

## PERSONAL INFORMATION

*Family name, Name:* Sardon Haritz

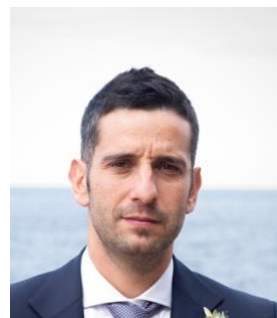
*Date of Birth:* 21 July 1982

*Nationality:* Spanish

*Web-pages:* <https://sardonharitz.wixsite.com/upv-ehu>

*Researcher ID:* C-4044-2015

*Twitter Account:* <https://twitter.com/SardonL>



## • EDUCATION

- 2008-2011 **PhD in Polymer Chemistry**, University of the Basque Country (UPV/EHU), supervised by Prof. M.J. Fernandez- Berridi and Prof. L. Irusta)
- 2006-2008 **M.S.** in Applied Chemistry and Polymeric Materials, UPV/EHU, San Sebastian, Spain.
- 2000-2005 **B.S.** in Chemistry (Macromolecules), UPV/EHU, San Sebastian, Spain

## • CURRENT POSITION(S)

- 2017-now **Associate Professor**, UPV/EHU (Department of Polymer Science and Technology Department (POLYMAT))
- 2016-now **Research Associate** BERC-POLYMAT San Sebastian, Spain

## • PREVIOUS POSITIONS

- 2016-2018 **Ikerbasque Research Fellow**, UPV/EHU (Department of Polymer Science and Technology Department (POLYMAT))
- 2014-2016 **Postdoctoral-Scientist** BERC-POLYMAT, San Sebastian, Spain (supervised by Prof. Mecerreyes)
- 2012-2014 **Postdoctoral-Scientist** Advanced Organic Materials, IBM-Almaden Research Center, California USA (supervised by Dr. J. L. Hedrick)
- 2010-2012 **Scientist**. Biomaterials Group, Histocell, S.L., Derio, Spain (supervised by Dr. Scott Rapoport) (Private Sector)

## • FELLOWSHIPS

- 2016 **Ikerbasque Research Fellow**, one of the 15 selected candidates from more than 400 applicants
- 2014 **Iberdrola Research Award** in Energy and Environment, Iberdrola. One of the 20 selected awards from more than 300 candidates
- 2014 **Juan de la Cierva Award**, Spanish Ministry. Selected in the chemistry panel from around 200 candidates.
- 2011 **Postdoctoral grant** from the Basque Government, Spain. Ranked nº1 in the chemistry panel from 10 candidates.
- 2006 **Doctoral grant** from the Ministry of Education and Science, Spain.

## • SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

Dr. Sardon has already (co)directed 3 PhD theses (2 working as post-docts and 1 working in a company) and he is currently directing 7 PhD students. In addition, he has also supervised 1 post-doct (Dr. Ana Sanchez-sanchez currently Marie Curie in Cambridge) and currently he is supervising another 3 post-docts (Dr. Nicolas Zivic, Dr. Jeremy Dematreu and Dr. Audrey Bonnefond). He has also supervised up to 5 Master Student and 3 Undergraduate Students.

- **BOOK CHAPTERS and EDITED BOOKS**

*Organic Catalysis for Polymerization*” RSC, Edited by **Sardon H.**, Naumann S., Dove A.P. **2018**

Organic Catalysis for Polymerization, **Sardon H.** *Organocatalyzed Step-Growth Polymerizations*, **2018**, Chapter 12, pages 531-583

How Smart are the Polymer? NOVA Science Publisher, **Sardon H.** *Intrinsically Healable Polymers*, **2018**, Chapter 4, 95-122

Applications of Ionic Liquids in Polymer Science and Technology, **Sardon H.** *Ionic Liquids and Cellulose Technologies: Dissolution, Modification and Composite Preparation*”, **2014**, Chapter 7, 135-152

- **GRANTED(SUBMITTED) PATENTS**

Synthesis of long chain polyethers using organocatalysis, Haritz Sardon, David Mecerreyes, Andre Basterretxea, Elena Gabirondo, **2018**, Spanish Patent P201830462

Polycarbonates bearing aromatic N-heterocycles for drug delivery JMW Chan, AC Engler, JL Hedrick, X Ke, VWL Ng, H Sardon, JPK tan, YY Yang, **2015** US Patent 9,717,797

