received* the 2019 "Chemistry Travel Award" from the Swiss Academy of Sciences (SCNAT), together with the Swiss Chemical Society (SCS).

- ***Mr. Afshin Abrishamkar*** *has received seven awards and honours:*
Travel Grant by Iran's National Elites Foundation for a talk at Uni. Isfahan (Dec. 2017)
Travel Grant by Swiss Society for Crystallography (Nov. 2017)
Finalist (runner-up) in 2017 SLAS Discovery & Technology Art Science Contest (May 2017)
Travel grant by European Cooperation in Science & Technology (COST) (May 2017)
Travel Grant by Iran's National Elites Foundation for a talk at Isfahan Uni. Of Tech. (Dec. 2016)
Registration Fee Waiver Grant by the Conference Organizing Committee MOF 2016 (Oct. 2016)
Finalist (honourable mention) in 2016 JALA & JBS Art Science Contest (May 2017)

9. TEACHING ACTIVITIES

Function	***Lecture / University***	***Date***
Lecturer	*Laboratory practicum at the Faculty of Chemistry / University of Barcelona*	2020-present
Lecturer	*European School on Molecular Nanoscience (ESMolNa2022)*	Academic year 2021-2022
Lecturer	*European School on Molecular Nanoscience (ESMolNa2021)*	Academic year 2020-2021
Lecturer	*European School on Molecular Nanoscience (ESMolNa2020)*	Academic year 2019-2020
Lecturer	*I am invited to give lectures: Masters in Nanoscience and Materials Science / University Autonomous of Barcelona (UAB)*	2019
Lecturer	*European School on Molecular Nanoscience (ESMolNa2019)*	Academic year 2018-2019
Lecturer	*Microfluidics for Microbial Ecology / ETH Zurich*	Academic year 2016-2019
Lecturer	*Course on experimental fluid dynamics Biomicrofluidic Engineering; MAKE Project / ETH Zurich*	Academic year 2017-2019
Lecturer	*Course on experimental fluid dynamics Microdroplet formation and stability / ETH Zurich*	Academic year 2016-2018

Lecturer	*European School on Molecular Nanoscience (ESMolNa2018)*	Academic year 2017-2018
Lecturer	*University of Angers* https://www.lumomat.fr/international/partenaires/	Academic year 2017-2018
Lecturer	*European School on Molecular Nanoscience (ESMolNa2017)*	Academic year 2017-2018
Lecturer	*Master of Applied Materials Chemistry / University of Barcelona (UB)*	Academic year 2016-2017
Lecturer	*European School on Molecular Nanoscience (ESMolNa2016)*	Academic year 2016-2017
Lecturer	*Masters in Nanoscience and Materials Science / University Autonomous of Barcelona (UAB)*	Academic year 2013-2014
Lecturer	*XIV Spanish National School of Molecular Materials*	Academic year 2013-2014
Lecturer	*The life of a researcher: a view on science for the general public / Different secondary schools in Catalonia*	Academic year 2012-2013 and 2013-2014

10. DISSEMINATION ACTIVITIS FROM ChemInFlow GROUP

2023 – present: Prof. Puigmartí-Luis' group, i.e., the ChemInFlow group, collaborates with **Nanoinventum**. **Nanoinventum** is a project that aims to incorporate science and nanotechnology into primary education. By creating a course specifically designed for schools, **Nanoinventum** enables students to become familiar with scientific language and cultivate their passion for nanotechnology.

- 2023: the ChemInFlow group contributed to the development of a comic titled '¡Nanobiotico!' to illustrate the potential actions that a nanorobot can provide for healing the human body.
- 30.04.2024: Dr. Maria Guix and Dr. Beltzane Garcia-Cirera are preparing some activities at Sagrada Familia School.

2023 – present: Dr. Maria Guix and Dr. Beltzane Garcia-Cirera collaborated with the **Magnet project.** The programme is targeted to schools that have an unbalanced social composition with respect to their reference territory, and that have a teaching staff committed to develop innovation projects. The participating institutions are institutions of reference and excellence in a specific field of knowledge which have an educational commitment to society, and a great capacity to transfer innovation and knowledge.

- March 2023: third-year students at the Madorell School in Molins de Rei. The collaboration involved dissemination activities related to the water cycle and microplastic contamination.
- May 2024: Madorell School. With students of primary school (2nd curs) about water cycle

11. ORGANISATION OF SCIENTIFIC MEETINGS

Function	***Conference and Summer School***	***Date***
Member of the organization	*Active nano/microsystems in the Spanish context (AMES 2024)*	24 – 25 October 2024
Organizer	*Special session, titled "Matter in motion" at MARSS in Abu Dhabi*	12 October 2023
Organizer	*Symposium between Beijing Institute of technology (BIT) and ETH Zürich*	16-17 October 2019
Invited to organize a session	*International Conference of Coordination Chemistry (ICCC) in 2018 at Sendai*	30 July-4 August 2018
Member of the organization committee	*International Conference 'Chirality at the Nanoscale'* Sitges, Spain	17–21 September 2007
Member of the organization committee	*VII Escuela Nacional de Materiales Moleculares* Boí Taüll, Lleida, Spain	29 March–6 April 2005

12. INSTITUTIONAL RESPONSIBILITIES, MEMBERSHIPS, COMISSIONS

Member of the Steering Committee for the COST project EU4MOFS	2023
Member of a PhD evaluation committee at Institut de Bioengineria de Catalunya (IBEC)	2023
Member of a PhD evaluation committee at Universitat Autònoma de Barcelona (UAB)	2022
Member of a PhD evaluation committee at Catalan Institute of Nanoscience (ICN2)	2022
Member of a PhD evaluation committee at Catalan Institute of Nanoscience (ICN2)	2022

