

# Curriculum Vitae

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## Dario Pasini

### Associate Professor

Department of Chemistry  
University of Pavia  
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### Education and Training

- 1986-1992                      **University of Pavia**                      **Pavia, Italy**  
Laurea in Chemistry
- 1992-1993                      **University College London**                      **London, UK**  
Short postgraduate fellowship with Dr M H Abraham
- 1993-1996                      **University of Birmingham**                      **Birmingham, UK**  
Ph.D. in Organic Chemistry with Professor Sir J. Fraser Stoddart  
(Nobel Prize in Chemistry 2016)  
Thesis Title: *Chiral Molecular Assemblies and Supramolecular Arrays*

### Positions Held

- 1997-1999                      **University of California, Berkeley**                      **Berkeley, USA**  
Postdoctoral Fellow in the group of Professor Jean J. M. Fréchet  
Design, synthesis and investigation of functional macromolecules for advanced microlithography
- 2000-2002                      **University of Pavia**                      **Pavia, Italy**  
Assistant Professor of Organic Chemistry  
Research interests: supramolecular chemistry, organic materials, macromolecular science
- 2002-2015                      **University of Pavia**                      **Pavia, Italy**  
Tenured Assistant Professor of Organic Chemistry
- 2015-present                      **University of Pavia**                      **Pavia, Italy**  
Associate Professor of Organic Chemistry
- 9/2004-8/2005                      **University of Geneva**                      **Geneva, CH**  
Visiting Scientist in the group of Prof. Stefan Matile  
Molecular recognition and sensing with synthetic multifunctional pores
- 2/2011                      **University of South Carolina**                      **Columbia, USA**  
Visiting professor in the group of Prof. Linda Shimizu.
- 12/2014                      *Habilitation as Full Professor (03/C1, Organic Chemistry)*

**Synopsis of Career Development.** Dario Pasini obtained his first degree from the University of Pavia in 1992, and spent six months in the group of M. H. Abraham (University College London, UK), after the award of a postgraduate fellowship for research abroad of the University of Pavia. He then moved to Birmingham, UK, for the next 3 and a half years to work in the group of Prof. Sir J. F. Stoddart, Nobel Prize for Chemistry 2016, and he received a PhD in Chemistry in 1996 from the University of Birmingham, UK. After postdoctoral research at the University of California, Berkeley, USA, in the group of Prof. J. M. J. Fréchet (1997–1999), he joined the faculty of the Department of Chemistry at the University of Pavia in 2000 as an Assistant Professor. He was promoted to Associate Professor in 2015, and he achieved the National Habilitation to Full Professor in Organic Chemistry (2014). He has been a visiting professor at the University of Geneva (in the group of Prof. S. Matile, one year, 2005) and at the University of South Carolina (Prof. L. Shimizu, one month, 2011).

He has established since 2004 an independently funded research group, developing new chemistry in the fields of organic, supramolecular and polymeric materials, focusing on functional properties on the nanometer scale. The research activities can be summarized in three different yet intertwining sectors: a) assembly of chiral nanostructures for sensing and optical imaging; b) controlled polymer synthesis for functional applications; c) organic conjugated materials.

**Bibliometric indexes (10/3/2017), source: Web of Science:**

ISI publications with impact factor: 87

ISI Proceedings: 7

Other publications: 3

Book chapters: 3

Total: 100

Publications as single author: 4

Publications as corresponding author: 56

Total Citations: 1550

Sum of Impact factors (IF 2015): 413,43

Average Impact factor: 4,75

H index: 26

Number of ISI publications last five years (2012/2016): 28

G index: 6

Contemporary H index: 16

Average N. of authors per publication: 6,59

**Publications highlighted:**

a) *Faraday Discuss.* **2017**, 196, 143-161 highlighted in DOI: 10.1039/C7CC90086D

a) *Org. Biomol. Chem.*, **2015**, 13, 3593-3601. Highlighted as "Organic Biomolecular Chemistry Hot Paper 2015". Web of Science "Highly cited paper" in 2015.

a) *J. Phys. Chem. C*, **2015**, 119, 19228-19235. Included in the "Elettra Highlights 2015-2016 booklet".

c) *J. Phys. Chem. C*, **2013**, 51, 27161-27166. Highlighted by: "Noteworthy Chemistry", an electronic newsweekly by the American Chemical Society.

d) *Phys. Chem. Chem. Phys.*, **2011**, 13, 18005-18014. Highlighted by: "Noteworthy Chemistry", an electronic newsweekly by the American Chemical Society.

e) *Org. Biomol. Chem.*, **2011**, 9, 5018-5020 Highlighted as: "Top 10 downloaded article" in July 2011.

f) *Nature Mat.* **2007**, 6, 577-580. Commented by: J.J. Lavigne, *Nature Mat.* **2007**, 6, 548-549

**Publications featured as Covers:**

- a) *Chem. Commun.* **2016**, 52, 11492-11495 (Cover).
- b) *Org. Biomol. Chem.*, **2011**, 9, 5018-5020 (Cover).
- c) *Org. Biomol. Chem.*, **2010**, 8, 1807-1815 (Inside Cover).
- d) *CrystEngComm*, **2008**, 10, 1132-1136 (Inside Cover).
- e) *Curr. Org. Synth.*, **2007**, 4, 59-80 (Permanent Cover from 2007 to 2014).
- f) *Adv. Funct. Mat.*, **2006**, 16, 169-179 (Cover).
- g) *Eur. J. Org. Chem.*, **2002**, 3385-3392 (Cover).
- h) *J. Polym. Sci. A: Polym. Chem.*, **1999**, 37, 1225-1236 (Cover).

### **Awards.**

-Journals Grant for International Authors of the Royal Society of Chemistry (2011)

### **Member of the Editorial Board of the following journals:**

- a) *Mediterranean Journal of Chemistry*, 2011-present
- b) *Journal of Chemistry*, 2012-present
- c) *Conference Papers in Chemistry (Hindawi)*, 2012-2015
- d) *The Open Condensed Matter Physics Journal (Bentham Open)*, 2008-2011
- e) *Quantum Biosystems*, 2007-2011
- f) *Open Physics Journal (Bentham Open)*, 2015-
- g) *The Journal of Membrane and Separation Technology*, 2016- present
- h) *The Open Access Journal of Science and Technology*, 2016-present

### **Sponsored Research as Principal Investigator.**

-Ca. 265 kEuro granted from local, regional and national research agencies in response to competitive, peer reviewed calls for scientific proposals. Ca. 190 kEuro in research contracts with industries. Overall support given by the University of Pavia: 120 kEuro. Ratio between external/internal funding: >3

### **Scientific presentations.**

-Ca. 30 invited talks at national and international meetings, and at US and European institutions, amongst which: 1 keynote lecture (Supramol 2015, national meeting), and invited talks to Namur (Belgium), Eindhoven (Holland), South Carolina (USA), Miami (USA), Geneva (Switzerland), Jerusalem (Israel).