Catalyst-free methods of forming polyurethanes from pentafluorophenyl carbonates JMW Chan, DJ Coady, AC Engler, JM Garcia, JL Hedrick, ZY Ong, H Sardon, YY Yang, **2015** US Patent 9,062,160

- **INVITED TALKS**

I have been invited to deliver more than 20 lectures international conference (8) and Universities (10) such as Soochow, Birmingham, Bordeaux, Yamagata, Pau, Barcelona, Warwick, Milan, Madrid and in some companies (3) IBM, Oribay, FORESA since independence. Selected examples include:

22 Annual Green Chemistry & Engineering Conference, Washington, USA **2017** (Invited)

Advanced Polymers via Macromolecular Engineering APME, Gent, Belgium **2017** (Invited)

1<sup>st</sup> Organocatalyzed Polymerization Conference” Brussels, Belgium **2016** (Invited)

1<sup>st</sup> JIP-JEPO French Spanish Young Polymer Conference, San Sebastian, Spain **2016** (Plenary)

9<sup>th</sup> international summer school on Nanomedicine, Thessaloniki, Greece **2015** (Invited)

Polycondensation 2014, Tokyo, Japan **2014** (Invited)

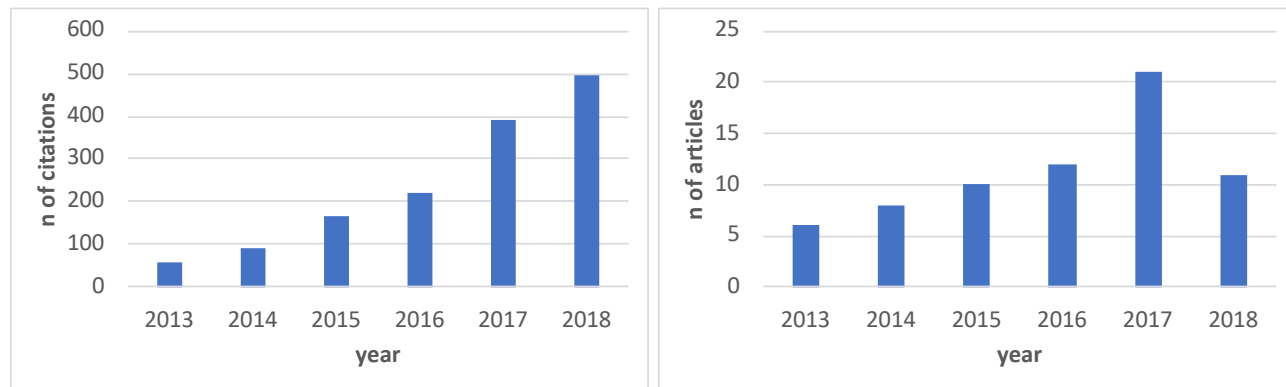
- **TEACHING ACTIVITIES (if applicable)**

2018-now	Lecturer BS level Year 1 Experimentation methods in chemistry; Year 2 Physical Chemistry I; Year 3 Spectrophotometric Identification of Organic Compounds
2018-now	Lecture MS level Advance Polymer Synthesis
2016-2018	Lecturer BS level Y2 Organic Chemistry I; Y3 Organic Chemistry II
2016-2018	Lecture MS level; Spectroscopic identification of Macromolecules

- **ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)**

2018	Chair of the 6th Young Polymer Scientists Conference (50 participants)
2018	Co-organizer of the 10th ECNP conference ECNP International Conference on Nanostructured Polymers and Nanocomposites (150 participants)
2015	Co-organizer of the first French-Spanish Joint Congress for Young Researchers in Polymers (90 participants)
2015	Co-chair of workshop for Marie Skłodowska-Curie OLIMPIA European Joint Doctorate Training Network (ITN) in San Sebastian (30 participants)

During his whole career, Haritz Sardon has demonstrated creative independent thinking and leadership qualities. He has produced 73 peer-reviewed publications during his research career (<http://www.researcherid.com/rid/C-4044-2017>), with more than 30 as corresponding author. Most of these peer-reviewed articles, have been published in the last 5 years (from 2013-2018) and are in journals in the Q1 (90%). The impact of his work can be measured by the near 1500 citations his publications have received (more than 1000 since 2014) All this provides him with an *h*-index of 22.