Member of the Grupo Especializado de Cristalografia y Crecimiento Cristalino (GE3C)	2021
Member of a PhD evaluation committee at KU Leuven, Belgium	2021
Member of a PhD evaluation committee at Catalan Institute of bioengineering (IBEC)	2021
Evaluator for the French National Research Agency (ANR) & Austrian Science Fund (FWF)	2021
Editorial Board member of Molecules (MDPI)	2020
Member of a PhD evaluation committee at Universidad Rey Juan Carlos	2020
Member of a PhD evaluation committee at Universidad Autonoma de Madrid	2020
Member of a PhD evaluation committee at Université de Bordeaux	2019
Member of a PhD evaluation committee at Catalan Institute of Nanoscience and Nanotechnology (ICN2), Spain	2018
Evaluator of InterTalentum projects	2018
Member of a PhD evaluation committee at Univ. of Barcelona, Spain	2018
Guest Editor, Special issue Editor "Microfluidic Platforms for Crystallography" (http://www.mdpi.com/journal/crystals/special_issues/Microfluidic_Crystal)	2018
Member of the Steering Committee for the COST project Chemobrionics (chair in Switzerland)	2018
Member of a PhD evaluation committee at Univ. of Barcelona, Spain	2017
Member of the Steering Committee for the COST project Crystalize (chair in Switzerland)	2015
Member of the Swiss Chemical Society (SCS)	Since 2015
Organiser of the Raman Spectroscopy Symposium, 1 day, at Empa-Swiss Federal Laboratories for Materials Science & Technology, Switzerland	2014
Member of a PhD evaluation committee at Univ. Geneva, Switzerland	2014
Member of the Royal Society of Chemistry (MRSC)	Since 2013
Member of the Scientific Program 'New Materials in Your Classroom', First Prize of the ReachOut, Competition Award E-MRS Spring 2014	2013
Reviewer for Nature Publishing Group, Chemical Society Reviews, Angewandte Chemie, Advanced Materials, Lab on a Chip, Journal of Materials Chemistry, Langmuir, among others	Since 2008
Member of the Real Sociedad Española de Química	Since 2006
Member of the Grupo NanoMatMol (www.nanomatmol.org)	Since 2006

13. PRESENTATIONS IN CONGRESSES AND SCHOOLS

Total number 128: 96 Invited Oral Communications; 17 Oral Communications; 15 Posters

[1] **IV Escuela de Resonancia Paramegnètica Electrònica**
(2004) Universidad de Alicante, Spain
Title: 'Self-assembly of TTF amide derivatives'
J. Puigmartí-Luis, C. Rovira, D. B. Amabilino

[2] **VII Escuela Nacional de Materiales Moleculares**
(29 March-6 April 2005) Boí Taüll, Lleida, Spain
Title: 'Auto-ensamblaje de derivados de TTF en superficies'
J. Puigmartí-Luis, D.B. Amabilino, S. De Feyter, H. Uji-i

[3] **Marie Curie Research Training Network Chiral Expression and Transfer at Nanoscale**
(2005) Mons, Belgium
Title: 'Solvent and surface dependence on the self -assembly of functional units'
J. Puigmartí-Luis, C. Rovira, D. B. Amabilino

[4] **Final Meeting of the COST Action D14**
(2005) Hotel Eden Roc, Sant Feliu de Guixols, Spain
Title: 'Self-assembly of TTF derivatives on surfaces'
J. Puigmartí-Luis, D. B. Amabilino, S. De Feyter, H. Ujii

[5] **8th European Conference on Molecular Electronics (ECME8)**
(29 June - 2 July) Bologna, Italy
Title: 'Self-assembly of TTF derivatives on surfaces'
J. Puigmartí-Luis, D. B. Amabilino, S. De Feyter, H. Ujii

[6] **3rd Nanospain Workshop**
(20-23 March 2006) Pamplona, Spain
Title: 'Organogels from simple Self-Assembling Amide derived Tetrathiafulvalenes: En route to Conducting Nanowires'

J. Puigmartí-Luis, A. Pérez del Pino, V. Laukhin, C. Rovira, E. Laukhina, D.B. Amabilino

[7] **Jornada de Química de Catalunya i del Gran Sud-Oest Francès**
(23-24 November 2006) Institut d'Estudis Catalans, Barcelona, Spain
Title: 'Conducting Supramolecular Nanowires'
J. Puigmartí-Luis, A. Minoia, E. Laukhina, A. Pérez del Pino, H. Uji-i, C. Rovira, J. Cornil, A. Lledós, G. Ujaque, S. De Feyter, R. Lazzaroni, V. Laukhin, D.B. Amabilino

[8] **XXII Trobades Científiques de la Mediterrànea**
(9-11 October 2006) Maó, Spain
Title: 'Organogels from simple self-assembling amide derived tetrathiafulvalenes: En route to conducting nanowires'
J. Puigmartí-Luis, A. Pérez del Pino, V. Laukhin, C. Rovira, E. Laukhina, D. B. Amabilino

[9] **Nanotech Insight 2007**
(10-17 March 2007) Luxor, Egypt
Title: 'Noncovalent Control for Bottom-Up Assembly of Functional Supramolecular Wires'
D.B. Amabilino, J. Puigmartí-Luis, A. Minoia, H. Uji-i, C. Rovira, J. Cornil, S. De Feyter, R. Lazzaroni
Title: 'Self-assembly of TTF derivatives at surfaces'
J. Puigmartí-Luis, A. Minoia, A. Pérez del Pino, G. Ujaque, C. Rovira, A. Lledós, R. Lazzaroni, H. Uji-i, S. De Feyter, D.B. Amabilino

[10] **Nano NAIMO M36 Meeting**
(2-4 April 2007) Napoles, Italy
Title: 'Organogels from simple self-assembling amide derived tetrathiafulvalenes: En route to conducting nanowires'
J. Puigmartí-Luis, A. Pérez del Pino, V. Laukhin, C. Rovira, E. Laukhina, D. B. Amabilino
Title: 'TTFs that can gelify organic solvents'
J. Puigmartí-Luis, A. Pérez del Pino, V. Laukhin, C. Rovira, E. Laukhina, D. B. Amabilino

[11] **Chirality at the Nanoscale**
(17-21 September 2007) Sitges, Spain
Title: 'Self-assembly of TTF derivatives on surfaces'
J. Puigmartí-Luis, A. Pérez del Pino, V. Laukhin, C. Rovira, E. Laukhina, D. B. Amabilino

[12] **7th International Symposium on Crystalline Organic Metals, Superconductors and Ferromagnets**
(24-29 September 2007) Peñiscola, Spain
Title: 'Self- Assembly of TTF derivatives at Surfaces Functional Supramolecular Wires'
J. Puigmartí-Luis, A. Minoia, A. Pérez del Pino, G. Ujaque, C. Rovira, A. Lledós, R. Lazzaroni, H. Uji-i, S. De Feyter, D.B. Amabilino

[13] **12th NanoTech, Annual European Conference on Micro and Nanoscale Technologies for Biosciences**
(17-19 November 2008) Montreux, Switzerland
Title: 'Microfluidics as a tool to control and direct self-assembly'
J. Puigmartí-Luis, P. S. Dittrich

[14] **Nano Tech Insight 2009**
(29 March-2 April 2009) Barcelona, Spain
Title: 'Microfluidics as a tool to control and direct self-assembly'
J. Puigmartí-Luis, P. S. Dittrich

[15] **Analytical Chemistry Symposium: Analyze That**
(13 May 2009) Zürich, Switzerland
Title: 'Microfluidics as a tool to control and direct self-assembly'
J. Puigmartí-Luis, P. S. Dittrich