### **Supervision of research collaborators.**

-Supervision of MSc students (28), postgraduate students (8), PhD students (2), postdocs (4) and 2 visiting professors.

### **Refereeing Activity.**

-For scientific journals (ca. 50 papers per year):

publications of all major publishers: RSC (including *Chem. Commun.*, *Nanoscale*, *Chem. Soc. Rev.*, *Polym. Chem.*), Wiley (*Eur. J. Org. Chem.*, *Chem. Eur. J.*, *Small*), ACS (*J. Am. Chem. Soc.*, *Macromolecules*, *J. Org. Chem.*), Elsevier, Bentham. For a certified record of refereeing, see:

<https://publons.com/author/507524/dario-pasini#profile>

-For scientific agencies:

ANVUR (VQR 2004-2010 and 2011-2014), MIUR (FIRB Futuro in Ricerca 2010; PRIN 2012); American University of Beirut (Faculty of Arts and Sciences, 2009); Portuguese Foundation for Science and Technology (2012 and 2013); European Commission: FP7, Marie Curie actions (IOF, IIF, IEF) 2013; HORIZON 2020, Marie Curie actions IF (2014-2016); KU Leuven (2015 and 2016); Research Foundation Flanders – FWO – (2015 and 2016).

***Institutional Activity and Service to the Department.***

- Member of several committees within the Department of Organic Chemistry (up to 2010);
- Member of the Board of the PhD School of Chemical and Pharmaceutical Sciences of the University of Pavia (2013-present);
- Coordinator of the MSc course in Industrial Biotechnologies (10/2013-12/2013)
- Representative of the Department in CIRSIS (Centro Interdipartimentale di Studi e Ricerche sui Sistemi di Istruzione Superiore) (2010-present);
- Coordinator of the SOBANE project, related to safety in working environment (2010-2013)

***Teaching activity.***

-Several courses at the BSc and MSc level: Organic Chemistry, Macromolecular Chemistry and Industrial Organic Chemistry for Chemistry, Engineering, and Biotechnology degrees (2002-present).

***Other Relevant Activities.***

Member of the Italian Chemical Society

Member of the American Chemical Society

Member of the Royal Society of Chemistry

PhD Examining committee (candidate: Miriam Crespo), 10/2/2009, Dipartimento di Chimica Inorganica ed Analitica, University of Cagliari

Participation to a Gordon Research Conference (Supramolecules & Assemblies, Chemistry of; Colby College, June 2009)

Participation (invited) to the RSC Faraday Discussion *Aggregation Induced Emission* (November 2016, Guangzhou, China)

## Complete List of Publications

100. Donor–acceptor conjugated copolymers incorporating tetrafluorobenzene as the  $\pi$ -electron deficient unit, A. Nitti, F. Debattista, L. Abbondanza, G. Bianchi, R. Po, **D. Pasini**,\* *J. Polym. Sci. Pol. Chem.*, **2017**, in press.
99. Direct Arylation Strategies in the Synthesis of  $\pi$ -Extended Monomers for Organic Polymeric Solar Cells, A. Nitti, G. Bianchi, R. Po, **D. Pasini**,\* *Molecules*, **2017**, *22*, 21.
- Invited contribution – Open Access Publication Fees Waived
98. Structure-Activity Relationships for the Solid State Emission of a New Family of “Push-Pull”  $\pi$ -Extended Chromophores, A. Nitti, F. Villafiorita-Monteleone, A. Pacini, C. Botta, T. Virgili, A. Forni, E. Cariati, M. Boiocchi, **D. Pasini**,\* *Faraday Discuss.* **2017**, *196*, 143-161.
- Highlighted in 10.1039/C7CC90086D.
97. Biomedical applications of luminogens: general discussion, A. Pucci, A. Hor, M. Gao, S. Wu, Y. Yu, B. Li, X. He, B. Liu, R. Hu, X. Lou, Z. Li, G. Krishnamoorthy, D. Zhang, **D. Pasini**, Y. Tang, Y. Tsuchiya, Y. Wang, W. Z. Yuan, B. Z. Tang, D. Ding, H. Tian, M.-Q. Zhu, J. Z. Sun, W. Tian, G. Kuang, L. Wu, J. Chen, R. Zhang, T. Jadhav, *Faraday Discuss.* **2017**, *196*, 403-414.
96. Advanced functional luminogens in the solid-state: general discussion, A. Pucci, N. Leung, A. Hor, S. Wu, Y. Gu, B. Li, B. Liu, R. Hu, A. Qin, X. Chen, Z. Li, D. Zhang, G. Krishnamoorthy, **D. Pasini**, Y. Tsuchiya, K. Wang, X. He, H. Peng, Z. Zhao, G. He, B. Z. Tang, E. Rivard, F. Ito, H. Tian, M.-Q. Zhu, J. Z. Sun, Y. Chujo, G. Kuang, Y. Ma, W. Tian, B. Xu, O. Tsutsumi, P. Duan, *Faraday Discuss.* **2017**, *196*, 317-333.
95. New and efficient fluorescent and phosphorescent luminogens: general discussion, N. Leung, A. Pucci, R. Hu, E. E. B. Campbell, G. Krishnamoorthy, B. Z. Tang, S. Wu, F. Zhang, J. Mei, W. Bai, B. Li, X. He, Y. Tang, B. Liu, R. Zhang, Z. Wang, A. Qin, Z. Li, D. Zhang, **D. Pasini**, W. Tian, Y. Tsuchiya, T. Jadhav, Y. Wang, Z. Zhao, G. He, K. Li, E. Rivard, M.-Q. Zhu, B. Xu, J. Z. Sun, Y. Chujo, J.-L. Hong, L. Kong, P. Lu, C.-C. Chang, K. Wang, R. A. Singh, *Faraday Discuss.* **2017**, *196*, 191-218.
94. Optoelectronic devices of highly efficient luminogens in the solid state: general discussion, S. Wu, X. He, B. Liu, R. Hu, Z. Li, G. Krishnamoorthy, A. Qin, Y. Tang, **D. Pasini**, Y. Tsuchiya, T. Jadhav, Z. Zhao, H. Peng, H. Tian, J. Z. Sun, M.-Q. Zhu, Y. Ma, B. Z. Tang, *Faraday Discuss.* **2017**, *196*, 455-460.
93. Conjugated Thiophene-Fused Isatin Dyes through Intramolecular Direct Arylation, A. Nitti, M. Signorile, M. Boiocchi, G. Bianchi, R. Po, **D. Pasini**,\* *J. Org. Chem.* **2016**, *81*, 11035-11042.
92. A chiroptical molecular sensor for ferrocene, M. Agnes, A. Nitti, D. A. Vander Griend, D. Dondi, D. Merli, **D. Pasini**,\* *Chem. Commun.*, **2016**, *52*, 11492-11495. **(Cover)**
91. Long-living optical gain induced by solvent viscosity in a push–pull molecule, M. Mroz, S. Benedini, A. Forni,\* **D. Pasini**, E. Cariati, T. Virgili,\* *Phys. Chem. Chem. Phys.* **2016**, *18*, 18289-18296.