His international standing and high regard in the field is evidenced by the large number of feature articles and reviews including 3 Prog. Polym.Sci. [2018 IF = 24.6] and 1 Adv. Drug Del. Reviews. [2018 IF = 13.6]. For instance, his review on “*Organocatalyzed Polyurethanes*” published in Macromolecules has received 100 citations to date (Since 2015) and the one published about “*Update and challenges in organo-mediated polymerization reactions*” published in Prog. Polym. Sci. has received (70 citations to date (Since 2016). He has also been invited to edit a Special Issue in the European Polymer Journal about Organocatalyzed Polymerizations (2017) and he has been also invited to edit a book entitled “*Organic Catalysis for Polymerization*”. Furthermore, he recently been invited to write a perspective article about polymer recycling in Science (2018, 360, 380-381).

## **Publications:**

**ResearcherID: C-4044-2015;**

[orcid.org/0000-0002-6268-0916](https://orcid.org/0000-0002-6268-0916)

## **2018**

1. Coralie Jehanno, Maria M. Perez-Madrigal, Jeremy Demartean, Haritz Sardon, Andrew P. Dove, Organocatalysis for depolymerisation *Polym. Chem.* 2019, 10, 172-18
2. Opportunities for organocatalysis in polymer synthesis via step-growth methods Prog. Polym. Sci. 2018, [doi.org/10.1016/j.progpolymsci.2018.11.003](https://doi.org/10.1016/j.progpolymsci.2018.11.003)
3. Ester Verde-Sesto, Nicolas Goujon, Haritz Sardon, Pauline Ruiz, Tan Vu Huynh, Fermil Elizalde, David Mecerreyes, Maria Forsyth, Luke A. O'Dell Macromolecules, 2018, 51 (20), 8046-8053
4. Haritz Sardon and Andrew P. Dove\* Plastic recycling with a difference Science 2018, Vol. 360, Issue 6387, 380-381
5. Amaury Bossion, Roberto H. Aguirresarobe, Lourdes Irusta, Daniel Taton, Henri Cramail, Etienne Grau, David Mecerreyes, Cui Su, Guoming Liu, Alejandro J. M<sup>v</sup>ller, and Haritz Sardon Unexpected Synthesis of Segmented Poly(hydroxyurea-urethane)s from Dicyclic Carbonates and Diamines by Organocatalysis Macromolecules, 2018, 51 (15), 5556-5566
6. Alexander Y. Yuen, Amaury Bossion, Antonio Veloso, David Mecerreyes, James L. Hedrick, Andrew P. Dove and Haritz Sardon\* Efficient polymerization and post-modification of N-substituted eight-membered cyclic carbonates containing allyl groups Polym. Chem., 2018,9, 2458-2467

7. Irma Flores, Jeremy Demarteau, Alejandro J. Muller, Agustin Etxeberria, Lourdes Irusta, Frank Bergman, Cor Koning Haritz Sardon\* Screening of Different Organocatalysts for the Sustainable Synthesis of PET *Eur Polym J.* 2018,104, 170-176
8. Naroa Sadaba, Maitane Salsamendi, Nerea Casado, Ester Zuza, Jone Muñoz, Jose-Ramon Sarasua, David Mecerreyes, Daniele Mantione, Christophe Detrembleur, Haritz Sardon Catechol End-Functionalized Polylactide by Organocatalyzed Ring-Opening Polymerization *Polymers* 2018, 10(2), 155 (Invited Special Issue)
9. Leire Meabe, Tan Vu Huynh, Nerea Lago, Haritz Sardon, Chun mei Li, Luke A.O'Dell, Michel Armand, Maria Forsyth, David Mecerreyes Poly(ethylene oxide carbonates) solid polymer electrolytes for lithium batteries *Electrochimica Acta* 2018, 367-375
10. Alexander Y. Yuen, Luca Porcarelli, Robert H. Aguirresarobe, Ana Sanchez-Sanche, Isabel del Agua, Usein Ismailov, George G. Malliaras, David Mecerreyes, Esma Ismailova and Haritz Sardon Biodegradable Polycarbonate Ionogels for Electrophysiology Measurements *Polymers* 2018, 10(9), 989 (Invited Special Issue)
11. Organocatalysed depolymerisation of PET in a fully sustainable cycle using thermally stable protic ionic salt Jehanno C., Flores I., Dove A.P., Müller A.J., Ruiz Pérez F., & Sardon H.\* *Green Chem.* 2018,20, 1205-1212