[16] **MicroTAS 2009**
(1-5 November 2009) Jeju, Korea
Title: 'Microfluidic-Guided Assembly of nanoparticles, nanorods and nanowires'
J. Puigmartí-Luis, P. S. Dittrich

[17] **Industry Day**
(17 September 2010) Zürich, Switzerland
Title: 'Formation and integration of functional micro-and nanowires on a microfluidic platform'
J. Puigmartí-Luis, P. S. Dittrich

[18] **NanoBio Europe 2010**
(15-17 June 2010) Münster, Germany
Title: 'Formation and integration of functional micro-and nanowires on a microfluidic platform'

J. Puigmartí-Luis, P. S. Dittrich

[19] **MicroTAS 2010**
(3-7 October 2010) Groningen, Netherlands
Title: 'Simultaneous control of length and location of metal-organic nanowires grown by hydrodinamic focusing in a multilayer microfluidic device'
P. Kuhn, J. Puigmartí-Luis, I. Imaz, D. Maspoch, P. S. Dittrich

[20] **MRS 2011**
(25-29 April 2011) San Francisco, USA
Title: 'Guided assembly of nanowires and their integration in microfluidic device'
J. Puigmartí-Luis, P. Kuhn, B. Z. Cvetkovic, D. Schaffhauser, M. Rubio-Martinez, I. Imaz, D. Maspoch, P. S. Dittrich

[21] **Lawrence Berkeley National Laboratory**
(2 May 2011) Berkeley, USA
Title: 'Self-Assembly and Microfluidic Guided Assembly of Functional Materials'
J. Puigmartí-Luis (invited by Prof. Miquel Salmeron)

[22] **III International Workshop on Analytical Miniaturization and NANOtechnologies**
(11-12 June, 2012) Barcelona, Spain

[23] **MolMat 2012**
(3-6 July 2012) Barcelona, Spain
Title: 'Microfluidic Platforms; a Versatile Synthetic Route'
J. Puigmartí-Luis, Inhar Imaz, Daniel Maspoch, David B. Amabilinob, Petra Dittrich

[24] **Institut de Ciències Fotòniques, ICFO**
(17 September 2012) Castelldefels, Spain'
Title: 'Microfluidic Platforms; a Versatile Synthetic Route'
J. Puigmartí-Luis (invited by Prof. Jordi Martorell)

[25] **Instituto de Microelectrónica de Barcelona IMB-CSIC**
(28 September 2012) Bellaterra, Spain
Title: 'Multifunctional Microfluidic Platforms'
J. Puigmartí-Luis (invited by Dr. Andreu Llobera Adán)

[26] **Instituto de Ciència de Materials de Barcelona ICMAB-CSIC**
(29 October 2012) Bellaterra, Spain
Title: 'Microfluidics, a versatile route towards self-assembly and device fabrication'
J. Puigmartí-Luis (invited by Dra. Rosario Núñez)

[27] **VIX Escuela Nacional de Materiales Moleculares**
(3-7 February 2013) Almagro, Spain
Title: 'Nuevos métodos de sintéticos y de localización de materiales moleculares'
J. Puigmartí-Luis

[28] **Initial Training Network, Dynamol**
(17-19 April 2013) Barcelona, Spain
Title: 'Microfluidics: A way to control self-assembly of functional molecular units'
J. Puigmartí-Luis; J. Puigmartí-Luis also organized and performed a practical course on Microfluidics for Dynamol

[29] **XXXIV Reunión Bienal**
(15-18 September 2013) Santander, Spain
Title: 'La microfluidica como una herramienta versátil para la síntesi y localización de materiales moleculares'
J. Puigmartí-Luis

[30] **Workshop at Empa with TUL Poland**
(7-May-2014) St. Gallen, Switzerland
Title: 'Activities Functional Membranes Group'
J. Puigmartí-Luis

[31] **ARRAYON Biotechnology SA**
(12-May-2014) CSEM, Neuchatel, Switzerland
Title: 'Activities Functional Membranes Group'
J. Puigmartí-Luis

[32] **University of Geneva**
(25-August-2014) Geneva, Switzerland

Title: 'Microfluidics, a mainstream technology for a myriad of applications'
J. Puigmartí-Luis (invited by Prof. Corinne Vebert)

[33] **Summer School: 'Electrospinning: Exploiting Electrohydrodynamics and Rheology for the Control of Nanofiber Structural and Physical Properties'**
(1-5 September 2014) Udine, Italy

[34] **Modern Crystallography in Applied Research**
(8 September 2014) Empa Dübendorf, Switzerland

[35] **Swiss soft days**
(2 October 2014) EPFL Leusane, Switzerland

[36] **University of Bern**
(13-February-2015) Bern, Switzerland
Title: 'Microfluidic technologies for materials processing and controlled self-assembly environments'
J. Puigmartí-Luis (invited by Prof. Jean-Louis Reymond)

[37] **Fourth International Conference on Multifunctional, Hybrid and Nanomaterials**
(Hybrid Materials 2015)
(9-13 March 2015) Sitges, Spain
Title: 'Block-copolymers as scaffolds for the organization of organic hybrid materials'
M. Riba-Moliner, Gómez-Rodríguez, D. B.Amabilino, J. Puigmartí-Luis, A. González-Campo

[38] **NRP 62 Smart Materials Final meeting**
(19 March 2015) Gurten, Switzerland

[39] **Laboratoire MOLTECH-Anjou and University of Angers**
(5 May 2015) Angers, France
Title: 'Microfluidic technologies for materials processing and controlled self-assembly environments'
J. Puigmartí-Luis (invited by Prof. Marc Sallé)

[40] **1st European Conference on Metal Organic Frameworks and Porous Polymers**
(11-14 October 2015) Postdam, Germany

[41] **Microfluidics Congress, utilizing microfluidic technologies as a tool for progressing medical research and patient care**
(20-21 October 2015) London, United Kingdom

[42] **Get together Workshop and second Management Committee (MC) meeting of the COST Action e-MINDS**
(28-30 October 2015) Krakow, Poland

[43] **Institute for Integrated Cell-Material Sciences (WPI-iCeMS) and Kyoto University**
(26 November -3 December 2015) Kyoto, Japan
Title: 'Self-assembly and controlled chemical treatments performed under microscale dynamic conditions'
J. Puigmartí-Luis (invited by Prof. Shuhei Furukawa and Prof. Susumu Kitagawa)

[44] **The Institute for Molecular Science (ICMol), University of Valencia**
(25 -26 January 2016) Valencia, Spain
Title: 'Self-assembly and controlled chemical treatments performed under microscale dynamic conditions'
J. Puigmartí-Luis (invited by Prof. Eugenio Coronado)

