





## Part A. PERSONAL INFORMATION

First name	Da	ivid						
Family name	Díaz Díaz							
Gender	Ma	ale		Birth date	10/11/1974			
ID number	43	365938J						
e-mail	dd	ddiazdiaz@ull.edu.es						
Researcher identification			Researcher ID	A-7792-2015				
			Scopus	16444118400				
			ORCID	0000-0002-0557-3364				
Nebsite http://ddiazdiaz.webs.ull.es/								

#### A.1. Current position

Position	Full Professor (Organic Chemistry)				
Initial date	01/12/2023				
Institution	University of La Laguna				
Department/Center	Departament of Organic Chemistry/IUBO-ULL				
Country	Spain <sup>-</sup>	Teleph. number	922318584		
Key words	Gels, hydrogels, organogels, (bio) catalysis, photoredox catalysis, orga multifunctional stimuli-responsive adhesives, coatings, metal na supramolecular chemistry, tissue er healing, dynamic covalent chem remediation, formulation science, so	)polymers, orgar anic-inorganic hyl materials, clic anoparticles, dr ngineering, self-a nistry, energy, ft actuators.	nic synthesis, brid materials, k chemistry, rug delivery, ssembly, self- environmental		

#### A.2. Previous positions

Period	Position/Institution/Country	
07/01/2020-31/11/2023	Distinguished Researcher (Beatriz Galindo)/Spain	
01/10/2018-present	Privatdozent/University of Regensburg/Germany	
01/10/2013-30/09/2018	Assoc. Professor W2/University of Regensburg/Germany	
01/01/2010-31/12/2011	AvH Experienced Researcher/University of Regensburg/Germany	
08/10/2009-present	Tenured Scientist/CSIC/Spain (currently on voluntary leave)	
01/12/2006-31/12/2008	Sr. Scientist/The Dow Chemical Company/Switzerland	
01/01/2006-01/01/2007	Ramón y Cajal Researcher/UAM/Spain	
15/07/2002-14/10/2005	Research Associate/The Scripps Research Institute/USA	

#### A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Chemistry	Universidad de La Laguna (ULL)/Spain	2002
Licensed in Chemistry	Universidad de La Laguna (ULL)/Spain	1997

#### A.4. Scientific production

Publications (JCR): 253 (17 covers); h-index = 54; citations: 10840; book chapters: 7; patents: 7 (incl. 3 in progress); industrial reports: 5; industrial consulting: 5; congress: 77; participation in research projects: 27 (13 as PI); teaching innovation projects: 2; six-year research periods: 3; invited lectures at international universities: 41; invited lectures at national universities: 18; supervision of doctoral theses: 13 (incl. 6 in progress); TFM directed: 13; Directed TFG: 25 (incl. 1 in progress).

#### Part B. CV SUMMARY

David Díaz Díaz was born in 1974 (Tenerife), where he studied Chemical Sciences at the University of La Laguna. He obtained a Doctorate in Chemistry at the same University under the supervision of Professor Víctor Martín. His doctoral thesis focused on the synthesis of natural products and the development of new synthetic methodologies using transition metal