## 2017

12. Alexander Y. Yuen, Elena Lopez-Martinez, Enrique Gomez-Bengoa, Aitziber L. Cortajarena, Robert H. Aguirresarobe, Amaury Bossion, David Mecerreyes, James L. Hedrick, Yi Yan Yang, Haritz Sardon\* Preparation of Biodegradable Cationic Polycarbonates and Hydrogels through the Direct Polymerization of Quaternized Cyclic Carbonates *ACS Biomater. Sci. Eng* 2017, 3(8), 1567-1575 (Editor Choice)
13. Leire Meabe, Haritz Sardon, David Mecerreyes Hydrolytically degradable poly(ethylene glycol) based polycarbonates by organocatalyzed condensation *Eur. Polym. J.* 2017, 95, 737-745
14. Esther Udabe, Mehmet Isik, Haritz Sardon\*, Lourdes Irusta, Maitane Salsamendi, Zhe Sun, Zhiqiang Zheng, Feng Yan, David Mecerreyes Antimicrobial polyurethane foams having cationic ammonium groups *J Appl. Polym Sci.* 2017, 134, 45473 (Special Issue Sustainable Polyurethanes)
15. Daniele Mantione, Nerea Casado, Ana Sanchez-sanchez, Haritz Sardon, David Mecerreyes Easy-to-make carboxylic acid dioxathiophene monomer (ProDOT-COOH) and functional conductive polymers . *Polym. Sci., Part A* 2017, 55, 2721-2724
16. Ludmila Irene Roncoa, Andere Basterretxea, Daniele Mantione, Robert H. Aguirresarobe, Roque Javier Minari, Luis Marcelino Gugliotta, David Mecerreyes, Haritz Sardon Temperature responsive PEG-based polyurethanes “à la carte” *Polymer*, 2017, 122, 117-124
17. Xiaowei An, Robert H. Aguirresarobe, Lourdes Irusta, Fernando Ruipérez, Jon M. Matxain, Xiangqiang Pan, Nora Aramburu, David Mecerreyes, Haritz Sardon and Jian Zhu Aromatic diselenide crosslinkers to enhance the reprocessability and self-healing of polyurethane thermosets *Polym. Chem.*, 2017,8, 3641-3646
18. Andere Basterretxea<sup>1</sup>, Elena Gabirondo, Ana Sanchez-Sanchez, Agustin Etxeberria, Olivier Coulembier, David Mecerreyes, **Haritz Sardon** Synthesis and characterization of poly (ε-caprolactam-co-lactide) polyesteramides using Brønsted acid or Brønsted base organocatalyst *Eur. Polym. J* 2017, 95, 650-659 (Special Issue Organocatalysis)
19. Daniele Mantione, Isabel del Agua, Wandert Schaafsma, Mohammed ElMahmoudy, Ilke Uguz, Ana Sanchez-Sanchez, Haritz Sardon, Begonia Castro, George G. Malliaras, and David Mecerreyes Low temperature cross-linking of PEDOT:PSS films using divinylsulfone *ACS applied and interfaces* 2017, 9, 18254.18262