90. *Polymorphism-Dependent Aggregation Induced Emission of a Push-Pull Dye and its Multi-Stimuli Responsive Behavior*, C. Botta,\* S. Benedini, L. Carlucci, A. Forni,\* D. Marinotto, A. Nitti, D. Pasini,\* S. Righetto, E. Cariati,\* *J. Mat. Chem. C* **2016**, *4*, 2979-2989.
89. *Microstructured chitosan/poly( $\gamma$ -glutamic acid) polyelectrolyte complex hydrogels by computer-aided wet-spinning for biomedical three-dimensional scaffolds*, D. Puppi, C. Migone, A. Morelli, C. Bartoli, M. Gazzarri, **D. Pasini**, F. Chiellini,\* *J. Bioact. Compat. Polym.*, **2016**, *31*, 531-549.
88. *Recent Advances in Chirality Sensing using Atropisomeric Molecular Receptors*, **D. Pasini**,\* A. Nitti, *Chirality*, **2016**, *28*, 116-123,
- Invited contribution from the Journal's Editorial Board. Special Issue in honour of Francesco Gasparrini
87. *Synthesis of Binaphthyl-Based Push-Pull Chromophores with Supramolecularly Polarizable Acceptor Ends*, C. Coluccini,\* G. Terraneo, **D. Pasini**,\* *J. Chem.*, **2015** Article Number: 827592.
- Invited contribution from the Journal's Editorial Board.
86. *Surface-Enhanced Polymerization via Schiff-Base Coupling at the Solid-Water Interface under pH Control*, M. Di Giovannantonio, T. Kosmala, B. Bonanni, G. Serrano, N. Zema, S. Turchini, D. Catone, K. Wandelt, **D. Pasini**, G. Contini,\* C. Goletti, *J. Phys. Chem. C*, **2015**, *119*, 19228-19235.
- Included in the Elettra Highlights 2015-2016 booklet.
85. *Solvent Molding of Organic Morphologies Made of Supramolecular Chiral Polymer*, L. Dordević, T. Marangoni, T. Miletić, J. Rubio-Magnieto, J. Mohanraj, H. Amenitsch, **D. Pasini**, N. Liaros, S. Couris, N. Armaroli,\* M. Surin,\* D. Bonifazi,\* *J. Am. Chem. Soc.* **2015**, *137*, 8150-8160.
84. *Chiral Nanostructuring of Multivalent Macrocycles in Solution and on Surfaces*, M. Caricato, A. Deforge, D. Bonifazi, D. Dondi, A. Mazzanti, **D. Pasini**,\* *Org. Biomol. Chem.*, **2015**, *13*, 3593-3601.
- Highlighted as "Hot Paper 2015".
83. *Synthesis, Chiroptical and SHG Properties of Polarizable Push-Pull Dyes Built on  $\pi$ -Extended Binaphthyls*, C. Coluccini, M. Caricato, E. Cariati, S. Righetto, A. Forni, **D. Pasini**,\* *RSC Advances*, **2015**, *5*, 21495-21503.
82. *'Crystal structure analyses facilitate understanding of synthesis protocols in the preparation of 6,6'-dibromo-substituted BINOL compounds'*, M. Agnes, A. Sorrenti, **D. Pasini**,\* K. Wurst, D. B. Amabilino,\* *CrystEngComm*, **2014**, *16*, 10131-10138.
81. *'Stereospecific generation of homochiral helices in coordination polymers built from enantiopure binaphthyl-based ligands'*, M. Crespo Alonso, M. Arca, F. Isaia, R. Lai, V. Lippolis, S. K. Callear, M. Caricato, **D. Pasini**,\* S. J. Coles, M. C. Aragoni,\* *CrystEngComm*, **2014**, *16*, 8582-8590.
80. *'Nanostructuring with Chirality: Binaphthyl-Based Synthons for the Production of Functional*

*Oriented Nanomaterials*, M. Caricato, A. K. Sharma, C. Coluccini, D. Pasini,\* *Nanoscale*, **2014**, *6*, 7165-7174.

- Invited contribution from the Journal's Editorial Board.

79. *Homochiral BINOL-based macrocycles with p-electron-rich, electron-withdrawing or extended spacing units as receptors for C<sub>60</sub>*, M. Caricato, S Díez González, I. Arandia Ariño, D. Pasini,\* *Beilstein J. Org. Chem.*, **2014**, *10*, .

- Invited contribution to the Thematic Series: Functionalized carbon-nanomaterials, Editor Prof. Anke Krueger

78. *'Clickable' hydrogels for all: facile fabrication and functionalization*, L. Beria, T. N. Gevrek, A. Erdog, R. Sanyal, **D. Pasini**,\* A. Sanyal,\* *Biomat. Sci.*, **2014**, *2*, 67-75.

77. *Direct evidence of torsional motion in an aggregation-induced emissive chromophore*, T. Virgili,\* A. Forni,\* E. Cariati, D. Pasini, C. Botta, *J. Phys. Chem. C*, **2013**, *51*, 27161-27166.

- Highlighted by "Noteworthy Chemistry", a news weekly by the American Chemical Society.

76. *The Click Reaction as an Efficient Tool for the Construction of Macrocyclic Structures*, **D. Pasini**,\* *Molecules*, **2013**, *18*, 9512-9530.

- Invited contribution to the Special Issue: "Advances in Click Chemistry" – Open Access Publication Fees Waived

75. *A Chiroptical Probe for Sensing Metal Ions in Water*, M. Caricato, N. J. Leza, K. Roy, D. Dondi, G. Gattuso, L. S. Shimizu, D. A. Vander Griend, **D. Pasini**,\* *Eur. J. Org. Chem.*, **2013**, 6078-6083.