complexes. In 2002, he joined Professor M. G. Finn's research group as a postdoctoral researcher at The Scripps Research Institute (TSRI) in San Diego (California, USA) where he remained for 4 years. During this period, he worked closely with two-times Nobel Laureate Professor K. B. Sharpless. His research focused on the chemistry of formamidines, bioconjugation techniques, first applications of "click" chemistry in materials, development of functional polymers and soft materials. Since 2006, he has held various positions in academia and industry, including the positions of Ramón y Cajal Contractor at the Autonomous University of Madrid (Spain), and Sr. Chemist at the multinational The Dow Chemical Company (materials division) carrying out his work in Switzerland and in The Netherlands. In 2009, he simultaneously obtained a position as a Tenured Scientist at the Spanish National Research Council (CSIC) and a position as an Experienced Researcher at the Alexander von Humboldt Foundation at the University of Regensburg (Germany), where he joined in January 2010 and founded his independent research group. In 2013, he was the first Spanish scientist to be awarded the Heisenberg Professorship of the German Scientific Research Foundation (DFG) and obtained the position of Associate Professor at the Faculty of Chemistry and Pharmacy at the University of Regensburg. In 2017, he received honorary adjunct professorships from the universities of Jiangsu (Chinese Society for Advanced Materials) and Nigeria (African Nanoscience-Nanotechnology Initiative); Honorary membership of the Argentine Society of Organic Chemistry: accreditation as a Full Professor by the National Agency for Quality Evaluation and Accreditation of Spain (ANECA); German Habilitation and permanent member status (Privatdozent, venia legendi) of the Faculty of Chemistry and Pharmacy of the University of Regensburg. In January 2019, Beatriz Galindo joined the University of La Laguna as Senior Distinguished Researcher (Tenerife, Spain), for which she requested a leave of absence from her position at the CSIC. Among the awards received are the Young Researcher Award, PNG (2014, Japan), the RSEQ Research Excellence Award (2021, Spain) and the International Society for Advanced Materials Award (2022, Sweden), Institutional Research Award of ULL Research (Senior category; 2024, Spain), Institutional Internationalization Award of ULL (2025, Spain), among others. In 2021 he obtained accreditation from ANECA as a University Professor and at the end of 2023 he obtained the position of Professor at the ULL. He is a member of several scientific societies (ACS, RSC, RSEQ, GDCh, SSB) and, among other editorial work, he has been the Editor-in-Chief of Gels (2015-2024) and since 2024 Member of the Editorial Board of Soft Matter. During his career he has published 240 articles in journals included in JCR, in addition to several book chapters and outreach articles. He has organized several scientific conferences and his current research mainly focuses on the development of advanced functional materials for biomedical, catalytic, coatings and energy applications. Languages: Spanish (m.t.), English (C1), German (B2).

Awards & distinctions: 1<sup>st</sup> Degree Award in Chemistry 1992-1997, ULL (1997); Outstanding Award in Chemical Sciences, ULL, 1997; National Award for Excellence in Academic Performance 1996–1997; Young Researchers Award, Canarias, 2002; Best Doctoral Thesis Award, Chemistry Faculty, ULL, 2003; PhD Award, Experimental & Technical Sciences, ULL, 2003; Teresa Pinillos Scientific Outreach Award, AITRi, 2005; Young Researchers Award, Autonomic Government, Canarias, 2005; Young Canarias 2007 Award; European Young Chemist Award Finalist, Italy, 2008; Dow Chemical Company (Switzerland): Performance Awards, 2007-2009; Alexander von Humboldt Award, Experienced Researchers, Germany, 2010; Heisenberg Professorship, DFG, Germany, 2013; Young Investigator Award, PNG, Japan, 2014; Honorary Adjunct Prof., Jiangsu Univ., China, 2017; Accreditation as Assoc. Prof. by ANECA, Spain, 2017; Honorary Member, Argentine Society of Research in Organic Chemistry, Argentina, 2017; Privatdozent, Univ. Regensburg, 2018; Accreditation as Full Prof., ANECA, 2021; National Research Excellence Award (RSEQ), Spain, 2021; IAAM Scientist Award, Sweden 2022; I3 certification by MICINN, Spain (2022); I3 Certification, MICINN (2022); "Outstanding Professional", IMFAHE Foundation (2023); Institutional Research Award (Senior), ULL (2024). Elected Member of the Spanish Council of the International Association of Advanced Materials, Sweden 2024; Institutional Internationalization Award, ULL (2025).