[45] **The ninth European School on Molecular Nanoscience (ESMolNa2016)**
(29th May -3rd June 2016) Tordesillas, Spain
Title: 'Microfluidics make the difference in self-assembly processes'
J. Puigmartí-Luis (invited by Prof. Eugenio Coronado)

[46] **Max Planck Institute for Polymer Research**
(28th November 2016) Mainz, Germany
Title: 'Self-assembly processes under dynamic conditions'
J. Puigmartí-Luis (invited by Dr. Markus Bannwarth)

[47] **Universidad Autonoma de Madrid**
(23rd January 2017) Madrid, Spain
Title: 'Self-assembly processes under dynamic conditions'
J. Puigmartí-Luis (invited by Prof. Jose Aleman)

[48] **Katholieke Universiteit Leuven (KUL)**
(6th February 2017) Leuven, Belgium
Title: 'Microfluidic technologies; a new method for materials synthesis'
J. Puigmarti-Luis (invited by Prof. Steven de Feyter)

[50] **Technical University Graz (TU Graz)**
(27th February 2017) Graz, Austria
Title: 'Microfluidics: a technology to control materials engineering'
J. Puigmartí-Luis (invited by Prof. Paolo Falcaro)

[51] **Laboratoire des Matériaux et du Génie Physique (LMGP)**
(13rd April 2017) Grenoble, France
Title: 'Supramolecular chemistry in flow'
J. Puigmartí-Luis (invited by Dr. David Muñoz-Rojas)

[52] **Institut Catala de Nanotecnologia**
(5th May 2017) Bellaterra, Spain
Title: 'Supramolecular chemistry in flow'
J. Puigmartí-Luis (invited by Prof. Dani Ruiz)

[53] **X European School on Molecular Nanoscience (ESMolNa2017)**
(7th May -12th May 2017) Madrid, Spain
Title: 'Microfluidic technologies for in flow chemistry'
J. Puigmartí-Luis (invited by Prof. Eugenio Coronado)

[54] **Gordon Research Conference**
Self-Assembly & Supramolecular Chemistry
(21st -26th May 2017) Les Diablerets, Switzerland
Title: 'Supramolecular chemistry in flow'
J. Puigmartí-Luis

[55] **Basque Center for Macromolecular design & engineering - Polymat**
(6th-7th June 2017) San Sebastian, Spain
Title: 'Controlled Self-assembly and Materials Engineering in Flow'
J. Puigmartí-Luis (invited by Prof. Jose Maria Asua)

[56] **Annual Meeting and Management Committee (MC) meeting of the COST Action Crystalize**
(26-27 June 2017) Lincoln, UK
Title: 'Controlled Self-assembly and Materials Engineering in Flow'

[57] **Kansai University**
(5th December 2017) Osaka, Japan
Title: 'Controlled Self-assembly and Materials Engineering in Flow'
J. Puigmartí-Luis (invited by Prof. Hideya Kawasaki)

[58] **Kyoto University**
(11st December 2017) Kyoto, Japan
Title: 'Controlled Self-assembly and Materials Engineering in Flow'
J. Puigmartí-Luis (invited by Prof. Shuhei Furukawa)

[59] **University of Tokyo**
(15th December 2017) Tokyo, Japan
Title: 'Controlled Self-assembly and Materials Engineering in Flow'
J. Puigmartí-Luis (invited by Prof. Ryota Sakamoto)

[60] **Nanosciences Fondation**
(28th February 2018) Grenoble, France
Title: 'Engineering liquid-liquid interfacial reactions for materials synthesis'
J. Puigmartí-Luis (invited by Dr. David Muñoz Rojas)

[61] **X European School on Molecular Nanoscience (ESMolNa2018)**
(20th May - 26th May 2018) Tenerife, Spain
Title: 'Engineering liquid-liquid interfacial reactions for materials synthesis'
J. Puigmartí-Luis (invited by Prof. Eugenio Coronado)

[62] **Material Science Institut of Barcelona**
(28th July 2018) Barcelona, Spain
Title: 'Engineering reaction-diffusion environments for chemistry and materials science'
J. Puigmartí-Luis (invited by Dr. Arantzazu Gonzalez Campo)

[63] **43rd International Conference on Coordination Chemistry (ICCC2018)**
(30th July – 4th August 2018) Sendai, Japan
Title: 'Engineering liquid-liquid interfacial reactions for materials synthesis'
J. Puigmartí-Luis (invited by Prof. Shuhei Furukawa)

[64] **10th Singapore International Chemistry Conference (ISCC10)**
(16th – 19th December 2018) Singapore, Singapore
Title: 'Engineering reaction-diffusion environments for chemistry and materials science'
J. Puigmartí-Luis (invited by Prof. Donglin Jiang)

[65] **BIGHEART Seminar**
(19th December 2018) Singapore, Singapore
Title: 'Engineering reaction-diffusion environments for chemistry and materials science'
J. Puigmartí-Luis (invited by Prof. Alfredo Franco-Obregon)

[66] **The SPIRITS International Symposium "Shaping Self-Assembled Mesoscale (Bio)Materials with Microengineering"**
https://www.icems.kyoto-u.ac.jp/en/news/4712
(28th March 2019) Kyoto, Japan
Title: 'Chemistry and materials synthesis employing bioinspired conditions at lowReynolds numbers'
J. Puigmartí-Luis (invited by Prof. Shuhei Furukawa)

[67] **12th European School on Molecular Nanoscience**
(19th - 24th May 2019) Elche (Alicante), Spain
Title: 'Bioinspired conditions for chemistry and materials synthesis'
J. Puigmartí-Luis (invited by Prof. Eugenio Coronado)

[68] **University of Bari**
(7th June 2019) Bari, Italy
Title: 'Unveiling pathway complexity and triggering pathway selection via nonlinear chemistry'
J. Puigmartí-Luis (invited by Prof. Luisa Torsi)

[69] **University of Cambridge**
(23rd – 24th September 2019) Cambridge, United Kingdom
Title: 'A low Reynolds number as a tool for unprecedented materials synthesis'
J. Puigmartí-Luis (invited by Prof. Laura Torrente)

[70] **3rd International Conference on Metal Organic Frameworks**
and Porous Polymers (EuroMOF2019)
(27th - 30th October 2019) Paris, France
Title: 'Shaping and unveiling pathway complexity in MOFs chemistry'
J. Puigmartí-Luis

[71] **University of Bordeau**
(30th October 2019) Bordeau, France
Title: 'Shaping single crystals at low Reynolds number'
J. Puigmartí-Luis (invited by Dr. Mat Gonidec)

[72] **University of Casstilla la Mancha**
(21st – 22nd November 2019) Ciudad Real, Spain
Title: 'How can we control self-assembly and materials engineering?'
J. Puigmartí-Luis (invited by Prof. Maria Antonia Herrero Chamorro)