20. Jeremy P.K. Tan, Daniel J. Coady, Haritz Sardon, Alexander Yuen, Shrinivas Venkataraman, Amanda C. Engler, Robert Ono, Yi Yan Yang, James L. Hedrick Broad spectrum macromolecular antimicrobials with biofilm disruption capability and in vivo efficacy *Adv. Health. Mater.* 2017, 6, 1601420
21. Luca Porcarellia, Kasina Manojkumar, **Haritz Sardon**, Oihane Llorente, Alexander S. Shaplove, Kari Vijayakrishna, Claudio Gerbaldi, David Mecerreyes, Single Ion Conducting Polymer Electrolytes Based on Versatile Polyurethanes *Electrochimica Acta* 241 (2017) 526-534
22. Sofiem Garmendia, Daniele Mantione, Silvia Alonso-de Castro, Coralie Jehanno, Luis Lezama, James L. Hedrick, David Mecerreyes, Luca Salassa and Haritz Sardon\* Polyurethane based organic macromolecular contrast agents (PU-ORCAs) for magnetic resonance imaging *Polym. Chem.* 2017, 8, 2693-2701
23. Leire Meabe, Nerea Lago, Laurent Rubatat, Chunmei Li, Alejandro J. Müller, Haritz Sardon, Michel Armand, David Mecerreyes Polycondensation as a Versatile Synthetic Route to Aliphatic Polycarbonates for Solid Polymer Electrolytes (*Electrochimica Acta* 237 (2017) 259–266)
24. Sofia M Morozova, Alexander S Shaplov, Elena I Lozinskaya<sup>1</sup>, Petr S Vlasov, Haritz Sardon, David Mecerreyes, and Yakov S Vygodskii Poly(ionic liquid)-based polyurethanes having imidazolium, ammonium, morpholinium, or pyrrolidonium cations *HPP* 2017, 29
25. Ana Sanchez-Sanchez<sup>a,†</sup> Ivan Rivilla<sup>b,‡</sup> Maddalen Agirre<sup>b</sup>, Andere Basterretxea<sup>a</sup>, Agustin Etxeberria<sup>d</sup>, Antonio Veloso<sup>a</sup>, Haritz Sardon<sup>a,c,d</sup>, David Mecerreyes<sup>a,c\*</sup> and Fernando P. Cossio<sup>b,c\*</sup> Enantioselective Ring-Opening Polymerization of rac-Lactide Dictated by Densely Substituted Aminoacids *J. Am. Chem. Soc.*, 2017, 139 (13), pp 4805–4814.
26. Sofia Morozova, Alexander Shaplov, Elena Lozinskaya, David Mecerreyes, **Haritz Sardon**, Sonia Zulfiqar, Fabian Suárez-García, Yakov Vygodskii, Ionic polyurethanes as new family of poly(ionic liquid)s for efficient CO<sub>2</sub> capture *Macromolecules*, 2017, 50 (7), pp 2814–2824
27. Julian M. W. Chan, Rudy J. Wojtecki, **Haritz Sardon**, Ashlynn L. Z. Lee, Cartney E. Smith, Artem Shkumatov, Shujun Gao, Hyunjoon Kong, Yi Yan Yang, James L. Hedrick Self-Assembled, Biodegradable Magnetic Resonance Imaging Agents: Organic Radical-Functionalized Diblock Copolymers *ACS Macro Lett.*, 2017, 6, pp 176–180
28. Amaury Bossion, Gavin O Jones, Daniel Taton, David Mecerreyes, James L Hedrick, Zhan Yui Ong, Yi Yan Yang, and **Haritz Sardon** Non-Isocyanate Polyurethane Soft Nanoparticles Obtained by Surfactant-Assisted Interfacial Polymerization *Langmuir*, 2017, 33 (8), pp 1959–1968
29. Hamed Daemi, Mehdi Barikani, **Haritz Sardon** Transition-metal-free synthesis of supramolecular ionic alginate-based polyurethanes *Carbohydr. Polym.* 2017, 157, 1949-1954
30. Mehmet Isik, Mireia Agirre, Jon Zarate, Gustavo Puras, David Mecerreyes, **Haritz Sardon**, J. L. Pedraz Amine Containing Cationic Methacrylate Copolymers as Efficient Gene Delivery Vehicles to Retinal Epithelial Cells *J. Polym. Sci., Part A* 2017, 2, 280-287
31. Marta Ribeiro, Maria P. Ferraz, Fernando J. Monteiro, Maria H. Fernandes, Marisa M. Beppu, Daniele Mantione and **Haritz Sardon**\* Antibacterial silk fibroin/nanohydroxyapatite hydrogels with silver and gold nanoparticles for bone regeneration *Nanomedicine: NBM* 2017, 1, 231-239

## 2016

32. Andere Basterretxea, Yuta Haga, Ana Sanchez-Sanchez, Mehmet Isik, Lourdes Irusta, Masaru Tanaka, Kazuki Fukushima and **Haritz Sardon**\* Biocompatibility and hemocompatibility evaluation of polyether urethanes synthesized using DBU organocatalyst *Eur. Polym. J.* 2016, 84, 750-758