#### Part C. RELEVANT MERITS

**C.1. Publications** (max. 10 representative)







- Dual electro-/pH-responsive nanoparticle/hydrogel system for controlled delivery of anticancer peptide. Resina, L.; Esteves, T.; Pérez-Rafael S.; García, J. I. H.; Ferreira, F. C.; Tzanov, T.; Bonardd, S.; Díaz, D. D.; Pérez-Madrigal, M. M.; Alemán, C. *Biomater. Adv.* 2024, *162*, 213925. DOI: 10.1016/j.bioadv.2024.213925
- Self-healing polymeric soft actuators. Bonardd, S.; Nandi, M.; Hernández García, J. I.; Maiti, B.; Abramov, A.; Díaz, D. D. Chem. Rev. 2023, 123, 736–810. DOI: 10.1021/acs.chemrev.2c00418
- Chitosan-enclosed menadione sodium bisulfite as an environmentally friendly alternative to enhance biostimulant properties against drought. Jiménez-Arias, D.; Bonardd, S.; Morales-Sierra, S.; Almeida Pinheiro de Carvalho, M. Â.; Díaz, D. D. *J. Agric. Food Chem.* 2023, 71, 3192–3200. DOI: 10.1021/acs.jafc.2c07927
- 4. Thermoresponsive shape-memory hydrogel actuators made by photo-triggered click chemistry. Maiti, B.; Abramov, A.; Franco, L.; Puiggal., J.; Enshaei, H.; Aleman, C.; Díaz, D. D. *Adv. Funct. Mater.* **2020**, *30*, 2001683. DOI: 10.1002/adfm.202001683
- Intragel Photoreduction of Aryl Halides by Green-to-Blue Upconversion under Aerobic Conditions. Häring, M.; Pérez-Ruiz, R.; von Wangelin, A. J.; Díaz, D. D. Chem. Commun. 2015, 51, 16848–16851. DOI: 10.1039/C5CC06917C
- 6. Stimuli-responsive gels as reaction vessels and reusable catalysts. Díaz, D. D.; Kühbeck, D.; Koopmans, R. J. *Chem. Soc. Rev.* **2011**, *40*, 427–448. DOI: 10.1039/C005401C
- Ligand-accelerated Cu-catalyzed azide-alkyne cycloaddition: A mechanistic report. Rodionov, V. O.; Presolski, S. I.; Díaz, D. D.; Fokin, V. V.; Finn, M. G. J. Am. Chem. Soc. 2007, 129, 12705-12712. DOI: 10.1021/ja072679d
- "Click" chemistry in a supramolecular environment: Stabilization of organogels by copper(I)-catalyzed azide-alkyne [3+2] cycloaddition. Díaz, D. D.; Rajagopal, K.; Strable, E.; Schneider, J.; Finn, M. G. *J. Am. Chem. Soc.* 2006, *18*, 6056–6057. DOI: 10.1021/ja061251w
- Synthesis of degradable model networks via ATRP and click chemistry. Johnson, J. A.; Lewis, D. R.; Díaz, D. D.; Finn, M. G.; Koberstein, J. T.; Turro, N. J. J. Am. Chem. Soc. 2006, 128, 6564–6565. DOI: 10.1021/ja0612910
- Click chemistry in materials synthesis. 1. Adhesive polymers from copper-catalyzed azidealkyne cycloaddition. Díaz, D. D.; Sreenivas, P.; Holzer, P.; McPherson, A.; Sharpless, K. B.; Fokin, V. V.; Finn, M. G. J. Polym. Sci. Part A: Polym. Chem. 2004, 42, 4394–4403. DOI: 10.1002/pola.20330

# C.2. Congress (max. 10 representative)

- 1. Reunión Bienal del Grupo Especializado de Química Orgánica, Spain, 26/06/2024-28/06/2024. Participation: Organizing Committee.
- 2. International Conference on Nanomaterials & Nanotechnology. Stockholm, Sweden, 28/08/2022-31/08/2022. Participation: Invited IAAM Award Lecture.
- 3. PNG 2022 Conference. Italy, Roma, 12/06/2022-16/06/2022. Participation: Invited Keynote Speaker.
- 4. Symposium: The power of chemical synthesis and characterization. Tenerife, Spain, 27/04/2022. Participation: Organizer.
- 5. RSEQ Symposium 2021. Spain, 27/09/2021-30/09/2021. Participation: Invited Lecture.
- 6. Milan Polymer Days 2020. Italy, Milan, 11/03/2020-13/03/2020. Participation: Invited Keynote Speaker.
- 7. XXXVIII Reunión Bienal de Química Orgánica–RSEQ. Spain, Tenerife, 2020 postponed to 2024. Participation: Organizing Committee.
- 8. ACS 70<sup>th</sup> Southeastern Regional Meeting. Symposium: Organic chemistry tools for synthesis, biomedicine, and materials science. USA, Augusta, 31/10/2018-03/11/2018. Participation: Organizing Committee and Oral Presentation.
- 9. 3<sup>rd</sup> African Conference on Nanotechnology. Nsukka, Nigeria, 15/08/2018-27/08/2018. Participation: Invited Plenary Lecture.
- 10. XXI National Symposium on Organic Chemistry. Argentina, San Luis, 08/11/2017-11/11/2017. Participation: Invited Plenary Lecture.