74. *From Red to Blue Shift: Switching the Binding Affinity from the Acceptor to the Donor End by Increasing the  $\pi$ -Bridge in Push-Pull Chromophores with Coordinative Ends*, M. Caricato, C. Coluccini, D. A. Vander Griend A. Forni, **D. Pasini**,\* *New J. Chem.*, **2013**, *15*, 1666-1674.

73. *Knockout of pgdS and ggt genes improves  $\gamma$ -PGA yield in B. subtilis*, V. Scoffone, D. Dondi, G. Biino, G. Borghese, **D. Pasini**, A. Galizzi, C. Calvio,\* *Biotechnol. Bioeng.*, **2013**, *110*, 2006-2012.

72. *Switching of Emissive and NLO Properties in Push-Pull Chromophores with Crescent PPV-like Structures*, C. Coluccini, A. K. Sharma, M. Caricato, A. Sironi, E. Cariati,\* S. Righetto, E. Tordin, C. Botta,\* A. Forni, \* **D. Pasini**,\* *Phys. Chem. Chem. Phys.*, **2013**, *15*, 1666-1674.

71. *Polystyrene-based self-aggregating polymers based on UPy units*, A. K. Sharma, M. Caricato, E. Quartarone, S. Edizer, A. Giacometti Schieron, R. Mendichi, **D. Pasini**,\* *Polym. Bull.*, **2012**, *69*, 911-923.

70. *Poly( $\gamma$ -Glutamic Acid) Esters with Reactive Functional Groups Suitable for Orthogonal Conjugation Strategies*, A. Pacini, M. Caricato, S. Ferrari, D. Capsoni, A. Martínez de Ilarduya, S. Muñoz-Guerra, **D. Pasini**,\* *J. Polym. Sci. Pol. Chem.*, **2012**, *50*, 4790-4799.

69. *A BINOL-based chiral polyammonium receptor for highly enantioselective recognition and fluorescence sensing of (S,S)-tartaric acid in aqueous solution*, A. Bencini,\* C. Coluccini, A. Garau, C. Giorgi, V. Lippolis,\* L. Messori, **D. Pasini**,\* S. Puccioni, *Chem. Commun.*, **2012**, 48, 10428-10430.
68. *A "clicked" macrocyclic probe incorporating Binol as the signalling unit for the chiroptical sensing of anions*, M. Caricato, A. Olmo, C. Gargiulli, G. Gattuso, **D. Pasini**,\* *Tetrahedron*, **2012**, 68, 7861-7866.
67. *Synthesis, Postmodification and Characterization of Linear Polystyrene-based Supports for the Interaction with Immobilized Biocatalysts*, M. Petenzi, T. Bavaro, C. Cornaggia, D. Ubiali, M. Pregnotato, **D. Pasini**,\* *Polym. Int.*, **2012**, 61, 1611-1618.
66. *Synthesis and anion recognition properties of shape-persistent binaphthyl-containing chiral macrocyclic amides*, M. Caricato, N. J. Leza, C. Gargiulli, G. Gattuso, D. Dondi, **D. Pasini**,\* *Beilstein J. Org. Chem.*, **2012**, 8, 967-976.
- Invited contribution to the Thematic Series: Molecular Switches and Cages, Editor Prof. Dirk Trauner
65. *Spectroscopic and Electrochemical Sensing of Lanthanides with  $\pi$ -Extended Chromophores Incorporating Ferrocenes and a Coordinative End*, C. Coluccini, A. K. Sharma, D. Merli, D. Vander Griend, B. Mannucci, **D. Pasini**,\* *Dalton Trans.*, **2011**, 40, 11719 -11725.
64. *Efficient Crystallization Induced Emissive Materials Based on a Simple Push-Pull Molecular Structure*, E. Cariati,\* V. Lanzeni, E. Tordin, R. Ugo, C. Botta,\* A. Giacometti Schieroni, A. Sironi, **D. Pasini**, *Phys. Chem. Chem. Phys.*, **2011**, 13, 18005-18014.
- Highlighted by "Noteworthy Chemistry", a news weekly by the American Chemical Society.
63. *Fluorinated Styrene-Based Monomers for Cyclopolymerizations*, A. K. Sharma, **D. Pasini**,\* *J. Fluorine Chem.*, **2011**, 132, 956-960.
62. *Mild Preparation of Functionalized [2.2]Paracyclophanes via the Pummerer Rearrangement*, M. Montanari, A. Bugana, A. K. Sharma, **D. Pasini**,\* *Org. Biomol. Chem.*, **2011**, 9, 5018-5020 (**Front Cover**).
- Top 10 Most Accessed Papers in OBC in July 2011.
61. *Controlled RAFT Cyclopolymerization of Oriented Styrenic Difunctional Monomers*, A. K. Sharma, C. Cornaggia, **D. Pasini**,\* *Macromol. Chem. Phys.*, **2010**, 211, 2254-2259.
60. *Nesting Complexation of C<sub>60</sub> with Large, Rigid D<sub>2</sub> Symmetrical Macrocycles*, M. Caricato, C. Coluccini, D. Dondi, D. A. Vander Griend, **D. Pasini**,\* *Org. Biomol. Chem.*, **2010**, 8, 3272-3280.
59. *Shape Selectivity in the Synthesis of Chiral Macrocyclic Amides*, S. Colombo, C. Coluccini, M. Caricato, C. Gargiulli, G. Gattuso,\* **D. Pasini**,\* *Tetrahedron*, **2010**, 66, 4206-4211.
58. *Locked Chromophores as CD and NMR Probes for the Helical Conformation of Tetraamidic*



Macrocycles, C. Coluccini, A. Mazzanti, **D. Pasini**,\* *Org. Biomol. Chem.*, **2010**, *8*, 1807-1815  
(**Inside Cover**).