33. Mehmet Isik, Robert J. Ono, Jeremy P.K. Tan, David Mecerreyes, Yi Yan Yang, James L. Hedrick and **Haritz Sardon\*** Tuning the antimicrobial properties of biodegradable polycarbonates by simple anion-exchange reactions (Macro. Biosci. 2016, 16, 1360-1367)
34. Jorge Fernandez Hernandez; Hegoi Amestoy; **Haritz Sardon**; Miren Aguirre; Jose-Ramon Sarasua Effect of the molecular weight on the mechanical properties an crystallization of poly(ethylene brassylate) homopolymers J Mech. Behav. Biomed. Mater. 2016, 64, 209-219
35. Jessica S. Desport, Daniele Mantione, Mónica Moreno, **Haritz Sardon**, María J. Barandiaran, David Mecerreyes, Synthesis of three different galactose-based methacrylate monomers for the production of sugar-based polymers Carbohydrate research 2016, 232, 50-54
36. Daniele Mantione, Isabel del Agua, Wandert Schaafsma, Javier Diez, Begona Castro, **Haritz Sardon**, David Mecerreyes Poly(3,4-ethylenedioxythiophene):GlycosAminGlycan (PEDOT:GAG) aqueous Dispersions: Towards Electrically Conductive Bioactive Materials for Neural Interfaces Macro. Biosci 2016, 16, 1227-1238
37. Ana Sanchez-Sanchez, Andere Basterrechea, Daniele Mantione, Agustin Etxeberria, Cristina Elizetxea, **Haritz Sardon**, David Mecerreyes Organo-mediated bulk polymerization of  $\epsilon$ -Caprolactam and its Copolymerization with  $\epsilon$ -Caprolactone using sulfonic acids J. Polym. Sci., Part A 2016, 54, 2394-2402
38. Julian Chan, Jeremy P. K. Tan, Amanda C. Engler, Xiyu Ke, Shujun Gao, Chuan Yang, **Haritz Sardon**, Yi Yan Yang and James L. Hedrick Organocatalytic Anticancer Drug Loading of Degradable Polymeric Mixed Micelles via a Biomimetic Mechanism Macromolecules, 2016, 49 (6), 2013–2021
39. Mehmet Isik, Fernando Ruiperez, **Haritz Sardon**, Alba Gonzalez, Sonia Zulfiqar, and David Mecerreyes, Innovative Poly(ionic liquid)s by the Polymerization of Deep Eutectic Monomers Macro. Rapid Comm., 2016, 37, 1135–1142
40. Alexander Yuen, Fernando Ruipérez, Amaury Bossion, Mehmet Isik, James L. Hedrickb, David Mecerreyes Yi Yan Yang, **Haritz Sardon\*** Room temperature synthesis of isocyanate free poly(hydroxyurethanes) using highly reactive N-substituted 8-membered cyclic carbonates. Polym. Chem. 2016, 7, 2105-2111
41. A Hamed Daemi, Sareh Rajabi-Zeleti, **Haritz Sardon**, Mehdi Barikani, Ali Khademhosseini, and Hossein Baharvand A Robust Super-Tough Biodegradable Elastomer Engineered by Supramolecular Ionic Interactions. Biomaterials 2016, 84, 54-63.
42. Winnie Nzahou Ottou, **Haritz Sardon**, David Mecerreyes, Joan Vignolle, and Daniel Taton Update and challenges in organo-mediated polymerization reactions. Prog. Polym. Sci. 2016, 56, 64-115
43. Nerea Casado, Guiomar Hernandez, **Haritz Sardon\***, David Mecerreyes Current Trends in Redox Polymers for Energy and Nanomedicine. Prog. Polym. Sci. 2016, 52, 107-135

## 2015

44. Shrinivas Venkataraman, Victor W. L. Ng, Daniel J. Coady, Hans W. Horn, Gavin O. Jones, Tak Shun Fung, **Haritz Sardon**, Robert W. Waymouth, James L. Hedrick and Yi Yan Yang A Simple and Facile Approach to Functional Eight-Membered Aliphatic Cyclic Carbonates and Their Organo-catalytic Polymerization. J. Am. Chem. Soc. 2015, 137, 13851-13860.
45. Mehmet Isik Thomas Lanjaret, Esma Ismailova, Georges maliaras, **Haritz Sardon**, Rebeca Marcilla and David Mecerreyes Cholinium Based Ion Gels as Electrolytes for Long-Term Cutaneous Recordings. J. Mater. Chem. C, 2015, 3, 8942-8948
46. **Haritz Sardon\***, Jeremy P. K. Tan, Daniele Mantione, Julian M. W. Chan, David Mecerreyes, James L. Hedrick, and Yi Yan Yang Thermoresponsive Random Poly(ether urethane) based Nanoparticles with Tailorable LCSTs for Anticancer Drug Delivery. Macromol. Rapid Comm. 2015, 36 (19), 1761-1767