# C.3. Research projects (max. 10 representative)







- Programmable Hybrid Biomaterials via Click Chemistry: Sponge Biomimetic Tubules as Chemobrionic Scaffolds for Cell Culture. Fundación Ramón Areces, 1/1/2025-31/12/2027-; IP, 152.000 €
- Biomateriales porosos derivados de residuos industriales funcionalizados con grupos azo: un enfoque más ecológico para la captura y conversión de CO<sub>2</sub>. MICINN, PID2022-142118OB-I00, 1/09/2023-31/08/2026; IP, 225.000 €
- 3. Redes orgánicas covalentes micro-mesoporosas ajustables para la reducción de CO₂. MICINN, TED2021-132847B-I00, 1/12/2022-30/11/2024; IP, 184.000 €
- Impulso de la economía circula en Canarias a través de la captura selectiva y valorización de CO₂ mediante nuevos materiales porosos derivados de biopolímeros procedentes de desechos industriales. Cátedra Fundación Cepsa-ULL, 10/11/2022-09/11/2023, IP, 4.000€
- 5. Desarrollo de formulaciones a base de gel para catalysis redox basada en aniquilación triplete-triplete usando luz visible. MICINN, PID2019-105391GB-C21, 01/06/2020-31/05/2023, IP, 134.000 €
- 6. Development and manufacturing of a highly integrated air treatment module for the use in automotive high performance PEFC. BMBF. 01/2018-01/2021, IP, 311.146 €
- 7. Influence of wet chemical treatment on electro-optical characteristics of epitaxially grown (III-V) compound semiconductor layers. Osram, 01/2017-01/2020, IP, 210.000 €
- 8. Extension of gel-based materials for catalytic and biomedical applications. DFG, Germany, 1748/3-(3), Universität Regensburg, 10/2016-10/2018, IP, 228.320 €
- 9. Gel-based materials as nanoreactors for catalytic processes. DFG, Germany, 1748/3-(1), Universität Regensburg, 10/2013-10/2016, IP, 342.480 €
- 10. Preparation of new acid-based metal organic frameworks and related metallogels for water adsorption and controlled release. DAAD, Germany, 01/2015-01/2018, IP, 44.700 €

# C.4. Editorial activities

- 1. Editorial Board Member, Soft Matter. Since May 2024
- 2. Editor in Chief, Gels (ISSN 2310-2861). 2014-2024
- 3. Editorial Board, *ScienceOpen* (https://www.scienceopen.com). Since 2012
- 4. Editor, Chemistry Section, The All Results Journals: Chem (ISSN 2172-4563). Since 2010
- 5. Review Editor, Editorial Board of Organic Chemistry, Frontier in Chemistry

# C.5. Evaluation activities

- 1. Reviewer of articles for scientific journals: 30 (JCR journals).
- Project reviewer: ANEP (Spain), DFG (Germany), ERC, FWO (Belgium), ARF (Austria), MCT (Romania), ACS-PRF (USA), FONCyT (Argentina), MOST (Israel), SNIE (India), FONDECYT (Chile).
- 3. Scientific coordinator and evaluator: (1) International Doctoral Program, Univ. of Regensburg; (2) SynCat "MSc Advanced Synthesis and Catalysis", Univ. Regensburg.
- 4. Reviewer and evaluator of Doctoral and Master's Theses: >30.
- 5. Member of the executive committee of the Antonio González University Institute of Bio-Organic (Tenerife).