[73] **Beijing Institut of Technology (BIT)**
(25th – 28th November 2019) Beijing, China
Title: 'A low Reynolds number as a tool for unprecedented materials synthesis'
J. Puigmartí-Luis (invited by Prof. Muhua Huang)

[74] **MRS fall Meeting**
(2nd - 6th December 2019) Boston, United States
Title: 'Shaping single crystals at low Reynolds number'
J. Puigmartí-Luis

[75] **Universitat de Barcelona**
(18th December 2019) Barcelona, Spain
Title: 'A low Reynolds number as a tool for unprecedented materials synthesis'
J. Puigmartí-Luis (invited by Prof. Francesc Illes)

[76] **The SPIRITS International Symposium "Shaping Self-Assembled Mesoscale (Bio)Materials with Microengineering"**
http://www.icems.kyoto-u.ac.jp/en/news/5246
(6th February 2020) Kyoto, Japan
Title: 'sub-20 nanometer Covalent Organic Frameworks in water'
J. Puigmartí-Luis (invited by Prof. Shuhei Furukawa)

[77] **Beijing Institut of Technology (BIT) / Virtual Conference**
(18th December 2020),
Title: 'Exploiting controlled reaction-diffusion conditions for materials synthesis'
J. Puigmartí-Luis (invited by Prof. Muhua Huang)

[78] **International Chemical Engineering and Catalysis Conference / Virtual Conference**
(28th January 2021),
Title: 'Exploiting Controlled Reaction-Diffusion Conditions for the Engineering of Functional Matter'
J. Puigmartí-Luis (invited)

[79] **14th European School on Molecular Nanoscience**
(24th - 27th May 2021) Benidorm (Alicante), Spain
Title: 'Simulated microgravity conditions for materials synthesis'
J. Puigmartí-Luis (invited by Prof. Eugenio Coronado)

[80] **"Ciencia en la red", Grupo Especializado de Cristalografía y Crecimiento Cristalino GE3C**
(15 June 2021), virtual
Title: 'What can controlled reaction-diffusion conditions offer to self-assembly processes?'
J. Puigmartí-Luis (invited)
https://www.youtube.com/watch?v=ywh-cQDC_KA

[81] **Innovations and Applied Aspects of Colloid and Interface Science" Summer School**
(14th – 16th July 2021) Varna, Bulgaria
Title: 'Simulated microgravity conditions for materials synthesis'
J. Puigmartí-Luis (invited)

[82] **Beijing Institut of Technology (BIT)**
(3rd August 2021),
Title: 'Is chemistry the only key strategy to successfully control materials synthesis as desired?'
J. Puigmartí-Luis (invited by Prof. Muhua Huang)

[84] **12th International Congress "Biomaterials and Nano-biomaterials: Recent Advances Safety - Toxicology and Ecology Issues"**
(1st October 2021),
Title: 'Microfluidic technologies for chemistry, materials science and biotechnology'
J. Puigmartí-Luis (invited by Prof. Andreas Flouris)

[84] **Midi MINATEC**
(15 October 2021),
Title: 'Microfluidic technologies for materials engineering: Looking back…with a view to the future…'
J. Puigmartí-Luis (invited)

[85] **XLIV. KÉMIAI ELŐADÓI NAPOK**
(26 October 2021),
Title: 'Exploiting controlled reaction-diffusion conditions for materials synthesis: Looking back…with a view to the future…'
J. Puigmartí-Luis (invited Prof. Istvan Szilagyi)

[86] **BeMAGIC Winter School**: Magnetoelectricity in biomedicine: healthcare for the 21st century (8-12 November 2021),
Title: 'Microfluidic technologies for chemistry and materials engineering'
J. Puigmartí-Luis (invited by Prof. Slavador Pané)

[87] **The International Solvay Institutes for Physics and Chemistry**. From 2D to 3D Crystals: A Multi-Scale, Multi-Technique and Multi-System Approach of the Crystallization of Organic Molecules on Tailored Carbon Surface (21 to 23 March 2022),
Title: 'Simulated microgravity conditions for materials synthesis'
J. Puigmartí-Luis (invited by Prof. Yves Geerts)

[88] **Flow Chemistry Summit 2022 – SELECTBIO**
(17 - 18 March 2022) Boston, United States
Title: 'Exploiting controlled reaction-diffusion conditions for materials synthesis'
J. Puigmartí-Luis

[89] **15th European School on Molecular Nanoscience**
(22nd - 27th May 2022) Tordesillas, Spain
Title: 'What can microfluidic technologies offer?'
J. Puigmartí-Luis (invited by Prof. Eugenio Coronado)

[90] **Instituto de Nanociencia y Materiales de Aragón (INMA)**

(7 June 2022) Zaragoza, Spain
Title: 'Microfluidic technologies for chemistry and materials engineering'
J. Puigmartí-Luis (invited by Prof. Jesús Santamaria)

[91] **Reunión Bienal de la Real Sociedad Española de Química (RSEQ)**
(27 June 2022) Palacio de Congresos de Granada
Title: 'Developing a Redox-Responsive Colloidal system based on host-guess interactions for dissipative salf-assembly'
J. Nicholas, J. Puigmartí-Luis (poster presentation)

[92] **International Conference on Manipulation, Automation and Robotics at Small Scales (MARSS)**
(25-29 July 2022) Toronto, Canada
Title: 'MOFBOTS: Metal-Organic Framework-Based Biomedical Microrobots'
J. Puigmartí-Luis (invited by Prof. S. Pané)

[93] **Beijing Institut of Technology (BIT)**
(2nd August 2022),
Title: 'From molecules and assemblies to functional materials by design via microfluidic technologies'
J. Puigmartí-Luis (invited by Prof. Muhua Huang)

[94] **University of Burgos**
(9^{th} – 12^{th} November 2022) Burgos, Spain
Title: 'Microfluidic technologies as an advanced tool for chemistry and materials synthesis'
J. Puigmartí-Luis (invited by Prof. Tomás Torroba)

[95] **Technical University of Dresden**
(20^{th} – 21^{st} November 2022) Dresden, Germany
Title: 'Microfluidic technologies as an advanced tool for chemistry and materials synthesis'
J. Puigmartí-Luis (invited by Prof. Juliane Simmchen)

[96] **2022 MRS Fall Meeting & Exhibit**
(27^{th} November – 2^{nd} December 2022) Boston, United States
Title: 'MOFBOTS: Metal–organic framework-based biomedical magnetic microrobots'
J. Puigmartí-Luis (invited by Prof. S. Pané)