57. *Structurally-Variable, Rigid and Optically-Active D2 and D3 Macrocycles Possessing Recognition Properties towards C<sub>60</sub>*, C. Coluccini, D. Dondi, M. Caricato, A. Taglietti, M. Boiocchi, **D. Pasini**,\* *Org. Biomol. Chem.*, **2010**, *8*, 1640-1649.
56. *Tagging Molecules with Linear Polymers: Biocatalytic Transformation of Substrates Anchored on Soluble Macromolecules*, C. Cornaggia, **D. Pasini**,\* *Comb. Chem. High Throughput Screen*, **2010**, *13*, 45-53.
55. *Cooperative Dynamic Switching in Binding Lanthanides with Macrocyclic "Push-Pull" Chromophores*, C. Coluccini, **D. Pasini**,\* P. Righetti, D. Van Der Griend,\* *Tetrahedron*, **2009**, *62*, 10436-10440.
54. *Efficient Free-Radical Cyclopolymerization of Oriented Styrenic Difunctional Monomers*, S. Edizer, B. Veronesi, O. Karahan, V. Aviyente, I. Degirmenci, A. Galbiati, **D. Pasini**,\* *Macromolecules*, **2009**, *42*, 1860-1866.
53. *Site Selective Supramolecular Synthesis of Halogen Bonded Cocrystals Incorporating the Photoactive Azo Group*, D. Fox, P. Metrangolo,\* **D. Pasini**, T. Pilati, G. Resnati,\* G. Terraneo, *CrystEngComm* **2008**, *10*, 1132-1136 (**Inside Cover**).
52. *"Push-Pull" Supramolecular Chromophores Supported on Cyclopolymers*, C. Coluccini, P. Metrangolo, M. Parachini, **D. Pasini**,\* G. Resnati, P. Righetti, *J. Polym. Sci. Pol. Chem.*, **2008**, *46*, 5202-5213.
51. *Chemoselective Functionalization of 3,3'-Substituted BINOL Derivatives*, C. Coluccini, A. Castelluccio, **D. Pasini**,\* *J. Org. Chem.* **2008**, *73*, 4237-4240.
50. *Supramolecular Pore Sensors as Artificial Tongues*, S. Litvinchuk, H. Tanaka, T. Miyatake, **D. Pasini**, T. Tanaka, G. Bollo, J. Mareda, S. Matile,\* *Nature Mat.* **2007**, *6*, 577-580.
- Commented by: J. J. Lavigne, *Nature Mat.* **2007**, *6*, 548-549
49. *Synthesis and Evaluation of Blends formed by Polymeric Crown Ethers and a Fullerene-Containing Primary Ammonium Salt*, **D. Pasini**,\* E. Bontempi, L.E. Depero, L. Garlaschelli, *Fuller. Nanotub. Carbon Nanostruct.* **2007**, *15*, 367-378.
48. *Synthesis and structure determination of 1, 4, 7, 11, 14, 17, 21, 24, 27-nonaoxatriacontan-8, 10, 18, 20, 28, 30-esaone*, **D. Pasini**, M. Zema,\* P. P. Righetti, *J. Chem. Crystallogr.*, **2007**, *37*, 537-541.
47. *A Chiral Probe for the Detection of Cu(II) by UV, CD and Emission Spectroscopies*, A. Moletti, C. Coluccini, **D. Pasini**,\* A. Taglietti,\* *Dalton Trans.*, **2007**, *16*, 1588-1592.
46. *Linear Recognition of Dicarboxylates by Ditopic Macrocyclic Complexes*, M. Boiocchi, M. Bonizzoni, A. Moletti, **D. Pasini**,\* A. Taglietti,\* *New J. Chem.*, **2007**, *31*, 352-356.
45. *Efficient Biocatalytic Cleavage and Recovery of Organic Substrates Supported on Soluble Polymers*, **D. Pasini**,\* M. Filippini, I. Pianetti, M. Pregnolato,\* *Adv. Synth. Catal.*, **2007**, *349*, 971-978.

44. *Macrocycles as Precursors for Organic Nanotubes*, **D. Pasini**,\* M. Ricci, *Current Organic Synthesis*, **2007**, 4, 59-80 (invited review) **(Cover)**.
43. *Molecular Recognition by Synthetic Multifunctional Pores in Practice: Are Structural Studies Really Helpful?*, Y. Baudry, G. Bollot, V. Gorteau, S. Litvinchuk, J. Mareda, M. Nishihara, **D. Pasini**, F. Perret, D. Ronan, N. Sakai, M. R. Shah, A. Som, N. Sordé, P. Talukdar, D.-H. Tran, S. Matile,\* *Adv. Funct. Mat.* **2006**, 16, 169-179. **(Cover)**.
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37. *Supramolecular Self-Assembly of Fibres*, **D. Pasini**,\* A. Kraft *Current Opinion in Solid State and Materials Science* **2004**, 8, 157-163.
36. *Cyclopolymers as Liquid Membrane Carriers*, E. Cagnoni, **D. Pasini**,\* A. Galbiati, M. Ricci, P. P. Righetti *Macromolecules* **2003**, 36, 8894-8897.
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27. *Lithographic Evaluation of a Novel Family of Carbon-Rich Cyclopolymers for 193 nm Microlithography*, J.M. Klopp, **D. Pasini**, J.M.J. Fréchet,\* J.D. Byers *Proc. SPIE* **2000**, *3999*, 23-31.
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17. *Cyclophanes and [2]Catenanes as Ligands for Transition Metal Complexes. Synthesis, Structure, Absorption Spectra, and Excited State and Electrochemical Properties*, P. R. Ashton, V. Balzani,\* A. Credi, O. Kocian, **D. Pasini**, L. Prodi, N. Spencer, J. F. Stoddart,\* M. S. Tolley, M. Venturi, A. J. P. White, D. J. Williams,\* *Chem. Eur. J.* **1998**, *4*, 590-607.

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14. *Molecular and Supramolecular Synthesis with Dibenzofuran-Containing Systems*, M. Asakawa, P. R. Ashton, C. L. Brown, M. C. T. Fyfe, S. Menzer, **D. Pasini**, C. Scheuer, N. Spencer, J. F. Stoddart,\* A. J. P. White, D. J. Williams *Chem. Eur. J.* **1997**, *3*, 1136-1150.
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12. *Design of a Positive-Tone Water Soluble Resist*, J. M. Havard, **D. Pasini**, J. M. J. Fréchet,\* C. G. Willson, *Polym. Mat. Sci. Eng.* **1997**, *77*, 424-425.
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9. *Chromatography of Mechanically-Interlocked Molecular Compounds*, M. Asakawa, **D. Pasini**, F. M. Raymo, J. F. Stoddart,\* *Anal. Chem.* **1996**, *68*, 3879-3881.
8. *Self-Assembling Catenanes and Rotaxanes*, **D. Pasini**, F. M. Raymo, J. F. Stoddart,\* *Gazz. Chim. It.* **1995**, *125*, 431-443.
7. *Solvent Effect as the Result of Frontier Molecular Orbital Interaction. VII. The Retro-Diels-Alder Reaction*, G. Desimoni,\* G. Faita, **D. Pasini**, P. P. Righetti, *Tetrahedron* **1992**, *48*, 1667-1674.