# C.6. Supervised PhD theses (max. 10 representative)

- 1. "Impacto de la cristalinidad de materiales micro and mesoporosos en la captura, almacenamiento y conversión de CO<sub>2</sub>". José I. Hdez, ULL. Fecha estimada: 01/2026
- 2. "Estudio de geles como nanoreactores para fotocatálisis redox en condiciones aeróbicas", Paola Domínguez Domínguez, ULL. Fecha estimada: 01/2025
- 3. "Catalizadores híbridos alternativos para la generación de hidrógeno". Oscar Ramírez, PUC-ULL (Tesis en co-tutela con PUC). Fecha estimada: 12/2023
- 4. "Synthesis, Characterization and Application of New Functional Materials", Alex Abramov, Magna Cum Laude, Univ. Regensburg, 23/12/2021
- 5. "Characterization and Manipulation of N-face Gallium Nitride Etching in Alkaline Solution", Markus Tautz, Magna Cum Laude, Univ. Regensburg, 17/02/2020
- 6. "Synthesis, Characterization and Application of New Functional Gels", Marleen Häring, Summa Cum Laude, Univ. Regensburg, 27/09/2018







- 7. "Synthesis, characterization and application of smart materials based on LMW compounds and polymers", Judith Mayr, Magna Cum Laude, Univ. Regensburg, 02/06/2017
- 8. "Engineering New Supramolecular Gels: From Catalysis to Drug Delivery", Jürgen Bachl, Magna Cum Laude, Univ. Regensburg, 12/05/2014
- 9. "Investigation of biopolymer-based hydrogels as green and heterogeneous catalysts in C-Cbond formation", Dennis Kühbeck, Magna Cum Laude, Univ. Regensburg, 28/04/2014
- 10. "Preparation, characterization and potential application of new low molecular-weight organogels", Eva-Maria Schön, Magna Cum Laude, Univ. Regensburg, 31/01/2014

# C.7. Contracts, technological or transfer merits

#### Contracts: (max. 10 representative)

- 1. 2023: Researcher contract "María Zambrano". Dra. Yanina Moglie.
- 2. 2023: Lab technician contract. José Ignacio Hernández García
- 3. 2022: Researcher contract "María Zambrano". Dr. Suman Chandra.
- 4. 2021: PhD Contract. Paola Domínguez Domínguez
- 5. 2021: Lab technician contract. Navara Mejías Pérez
- 6. 2019: Researcher contract "Juan de la Cierva-Formación": Dr. Sebastian Bonardd
- 7. 2018: Researcher contract "Juan de la Cierva-Form.": Dra. María José Trujillo Rodríguez
- 8. 2017: PhD Contract. Alex Abramov
- 9. 2017: Postdoctoral Contract. Dr. Binoy Maiti
- 10. 2016: Industrial PhD Contract. Markus Tautz

## Industrial agreements:

- 1. Project Advisor Agreement (biomass revalorization): BEDA Water Engineering, Barcelona, Spain, April/2025
- 2. Project Advisor Agreement (osmium complexes): Arquimea Research Center (Nanotec-Intech), Tenerife, Spain, 01/06/2024-present.
- 3. Project Advisor Agreement (printable gels): Arquimea Research Center (Nanotec-Intech), Tenerife, Spain, 25/08/2022-31/12/2022.
- 4. Project Advisor Agreement (LEDs): Osram Opto Semiconductors GmbH, Regensburg, Germany, 01/2017-01/2020.

#### Patents and industrial reports: (max. 10 representative)

- 1. Película porosa de quitosano, procedimiento para su fabricación y uso. P2022231097
- 2. Recipiente de vidrio recubierto interiormente con una red metal-orgánica. P202131195
- 3. Uso de una composición acuosa como adhesivo. P201930672
- 4. Stabilization of organogels and hydrogels by CuAAC. WO 2007/027493 A2
- 5. Highly thermoresistant polyurethane for pipe applications. CRI, Dow Chemical Company
- 6. Superhydrophobic coatings. CRI, The Dow Chemical Company
- 7. Superhydrophobic latex-based coatings for paper. CRI, The Dow Chemical Company
- 8. EO-Based surfactant formulations. CRI, The Dow Chemical Company
- 9. Microwave sensor for in situ polyurethane control. CRI, The Dow Chemical Company
- 10. Coaxial MW sensor for determining dielectric properties. CRI, Dow Chemical Company