[97] **1era REUNIÓ DE QUÍMICA INORGÀNICA I ORGANOMETÀL·LICA de la SCQ**
(2^{nd} -3^{rd} February 2023) Barcelona, Spain
Title: 'Microfluidic technologies as an advanced tool for chemistry and materials synthesis'
J. Puigmartí-Luis

[98] **Institute of Science and Technology Austria (ISTA)**
(27-29 March 2023) Wien, Austria
Title: 'Microfluidic technologies as an advanced tool for chemistry and materials synthesis'
J. Puigmartí-Luis (invited by Prof. M. Ibañez)

[99] **1st Iberian Symposium on Functional Organic Polymers**
(11-12 May 2023) Aveiro, Portugal
Title: 'Functional materials by design via microfluidic technologies'
J. Puigmartí-Luis (invited by Prof. M. Souto)

[100] **18th IEEE International Conference on Nano/Micro Engineered and Molecular Systems (IEEE NEMS 2023)**
(14-17 May 2023) Jeju, Korea
Title: 'MOFBOTS: Metal-Organic Framework-Based Biomedical Microrobots'
J. Puigmartí-Luis (invited by Prof. Hongsoo Choi)

[101] **Guangzhou Laboratory**
(30 juny 2023) Guangzhou, China
Title: 'Controlled materials engineering via microfluidic technologies'
J. Puigmartí-Luis (invited by Dr. Ciao Xiaobao)

[102] **IEEE International Conference on Manipulation, Manufacturing and Measurement on the Nanoscale (IEEE 3M-NANO)**
(31 July-4 August 2023) Chengdu, China
Title: 'Controlled Materials Engineering via Microfluidic Technologies'
J. Puigmartí-Luis (invited by Prof. Zuobin Wang)

[103] **International Biological Island**
(7 August 2023) Guangzhou, China
Title: 'Controlled Materials Engineering via Microfluidic Technologies'
J. Puigmartí-Luis (invited by Dr. Xiaobao Cao)

[104] **International Conference on Manipulation, Automation and Robotics at Small Scales (MARSS)**
(10-12 October 2023) Abu Dhabi, UAE
Title: 'Porous crystalline materials in motion'
J. Puigmartí-Luis (invited by Prof. Abdon Pena-Francesch and Prof. Hamed Shahsavan)

[105] **Changchun University of Science and Technology (CUST)**
(1 December 2023) Changchun, China
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Zuobin Wang)

[106] **Fudan University**
(4 December 2023) Shanghai, China
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Xiangzhong Chen)

[107] **16th IEEE International Conference on Nano/Molecular Medicine & Engineering (IEEE-NANOMED 2023)**
(5-8 December 2023) Okinawa, Japan
Title: 'Controlled Materials Engineering via Microfluidic Technologies'
J. Puigmartí-Luis (invited by Prof. Kin Fong Lei)

[108] **9th International Conference on Bio-Inspiration in Nice - France**
(12-14 December 2023) Nice, France
Title: 'Controlled Materials Engineering via Microfluidic Technologies'
J. Puigmartí-Luis (invited by Prof. Frédéric Guittard)

[109] **ETH Zurich**
(20 December 2023) Zurich, Switzerland
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Filippo Coletti)

[110] **As a Visiting Professor at Beijing Institute of Technology (BIT)**
(31 March – 12 April 2024) Beijing, China
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Mu Hua Huang)

[111] **12th World Biomaterials Congress (WBC 2024)**
(26 – 31 May 2024) Daegu, Corea
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Jae-Byum Chang as a Symposium invited speaker)

[112] **Nanomotors conference Barcelona**
(3– 5 June 2024) Barcelona, Catalonia, Spain
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Samuel Sanchez Ordóñez)

[113] **3rd Annual Nanoseries Conference**
(17 – 19 June 2024) Lisboa, Portugal
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Profs. Jose Paulo Farinha, Ermelinda Maçôas, and Carlos Baleizão)

[114] **N.I.C.E. Conference**
(19 – 21 June 2024) Nice, France
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Frédéric Guittard as a Keynote speaker)

[115] **International Conference on Manipulation, Automation and Robotics at Small Scale (MARSS2024)**
(1 – 5 July 2024) Delf, Netherlands
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Max Mastrangeli, as a Plenary speaker)

[116] **As a Visiting Professor at Eindhoven University of Technology**
(6 July 2024) Eindhoven, Netherlands
Title: 'Controlled non-covalent synthesis via microfluidic technologies'
J. Puigmartí-Luis (invited by Prof. Tania Patiño Padial)

[117] **9th International Conference on Metal-Organic Frameworks and Open Framework Compounds (MOF2024)**
(15 – 19 September 2024) Dresden, Germany
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Dan Zhao)

[118] **As a Visiting Professor at Helmholtz-Zentrum Dresden-Rossendorf**
(26 – 28 July 2024) Singapore, Republic of Singapore
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Dr. Denys Makarov)

[119] **Active nano/microsystems in Spanish context (AMES24)**
(23 – 25 October 2024) Barcelona, Spain
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Dr. Maria Guix)

[120] **DGIST**
(28 May 2024) Daegu, Republic of Korea
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Hongsoo Choi)

[121] **KAIST**
(30 May 2024) Daejeon, Republic of Korea
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Jae-Byum Chang)

[122] **Changchun University of Science and Technology (CUST)**
(11 November 2024) Changchun, China
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Zuobin Wang)

[123] **As a Visiting Professor at Beijing Institute of Technology (BIT)**
(14 October 2024) Beijing, China
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Mu Hua Huang)

[124] **As a Visiting Professor at Beijing Institute of Technology (BIT)**
(14 October 2024) Beijing, China
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Bao-Hang Han)

[125] **As a Visiting Professor at Beijing Institute of Technology (BIT)**
(18 October 2024) Beijing, China
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Jian-Ke Sun)

[126] **MRS fall Meeting**
(2 - 6 December 2024) Boston, United States
Title: 'Microfluidic tools for the bioinspired synthesis of artificial functional materials'
J. Puigmartí-Luis

[127] **N.I.C.E. Conference**
(10 – 12 December 2024) Nice, France
Title: 'Microfluidic tools for the bioinspired synthesis of artificial functional materials'
J. Puigmartí-Luis (invited by Prof. Frédéric Guittard as a Keynote speaker)

[128] **Sapienza Università di Roma**
(19 December 2024) Rome, Italy
Title: 'Revolutionizing Materials Engineering and Processing with Microfluidic Tools'
J. Puigmartí-Luis (invited by Prof. Alessia Ciogli)

14. MAJOR COLLABORATIONS

Group	***Institution and/or University***	***Topic of collaboration***
Prof. Dr. Brad Nelson and Prof. Dr. Salvador Pané	*ETH Zürich, Switzerland*	*Microfabrication and processes engineering*
Dr. Tiago Sotto Mayor	*University of Porto, Portugal*	*Numerical simulations*
Prof. Dr. Andrew deMello	*ETH Zürich, Switzerland*	*Microfabrication / Clean room work*

15. PUBLICATION LIST

Contributions: 132; 120 articles, 13 proceedings, 5 book chapters; 2 patents
Citations: > 5700 (Google Scholar)
H-index: 42 (Google Scholar) / 39 (Web of Science)

I have been working as an independent researcher since 2009, when I was appointed an ETH research fellow. I was awarded the ETH fellowship to develop my own research combining microfluidic technologies with chemistry and materials science.