*Book chapters:*

6. *Design and Preliminary Studies of Environmentally Enhanced Water-Castable, Water-Developable Positive Tone Resists: Model and Feasibility Studies*, J. M. Havard, **D. Pasini**, J. M. J. Fréchet,\* D. Medeiros, S. Yamada, C. G. Willson *ACS Symp. Ser.* **1998**, *706* (Micro and Nanopatterning Polymers); Ito, H.; Reichmanis, E.; Nalamasu, O.; Ueno, T. Eds.; pp. 262-275.
5. *Linear vs. Crosslinked Macromolecules as Supports for Biocatalyzed Transformations: Recent Developments*, **D. Pasini**,\* *Inorganic Biochemistry: Research Progress*, J. G. Hughes and A. J. Robinson, Eds.; Nova Science Publishers, **2008**: pp. 1-10.
4. *Click Chemistry and Macrocycles*, **D. Pasini**,\* in "Click Reactions in Organic Synthesis", S. Chandrasekaran, Ed.; Wiley, 2016, pp. 287-307.

*Refereed Papers without Impact factor:*

3. *Acentric Nanostructured Assembly as a Strategy for the Design of Organic Electrooptic Materials*, C. Coluccini, **D. Pasini**,\* *Open Condensed Matter Physics Journal* **2008**, 1, 7-12 (Invited Editorial Board Member Contribution).
2. *Counting at the Nanoscale: Molecules performing Simple Logic Operations*, **D. Pasini**,\* *Quantum Biosystems* **2007**, 1, 74-79 (Invited Editorial Board Member Contribution).

*Divulgative Papers without Impact factor:*

1. *Black gold in state-of-the-art photovoltaics*, Andrea Nitti, **Dario Pasini**, *About Oil*, [published online 17/6/2015](#).

*The asterisk denotes corresponding authors.*

## **List of Invited seminars/Oral Presentations**

### *Scientific Seminars:*

- 18/11/2016 *Structure-Activity Relationships for the Solid State Emission of a New Family of "Push-Pull"  $\pi$ -Extended Chromophores*, Faraday Discussions, Guangzhou, China.
- 29/9/2015 *Chiroptical Sensing and Chiral Nanostructures from Binaphthyl-Based Molecular Modules*, Keynote Lecture, XII Congresso Nazionale di Chimica Supramolecolare, Messina, Italy.
- 11/6/2015 *Biomateriali Micro e Nanostrutturati per l'Ingegneria Tissutale derivati da un Polimero Batterico Emergente*, Final Meeting INSTM-Regione Lombardia 2013-2015, one of the six selected Projects for the final presentation.
- 19/6/2014 *Chiroptical Sensing and Chiral Nanostructures from Binaphthyl-Based Molecular Modules*, CHIRITALY, Pisa, Italy.
- 27/6/2013 *Macromolecular and Macrocyclic Architectures as Functional Materials*, Consiglio Nazionale delle Ricerche, Istituto di Struttura della Materia, Roma, Italy.
- 15/3/2013 *Poli( $\gamma$ -glutammato): bioproduzione di un polimero ecocompatibile e sua derivatizzazione in materiali per il packaging attivo di alimenti (GAMMA-PGA)*, Final Meeting INSTM-Regione Lombardia 2010-2012 Projects
- 15/11/2012 *"Push-pull"  $\pi$ -extended chromophores with coordinative ends: supramolecular polarization, sensing and aggregation-induced emission*, ISMAC Workshop 2012 dedicated to Alberto Bolognesi, ISMAC-CNR, Milano, Italy
- 13/1/2012 *Novel Macrocyclic and Polymeric Architectures: Towards Functional Nanomaterials*, Dipartimento di Chimica Organica e Biologica, University of Messina, Italy (host: G. Gattuso)
- 3/2/2011 *Novel Macrocyclic and Polymeric Architectures: Towards Functional Nanomaterials*, Department of Chemistry and Biochemistry, University of South Carolina, U.S.A (host: L. Shimizu)
- 24/11/2010 *Novel Macrocyclic and Polymeric Architectures: Towards Functional Nanomaterials*, Institute for Complex Molecular Systems, Eindhoven University of Technology, Netherlands (host: E. W. Meijer)
- 5/5/2010 *Cyclic Organic Molecules and Polymers: Towards Functional Nanomaterials*, Department of Chemistry, University of Namur, Belgium (host: D. Bonifazi)
- 8/12/2009 *Cyclic Organic Molecules and Polymers: Towards Functional Nanomaterials*, Department of Chemistry, University of Miami, U.S.A. (host: F. M. Raymo)
- 8/7/2009 *Cyclopolymerization as a Tool for the Synthesis of Functional Macromolecular Materials*, 13<sup>th</sup> International IUPAC Conference on Polymers and Organic Chemistry, Montreal, Canada.
- 3/6/2009 *Styrene-Based Copolymers as Soluble Platforms for the Biocatalytic Transformation of Organic Substrates with Immobilized Enzymes*, Active Pharmaceutical Ingredients from Bioprocesses: from research to industrial and regulatory issues (APIBo9, 1<sup>st</sup> International

Symposium and Advanced Course), University of Pavia, Pavia, Italy.

- 27/3/2009 *Cyclic Organic Molecules and Polymers: Towards Functional Nanomaterials*, Le giornate di Chimica Organica, Department of Organic Chemistry, University of Pavia, Pavia, Italy.
- 27/11/2007 *Cyclopolymerization as a Tool for the Synthesis of Functional Materials*, Department of Chemistry, Bogazici University, Istanbul, Turkey (host: D. Avci)
- 23/2/2007 *Novel Macrocyclic and Polymeric Architectures: Towards Functional Supramolecular Materials?*, CNR-INFM Nanostructures and Biosystems at Interfaces, Modena, Italy (host: L. Berti)
- 17/6/2005 *Bioorganic Chemistry of Rigid-Rod Molecules*, NRP 47 final meeting, Murten, Switzerland.
- 5/5/2005 *Optically-active macrocycles as sensors and as precursors for helical tubular structures*, PRIN workshop, University of Bologna, Italy (host: D. Braga)
- 6/2/2004 *Supramolecular and Macromolecular Architectures via Lanthanide Ion Complexation and Cyclopolymerizations*, University of Geneva, Switzerland (host: S. Matile)
- 10/9/2002 *Novel Macromolecular and Supramolecular Architectures via a Cyclopolymerization Approach*, Euresco Conference on High Performance Fibers, Bad Herrenalb, Germany.
- 14/11/2000 *Nuovi Polimeri per Litografia a 193 nm*, Department of Organic Chemistry Research Seminars, University of Pavia, Italy.
- 31/10/2000 *Novel Polymer Architectures for Advanced Microlithography*, Department of Organic Chemistry, Hebrew University of Jerusalem, Jerusalem, Israel (host: I. Willner)
- 14/9/1999 *Carbon Rich Cylopolymers for 193 nm Microlithography*, Resist Advisory Group Meeting, SEMATECH, Austin, Texas, USA.
- 15/3/1999 *Carbon-Rich Cyclopolymers: Their Synthesis, Etch Resistance, and Application to 193 nm Microlithography*, SPIE's 24<sup>th</sup> International Symposium on Microlithography, Santa Clara, California, USA.
- 21/8/1997 *Water-Soluble Water-Processable Resists*, Semiconductor Research Corporation Progress Review, University of California at Berkeley, Berkeley, California, USA.
- 17/1/1997 *Sistemi Supramolecolari Chirali*, Istituto di Chimica delle Macromolecole, Consiglio Nazionale delle Ricerche, Milano, Italy (host: G. Audisio)
- 30/4/1996 *Chiral Supramolecular Assemblies*, School of Chemistry Research Seminar, University of Birmingham.
- 20/11/1994 *Towards Axially-Chiral  $\pi$ -Electron Deficient Supramolecular Receptors*, Glaxo Medicinal Chemistry Symposium Organized by the Medicinal Chemistry 2 Section, Glaxo Research and Development Centre, Greenford, London.