47. **Haritz Sardon\***, Ana Pascual, David Mecerreyes, Daniel Taton, Henri Cramail, and James L. Hedrick Synthesis of Polyurethanes using Organocatalysis: A Perspective *Macromolecules* 2015, 48, 3153–3165 (Front Cover)
48. Ana Pascual, Jeremy P. K. Tan, Julian M. W. Chan, Daniel J. Coady, David Mecerreyes, James L. Hedrick, Yi Yan Yang, and **Haritz Sardon\*** Broad-Spectrum Antimicrobial Polycarbonate Hydrogels with Fast Degradability *Biomacromolecules* 2015, 16 (4), 1169–1178.
49. Qingxing Xu, **Haritz Sardon**, Julain M.W. Chan, James L. Hedrick, Yi Yan Yang Polyurethane-coated silica particles with broad-spectrum antibacterial properties *Polym. Chem* 2015,6, 2011-2022
50. **Haritz Sardon**, Alba González, María José Fernández-Berridi, Lourdes Irusta. Oxygen Barrier Properties of Waterborne Polyurethane/Silica Hybrids *J. Macromol. Sci. B.* 2015, 54, 711-721
51. Julian M. W. Chan, Xiangyi Zhang, Megan K. Brennan, **Haritz Sardon**, Amanda C. Engler, Courtney H. Fox, Curtis W. Frank, Robert M. Waymouth, and James L. Hedrick Organocatalytic Ring-Opening Polymerization of Trimethylene Carbonate to Yield a Biodegradable Polycarbonate *J. Chem. Educ.*, 2015, 92 (4), 708–713
52. Ana Pascual, **Haritz Sardon**, Fernando Ruipérez, Raquel Gracia, Pallavi Sudam, Antonio Veloso, David Mecerreyes Experimental and Computational Studies of Ring Opening Polymerization of Ethylene Brassylate Macrolactone and Copolymerization with  $\epsilon$ -caprolactone and TBD-guanidine Organic Catalyst *J. Polym. Sci., Part A: Polym. Chem.* 2015, 53 (4), 552-561

## 2014

53. Victor W. L. Ng, Julian M. W. Chan, **Haritz Sardon**, Robert J. Ono, Jeannette M. Garcia, James L. Hedrick and Yi Yan Yang Antimicrobial hydrogels: a new weapon in the arsenal against multidrug-resistant infections *Adv. Drug Delivery Rev.* 2014, 78, 46-62.
54. Mehmet Isik, **Haritz Sardon**, Miriam Saenz, David Mecerreyes. New amphiphilic block copolymers from lactic acid and cholinium building units *RSC Adv.* 2014, 4, 53407-53410
55. Ana Pascual, **Haritz Sardon**, Antonio Veloso, Fernando Ruiperez, David Mecerreyes, Organocatalyzed Synthesis of Aliphatic Polyesters from Ethylene Brassylate: a Cheap and Renewable Macrolactone *ACS Macro Lett.* 2014, 3 (9), 849-853.
56. Mehmet Isik, **Haritz Sardon**, David Mecerreyes Ionic Liquids and Cellulose: Dissolution, Chemical Modification and Preparation of New Celulosic Materials *Int.J. Mol. Sci.* 2014, 15, 11922-11940
57. Julian M. W. Chan, Xiyu Ke, **Haritz Sardon**, Amanda C. Engler, Yi Yan Yang, and James L. Hedrick. Chemically Modifiable N-Heterocycle-functionalized Polycarbonates as a Platform for Diverse Smart Biomimetic Nanomaterials *Chem. Sci.* 2014, 5, 3294-3300.
58. **Haritz Sardon**, Lourdes Irusta, Roberto H. Aguirresarobe, Maria Jose Fernández-Berridi Polymer/silica nanohybrids by means of tetraethoxysilane sol–gel condensation onto waterborne polyurethane particles. *Prog. Org. Coat.* 2014, 77, 1436–1442.
59. **Haritz Sardon\***, Julian M.W, Chan, Robert Ono, David Mecerreyes James L. Hedrick, Highly Tunable Polyurethanes: Organocatalyzed Polyaddition and Subsequent Post-polymerization Modification of Pentafluorophenyl Ester Sidechains. *Polym. Chem.* 2014, 5, 3547-3550.
60. Daniel P. Sanders, Daniel J. Coady, Manabu Yasumoto, Masaki Fujiwara, **Haritz Sardon**, James L. Hedrick, Synthesis of functionalized cyclic carbonate monomers using a versatile pentafluorophenyl carbonate intermediate. *Polym. Chem.* 2014, 5(2), 327-329.