In the publications in which my name is underlined, I was the lead author, and/or introduced the concepts of the study and supervised the research. Entries marked with a star mean that I am also the corresponding author.

15.a. PEER-REVIEWED ARTICLES

[1] **J. Puigmartí-Luis**, A. Minoia, H. Uji-I, C. Rovira, J. Cornil, S. De Feyter, R. Lazzaroni, D. B. Amabilino
'Noncovalent Control for Bottom-Up Assembly of Functional Supramolecular Wires'
J. Am. Chem. Soc. **2006**, *128*, 12602-12603.
Science Highlight, Science-AAAS Editors' Choice 22
September 2006; 313 (5794).

[2] **J. Puigmartí-Luis**, A. Minoia, Á. Pérez del Pino, G. Ujaque, C. Rovira, A. Lledòs, R. Lazzaroni, D. B. Amabilino
'Chemical and Constitutional Influences in the Self-Assembly of Functional Supramolecular Hydrogen-bonded Nanoscopic Fibers'
Chem. Eur. J. **2006**, *12*, 9161-9175.***VIP Paper***

[3] **J. Puigmartí-Luis**, V. Laukhin, Á. Pérez del Pino, J. Vidal-Gancedo, C. Rovira, E. Laukhina, D. B. Amabilino
'Supramolecular conducting nanowires from organogels'
Angew. Chem. Inter. Ed. **2007**, *46*, 238-241.

[4] S. Lei, **J. Puigmartí-Luis**, A. Minoia, M. Van der Auweraer, C. Rovira, R. Lazzaroni, D. B. Amabilino, S. De Feyter
'Bottom-up assembly of high density molecular nanowire cross junctions at a solid/liquid interface'
Chem. Comm. **2008**, 703-705.

[5] E. Gomar-Nadal, **J. Puigmartí-Luis**, D. B. Amabilino
'Assembly of Functional Molecular Nanostructures on Surfaces'
Chem. Soc. Rev. **2008**, *37*, 490-504

[6] D. B. Amabilino, S. De Feyter, R. Lazzaroni, E. Gomar, J. Veciana, C. Rovira, M. M. Abdel-Mottaleb, W. Mamdouh, P. Iavicoli, K. Psychogyiopoulou, M. Linares, A. Minoia, H. Xu, **J. Puigmartí-Luis**
'Monolayer self-assembly at liquid-solid interfaces: Chirality and electronic properties of molecules at surfaces'
J. Phys. Cond. Mat. **2008**, *20*, 184003703.

[7] **J. Puigmartí-Luis**, Á. Pérez del Pino, E. Laukhina, J. Esquena, V. Laukhin, C. Rovira, J. Vidal-Gancedo, A. Kanaras, R. J. Nichols, M. Brust, D. B. Amabilino
'Shaping Supramolecular Nanofibers with Nanoparticles forming complementary Hydrogen Bonds'
Angew. Chem. Inter. Ed. **2008**, *47*, 1861-1866.

[8] I. C. Pintre, J. L. Serrano, M. Blanca Ros, J. Ortega, I. Alonso, J. Martínez-Perdiguero, C. L. Folcia, J. Etxebarria, F. Goc, D. B. Amabilino, **J. Puigmartí-Luis**, E. Gomar-Nadal
'TTF-based bent-core liquid crystals'
Chem. Comm. **2008**, 2523-2525.

[9] C. Munuera, **J. Puigmartí-Luis**, M. Paradinas, L. Garzon, D. B Amabilino, C. Ocal
'Layer-By-Layer Electropeeling of Organic Conducting Material Imaged In Real Time'
Small **2009**, *5*, 214-220.

[10] **J. Puigmartí-Luis**, E. Laukhina, V. N. Laukhin, A. Perez del Pino, N. Mestres, J. Vidal-Gancedo, C. Rovira, D. B. Amabilino
'Rich Phase Behavior in a Supramolecular Conducting Material Derived from an Organogelator'
Adv. Funct. Mater. **2009**, *19*, 934-941.

[11] I. Danila, F. Riobé, **J. Puigmartí-Luis**, A. Pérez del Pino, J. D. Wallis, D. B. Amabilino, N. Avarvari

'Supramolecular electroactive organogel and conducting nanofibers with C-3-symmetrical architectures'
J. Mat. Chem. **2009**, *26*, 4495-4504.
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[12] **J. Puigmartí-Luis**, A. Pérez del Pino, V. Laukhin, L. N. Feldborg, C. Rovira, E. Laukhina, D. B. Amabilino
'Solvent effect on the morphology and function of novel gel-derived molecular materials'
J. Mater. Chem. **2010**, *20*, 466-474.

[13] E. Torres, **J. Puigmartí-Luis**, Á. Pérez del Pino, R. M. Ortuño, D. B. Amabilino
'Use of unnatural β-peptides as a self-assembling component in functional organic fibres'
Org. Biomol. Chem. **2010**, *8*, 1661-1665.

[14] D. B. Amabilino, **J. Puigmartí-Luis**
'Gels as a soft matter route to conducting nanostructured organic and composite materials'
Soft Matter **2010**, *6*, 1605-1612.

[15] **J. Puigmartí-Luis***, D. Schaffhauser, B. R. Burg, P. S. Dittrich
'A Microfluidic Approach for the Formation of Conductive Nanowires and Hollow Hybrid Structures'
Adv. Mater. **2010**, *22*, 2255-2259.
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[16] S. Kotarba, J. Jung, A. Kowalska, T. Marszalek, M. Kozanecki, P. Miskiewicz, M. Mas-Torrent, C. Rovira, J. Veciana, **J. Puigmartí-Luis**, J. Ulanski
'Anisotropy in structural and physical properties in tetrathiafulvalene derivatives-based zone-cast layers as seen by Raman spectroscopy, UV-visible spectroscopy, and field effect measurements'
J. Appl. Phys. **2010**, *108*, 014504.

[17] P. L. Urban, K. Jefimovs, A. Amantonico, S. R. Fagerer, T. Schmid, S. Mädler, **J. Puigmartí-Luis**, N. Goedecke, R. Zenobi
'High-density micro-arrays for mass spectrometry'
Lab Chip **2010**, **10**, 3206-3209.