*Outreach/Expert talks:*

- 27/1/2015 *Testimonianza di un valutatore di progetti Marie Curie (FP7 – IEF -2013; H2020 - IF - 2014)*, INFO DAY: Opportunità per ricercatori, Università dell'Insubria, Varese.

## **Research Support**

### **Complete List of Grants**

#### **Current:**

Title: *Nuovi Materiali e Tecnologie per Stampa 3D Stereolitografica (STEREO3D)*

Source: INSTM – Regione Lombardia

Dates: 10/2016-9/2018

Amount: 14.000 Euro (Unit Coordinator)

Title: *studio e caratterizzazione di siliconi innovativi ed additivi per la formulazione di paste coloranti adatte a sistemi poliuretanic*

Source: MARBO S.P.A.

Dates: 10/2016-9/2017

Amount: 20.000 Euro (Project Coordinator)

#### **Completed:**

Title: *Sintesi di poliesteri iper-ramificati per prodotti vernicianti*

Source: IVM Chemicals S.r.l.

Dates: 3/2016-2/2017

Amount: 40.000 Euro (Project Coordinator)

Title: *Formulazione Innovativa per Somministrazione Intraarticolare*

Source: Rottapharm S.p.A.

Dates: 12/2015-8/2016

Amount: 9.750 Euro (Subcontractor)

Title: *Analisi e deformulazione di specifiche composizioni assemblate*

Source: MARBO S.P.A.

Dates: 1/2015-1/2016

Amount: 20.000 Euro (Project Coordinator)

Title: *Sistemi Macromolecolari Innovativi per il Fotovoltaico Organico Polimerico*

Source: ENI Corporate University

Dates: 11/2013-10/2016

Amount: 70.000 Euro (Project Coordinator)

Title: *Biomateriali Micro e Nanostrutturati per l'Ingegneria Tissutale derivati da un Polimero Batterico Emergente (PGGABIOMAT)*

Source: INSTM – Regione Lombardia

Dates: 5/2013-4/2015

Amount: 45.000 Euro (Project Coordinator)

Title: *Sintesi di Prepolimeri a Bassa Polidispersità come Componenti Macromolecolari Innovativi per Adesivi a Base Silanica*

Source: New Polyurethane Technologies s.r.l.



Dates: 4/2014-3/2015  
Amount: 29.000 Euro (Project Coordinator)

Title: *Chiroptical Sensing and Chiral Nanostructures with BINOL-based Molecular Modules*  
Source: PRIN (projects of Relevant National Interest) MIUR (Unit Coordinator)  
Dates: 10/2011-10/2013  
Amount: 22.000 Euro

Title: *Poli( $\gamma$ -glutammato): bioproduzione di un polimero ecocompatibile e sua derivatizzazione in materiali per il packaging attivo di alimenti (GAMMA-PGA)*  
Source: INSTM – Regione Lombardia  
Dates: 3/2010-2/2012  
Amount: 57.500 Euro (Project Coordinator)

Title: *Poli( $\gamma$ -glutammato) (gamma-PGA): un materiale biocompatibile e biodegradabile per l'immobilizzazione di molecole biologicamente attive*  
Source: Fondazione Alma Mater Ticinensis  
Dates: 5/2010-4/2012  
Amount: 13.750 Euro (Unit Coordinator)

Title: *Self-Assembled Nanostructured Materials: A Strategy for the Control of Electrooptic Properties*  
Source: Fondazione CARIPO (Unit Coordinator)  
Dates: 9/2007-8/2009  
Amount: 57.600 Euro

Title: *Supramolecular Assembly of Helical Structures from Optically-Active Macrocycles*  
Source: PRIN (projects of Relevant National Interest) MIUR (Unit Coordinator)  
Dates: 11/2004-10/2006  
Amount: 46.300 Euro

Title: *Organic Materials*  
Source: Fondo di Ateneo per la ricerca, University of Pavia  
Dates: annually renewed (2001-2009)  
Total Amount: ca. 10.000 Euro

**Total:454900 Euro**

**Externally funded fellowship:**

- a) Sovvenzione Globale Ingenio 7/07-12/07 (12.000 Euro, C. Coluccini)
- b) Stefano Colombo (6 months, 2007-2008, 7.000 Euro, Fondo Sociale Europeo);
- 6) Claudio Cornaggia (5 months, 2008, 6.000 Euro, Fondo Sociale Europeo).

**Total:25.000 Euro**

**Internally Funded Fellowships:**

- a) UNIPV funded postdoctoral fellowship (2016-2018: 50.000 Euro)

- b) 1 PhD fellowship (50.000 Euro, 2007-2010)  
c) UNIPV cofund 1 year postdoctoral fellowship (2006: ca. 10.000 Euro)

**Total:110.000 Euro**

## **List of Research Collaborators**

### **Visiting Professors**

Prof. Douglas Vander Griend (Calvin College, Grand Rapids, MI- USA): 9/2009-2/2010, self-supporting  
Dr. Mohamed Yahia (Helwan University, Cairo, Egypt): 2/2017-4/2017: CICOPS fellowship

### **Postdoctoral fellows**

- 1) Marina Ricci (technician part time research, 2003);
- 2) Carmine Coluccini (5/2006-8/2009: cofunding MIUR-Ateneo 5/06-6/07, Sovvenzione Globale Ingenio 7/07-12/07, CARIPO Funds, 1/2008-8/2009);
- 3) Arvind Sharma (2/2009-1/2010: INDIA-MIUR fellowship);
- 4) Marco Caricato (11/2010-12/2012: 11/10-10/11 UNIPV fellowship; 11/11-10/12: ALMAMATER 50%-INSTM 50%; 11/12-12/12: INSTM-Regione Lombardia).
- 5) Aurora Pacini (3/2016-7/2017: IVM contract)
- 6) Andrea Nitti (11/2016-: UNIPV postdoctoral fellowship type A)