## 2013

61. **Haritz Sardon\***, Amanda C. Engler, Julian M. W. Chan, Jeannette M. García, Daniel J. Coady, Ana Pascual, David Mecerreyes, Gavin O. Jones, Julia E. Rice, Hans W. Horn, and James L. Hedrick Organic Acid-Catalyzed Polyurethane Formation via a Dual-Activated Mechanism: Unexpected Preference of N-Activation over O-Activation of Isocyanates. *J. Am. Chem. Soc.* 2013, 135, 16235–16241
62. Julian M. W. Chan, **Haritz Sardon**, Amanda C. Engler, Jeannette M. O'Brien, James L. Hedrick. Tetra-n-butylammonium Fluoride as an Efficient Transesterification Catalyst for the Functionalization of Cyclic Carbonates and Aliphatic Polycarbonates. *ACS Macro Lett.*, 2013, 2 (10) 860–864.
63. Ana Pascual, **Haritz Sardon**, James L. Hedrick, David Mecerreyes Organocatálisis: hacia una nueva generación de catalizadores para la síntesis de polímeros *Anales de Química* 2013, 109(3), 173–181
64. **Haritz Sardon**, Lourdes Irusta, Alba Gonzalez, María José Fernández-Berridi. Waterborne hybrid polyurethane coatings functionalized with (3-aminopropyl)triethoxysilane: Adhesion properties. *Prog. Org. Coat.* 2013, 76, 1230–1235
65. **Haritz Sardon\***, Amanda C. Engler, Julian M. W. Chan, Daniel J. Coady, Jeannette M. O'Brien, David Mecerreyes, Yi Yan Yang, James L. Hedrick Homogeneous isocyanate- and catalyst-free synthesis of polyurethanes in aqueous media. *Green Chem.*, 2013, 15, (5), 1121-1126
66. Daniel J. Coady, Hans W. Horn, Gavin O. Jones, **Haritz Sardon**, Amanda C. Engler, Robert M. Waymouth, Julia E. Rice, Yi Yan Yang, James L. Hedrick *Polymerizing Base Sensitive Cyclic Carbonates Using Acid Catalysis* *ACS Macro Lett.* 2013, 2(4), 306-312.
67. Amanda C. Engler, Julian M. W. Chan, Daniel J. Coady, Jeannette M. O'Brien, **Haritz Sardon**, Alshakim Nelson, Daniel P. Sanders, Yi Yan Yang, James L. Hedrick *Accessing New Materials through Polymerization and Modification of a Polycarbonate with a Pendant Activated Ester.* *Macromolecules* 2013, 46 (4), 1283-1290

## 2012-2006

68. **Haritz Sardon**, Lourdes Irusta, Pablo Santamaria, María Jose Fernandez-Berridi *Adhesion properties of self-curable waterborne hybrid polyurethanes: effect of soft segment nature and APTES content.* *J. Polym. Res.* 2012, 19(9), 1-9.
69. **Haritz Sardon**, Lourdes Irusta, María José Fernández-Berridi, Joseba Luna, Muriel Lansalot, Elodie Bourgeat-Lami. *Waterborne polyurethane dispersions obtained by the acetone process: A study of colloidal features.* *J. Appl. Polym. Sci.* 2011, 120, 2054-2062.
70. **Haritz Sardon**, Lourdes Irusta, María José Fernández-Berridi, Muriel Lansalot, Elodie Bourgeat-Lami. *Synthesis of room temperature self-curable waterborne hybrid polyurethanes functionalized with (3-aminopropyl)triethoxysilane (APTES).* *Polymer* 2010, 51, 5051-5057.
71. Lorea Buruaga, **Haritz Sardon**, Lourdes Irusta, Alba González, María José Fernández-Berridi, Juan José Iruin. *Electrospinning of waterborne polyurethanes.* *J. Appl. Polym. Sci.* 2010, 115, 1176-1179.
72. **Haritz Sardon**, Lourdes Irusta, María José Fernández-Berridi. *Synthesis of isophorone diisocyanate (IPDI) based waterborne polyurethanes: Comparison between zirconium and tin catalysts in the polymerization process.* *Prog. Org. Coat.* 2009, 66, 291-295.



73. Rebeca Marcilla, Francisco Alcaide, **Haritz Sardon**, José A. Pomposo, Cristina Pozo-Gonzalo, David Mecerreyes. *Tailor-made polymer electrolytes based upon ionic liquids and their application in all-plastic electrochromic devices*. *Electrochemistry Comm.* 2006, 8, 482-488.