[18] P. Kuhn, **J. Puigmartí-Luis**, I. Imaz, D. Maspoch, P. S. Dittrich
'Controlling the length and location of in-situ formed nanowires by means of microfluidic tools'
Lab Chip **2011**, *11*, 753-757.

[19] E. V. Giger, **J. Puigmartí-Luis**, R. Schlatter, S. Proulx, B. Castagner, M. Detmar, P. S. Dittrich, J.-Christophe Leroux
'Gene Delivery with Bisphosphonate-stabilized Calcium Phosphate Nanoparticles'
J. Control. Release. **2011**, *150*, 87-93.

[20] **J. Puigmartí-Luis***, J. Stadler, D. Schaffhauser, Á. Pérez del Pino, B. R. Burg, P. S. Dittrich,
'Guided assembly of metal and hybrid conductive probes using floating potential dielectrophoresis'
Nanoscale **2011**, *3*, 937-940.

[21] E. Taboada, L. N. Feldborg, A. Pérez del Pino, A. Roig, D. B. Amabilino, **J. Puigmartí-Luis***
'Nanocomposites combining conducting and superparamagnetic components prepared via an organogel'
Soft Matter **2011**, *7*, 2755-2761.

[22] **J. Puigmartí-Luis**, M. Rubio-Martínez, U. Hartfelder, I. Imaz, D. Maspoch, P. S. Dittrich
'Coordination Polymer Nanofibers Generated by Microfluidic Synthesis'
J. Am. Chem. Soc. **2011**, *133*, 4216-4219.

[23] I. Danila, F. Riobé, F. Piron, **J. Puigmartí-Luis**, J. D. Wallis, M. Linares, H. Ågren, D. Beljonne, D. B. Amabilino, N. Avarvari
'Hierarchichal chiral expression from the nano- to meso-scale in synthetic supramolecular helical fibers of a non-amphiphilic C3-symmetrical π-functional molecule'
J. Am. Chem. Soc. **2011**, *133*, 8344-8353.

[24] **J. Puigmartí-Luis***, A. Minoia, S. Lei, V. Geskin, B. Li, R. Lazzaroni, S. De Feyter, D. B. Amabilino
'Self-assembly of supramolecular wires and cross-junctions and efficient electron tunnelling across them'
Chem. Sci. **2011**, 1945-1951.

[25] I. Danila, F. Pop, C. Escudero, L. N. Feldborg, **J. Puigmartí-Luis**, F. Riobé, N. Avarvari, D. B. Amabilino
'Twists and turns in the hierarchical self-assembly pathways of a non-amphiphilic chiral supramolecular material'
Chem. Commun. **2012**, *48*, 4552-4554.

[26] B. Z. Cvetković, **J. Puigmartí-Luis**, D. Schaffhauser, T. Ryll, S. Schmid, P. S. Dittrich
'Confined synthesis and integration of functional materials in sub-nanoliter volumes'
ACS Nano **2013**, *7*, 183-190.

[27] M. Rubio-Martínez, **J. Puigmartí-Luis**, I. Imaz, P. S. Dittrich, D. Maspoch

'Dual-template' synthesis of one-dimensional conductive nanoparticle superstructures from coordination metal-Peptide polymer crystals'
Small, **2013**, *9*, 4160–4167

[28] **J. Puigmartí-Luis**, W. J. Saletra, A. González, D. B. Amabilino, Ll. Pérez-García
'Bottom-up assembly of a surface-anchored supramolecular rotor enabled using a mixed self-assembled monolayer and pre-complexed components'
Chem. Commun., **2014**, *50*, 82-84.

[29] **J. Puigmartí-Luis***
'Microfluidic platforms; a mainstream technology for the preparation of crystals'
Chem. Soc. Rev. **2014**, *43*, 2253-2271
Invited article
Paper Highlighted in *"Highlights from the Flow Chemistry Literature 2014"* by Toma N. Glasnov (https://link.springer.com/content/pdf/10.1556/JFC-D-14-00010.pdf)

[30] **J. Puigmartí-Luis***, M. Rubio-Martinez, I. Imaz, B. Cvetkovic, Ll. Abad, A. Perez del Pino, D. Maspoch, D. B. Amabilino,
'Localized, Stepwise Template Growth of Functional Nanowires from an Amino Acid-Supported Framework in a Microfluidic Chip'
ACS Nano, **2014**, *8*, 818-826.
Paper Highlighted in ICN2 (http://www.icn.cat/en/news/2654-new-method-for-the-controlled-growth-of-functional-nanowires)

[31] A. C. Aragonès, N. Darwish, W. J. Saletra, Ll. Pérez-García, F. Sanz, **J. Puigmartí-Luis***, D. B. Amabilino, I. Díez-Pérez
'Highly Conductive Single-Molecule Wires with Controlled Orientation by Coordination of Metalloporphyrins'
Nano Lett., **2014,** 14, 4751-4756

[32] B. Li, **J. Puigmartí-Luis**, A. M. Jonas, D. B. Amabilino, S. De Feyter
'Hierarchical growth of curved organic nanowires upon evaporation induced self-assembly'
Chem. Comm. **2014,** 50, 13216-13219
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[33] G. Chatzipirpiridis, A. Sanoria, O. Ergeneman, J. Sort, **J. Puigmartí-Luis**, B. J. Nelson, E. Pellicer, S. Pané
'The electrochemical manipulation of apolar solvent drops in aqueous electrolytes by altering the surface polarity of polypyrrole architectures'
Electrochem. Commun. **2015,** *54*, 32-35

[34] **J. Puigmartí-Luis***, M. Paradinas, E. Bailo, R. Rodriguez-Trujillo, R. Pfattner, C. Ocal, D. B. Amabilino
'Bottom-up on-crystal in-chip formation of a conducting salt and a view of its restructuring: From organic insulator to conducting 'switch' through microfluidic manipulation'
Chem. Sci. **2015**, *6*, 3471-3477

[35] A. Pérez del Pino, E. György, C. Logofatu, **J. Puigmartí-Luis,** Wei Gao
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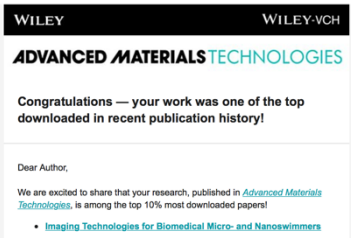
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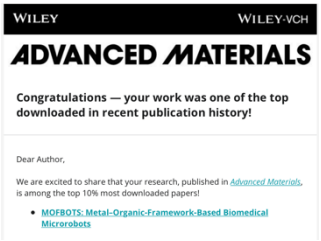
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