### **PhD Students**

- 1) Marco Caricato (2007-2010, MIUR fellowship).
- 2) Andrea Nitti (2013-2016; ENI fellowship)

### **Postgraduate students with short-term fellowships**

- 1) Federica Spiaggia (3 months, 2003, FAR, with L. Garlaschelli);
- 2) Alberto Moletti (6 months, 2005, PRIN);
- 3) Antonio Castelluccio (8 months, 2006, PRIN);
- 4) Seda Edizer (3 months, visiting from Turkey, 2007, self-supporting);
- 5) Stefano Colombo (6 months, 2007-2008, Fondo Sociale Europeo);
- 6) Claudio Cornaggia (5 months, 2008, Fondo Sociale Europeo).
- 7) Giovanni Borghese (2 months, 2010, INSTM-Regione Lombardia)
- 8) Nerea Jordana Leza (12 months, 2014-2015, NPT contract,)
- 9) Ameneh Arabi (8 months, visiting from Iran, 11/2015-6/2016, self-supporting)

### **MSc (9 months research internship)**

- 1) Valerio Rossi (2001, with P. Righetti, Thesis title: *Primi Studi di Polimeri con Potenziali Proprietà Ottiche Non Lineari da Macro cicli a Carattere "Push-Pull"*)\*
- 2) Enrique Blazquez (2002, ERASMUS, with P. Mustarelli: *Sintesi di Nuovi Ciclopimeri come Materiali per Batterie al Litio*)\*
- 3) Emanuela Cagnoni (2002, with P. Righetti: *Ciclopimeri a Base di Malonati Corona Semplici e Funzionalizzati*)\*
- 4) Federica Spiaggia (2003, with L. Garlaschelli: *Nuovi Addotti Fullerenici Supramolecolari Dimerici e Polimerici*)\*
- 5) Barbara Veronesi (2004, did not graduate but completed her internship)\*
- 6) Ilaria Pianetti (Chemical and Pharmaceutical Technologies; 2003, with M. Pregnotato: *Idrolisi Enzimatica di Esteri Supportati su Polimeri Solubili a Base Stirenica*)\*
- 7) Marco Filippini (Chemical and Pharmaceutical Technologies; 2006, con M. Pregnotato: *Idrolisi mediante PGA Immobilizzata di Ligandi Esterei su Fase Solida Stirenica*)\*
- 8) Alberto Moletti (2005, with A. Taglietti: *Dispositivi Molecolari Basati sul BINOL*)\*

- 9) Ivet Kosta (2004, ERASMUS, with P. Mustarelli: *Nuovi Approcci a Polimeri Reticolati di Tipo Supramolecolare e a Polimeri per Celle a Combustibile*)
- 10) Marco Parachini (2004, with P. Righetti: *Ciclopolidimeri e Ciclocopolimeri come Leganti per la Complessazione di Metalli Lantanidici*)\*
- 11) Luca Genovesi (2008: *Sintesi ed Applicazioni di Polimeri Biodegradabili*)
- 12) Alessandro Olmo (2010: *Applicazioni della "Click Chemistry" nella Sintesi di Macro cicli Chirali*)\*
- 13) Alberto Bugana (2010: *Sintesi di PPV Modificati con Unità Aromatiche Elettron Ricche ed Elettron Povere Alternanti*)\*
- 14) Matteo Montanari (2010: *Approcci Sintetici Innovativi per la Preparazione di Paraciclofandieni*)\*
- 15) Nerea Jordana Leza (2011, ERASMUS, with Marco Caricato: *Macro cicli Chirali per il Sensing e l'Assemblaggio di Nanostrutture*)\*
- 16) Silvia Diez-Gonzales (2012, ERASMUS, with Marco Caricato: *Macro cicli Chirali per il Sensing e l'Assemblaggio di Nanostrutture*)\*
- 17) Aurora Pacini (2012, with Marco Caricato:  *$\gamma$ -PGA e Polilattico: Funzionalizzazione di Polimeri Naturali per Bioplastiche Ecosostenibili*)\*
- 18) Federico Debattista (2013, *Sintesi di Polimeri PPV con Unità Alternanti Donor-Acceptor*)\*
- 19) Idoia Arandia Ariño (2013, ERASMUS, 4 months, with Marco Caricato: *Macro cicli Chirali per il Sensing e l'Assemblaggio di Nanostrutture*)\*
- 20) Luca Beria (2013, with Amitav Sanyal, Bogazici University—Turkey: *Chemical Modification of Natural and Artificial Polymers for the Synthesis of Functional Biomaterials and Hydrogels*)\*
- 21) Marco Agnes (2014, with David Amabilino, ICMAB Barcelona—Spain: *Synthesis of BINOL-Based Building Blocks for Selective Complexation and Chiral Macrocyclic Formation*)\*
- 22) Sara Benedini (2014: *Sintesi di Cromofori "Push-Pull" come "Aggregation-Induced Emissive Materials" e per il Sensing di Lantanidi*)\*
- 23) Fabio Invernizzi (2014: *Sintesi di [2.2]paraciclofani e [2.2]paraciclofandieni via Pummerer rearrangement e sulfur extrusion*)
- 24) Nicolò Ferri (2014: *Sintesi e Ciclopolidimerizzazione di Monomeri Stirenici Difunzionali*)
- 25) Valeria Cedrati (2015: *Sintesi di Derivati e Copolimeri Graft dell'Acido Poli- $\gamma$ -Glutammico mediante Click Chemistry*)
- 26) Marco Signorile (2016: *Sintesi di Sistemi Molecolari  $\pi$ -Coniugati tramite Reazioni di Arilazione Diretta Intramolecolare*)\*
- 27) Erica Maggioni (Chemical and Pharmaceutical Technologies; 2016, with Ida Genta: *Studi Preformulativi Preliminari per la Realizzazione di un Idrogelo Termosensibile Destinato ad una Somministrazione Intra-articolare*)
- 28) Luis De Verastegui (2017, ERASMUS, 10 months, with Andrea Nitti, in progress)

**BSc students** (only written discussion of a research topic), ca. 20 students. The following students carried out a lab stage of 3-4 weeks:

- a) Annamaria Bertasa, 2003; b) Michele Petenzi, 2007;\* c) Alberto Bugana, 2007; d) Guido Barzanò, 2014; e) Valeria Cedrati, 2015.

*The asterisk denotes undergraduates whose work has been published.*