

MAURIZIO BENAGLIA e' nato a Bergamo il 29/06/66.

Laureato in Chimica presso l'Università degli Studi di Milano, in data 24/01/1991, con valutazione 110/110, ha conseguito il titolo di dottore in ricerca nel novembre 1994 con una tesi dal titolo: "Sintesi stereoselettiva di beta-lattami mediante condensazione con immine di enolati di titanio, stagno e boro" (relatore prof. Mauro Cinquini).

Vincitore di una borsa di studio CNR/N.A.T.O dal 1995 al 1997 ha lavorato presso il Chemistry and Biochemistry Department della University of California, San Diego nel gruppo del Prof. J. S.Siegel, occupandosi di chimica supramolecolare.

Tornato a Milano ha vinto da maggio 1997 ad agosto 1998 una borsa di post-dottorato del Ministero della Ricerca Scientifica e Tecnologica e da agosto 1998 a maggio 2000 una borsa di studio della Tecnofarmaci S.C.p.A.

Ha preso servizio come ricercatore da giugno 2000 presso il Dipartimento di Chimica Organica e Industriale della Università degli Studi di Milano e nel 2006 ha vinto il concorso a professore associato presso lo stesso Dipartimento.

Ha ottenuto l'abilitazione a professore di I fascia (bando 2012 - DD n. 222/2012), superando tre mediane su tre degli indicatori bibliometrici.

Dal 1 maggio 2015 ha preso servizio come professore ordinario presso il Dipartimento di Chimica dell'Università degli Studi di Milano.

## **PREMI E RICONOSCIMENTI**

Vincitore della MEDAGLIA "GIACOMO CIAMICIAN" per il 2001, assegnata dalla Divisione di Chimica Organica della Società Chimica Italiana.

E' stato premiato da Elsevier come autore di uno dei 50 articoli piu' citati nel triennio 2003-2006.

E' stato poi premiato da Elsevier come autore di uno dei 50 articoli piu' citati nel triennio 2006-2009.

Per il triennio 2006-2009 e' stato anche premiato da American Chemical Society come autore di uno dei 20 lavori piu' citati su Organic Letters (highlighted in Synfacts).

Autore di un Editor Choice article (*Org. Process Res. Dev.* **2016**, 20, 2-25).

Autore di un articolo highlighted in Synfacts 2018 (*Synthesis*. **2018**, DOI: 10.1055/s-0036-1591911).

Nel 2014 gli e' stato conferito il premio "Innovazione alla ricerca" (2014) dal Consorzio Interuniversitario Nazionale "Metodologie e processi innovativi di sintesi" -C.I.N.M.P.I.S.

Nel 2019 gli è stata conferita la MEDAGLIA PIERO PINO, assegnata dalla Divisione di Chimica Organica della Società Chimica Italiana.

- E' stato **Invited Plenary Speaker** a: 9<sup>th</sup> Meeting on Stereochemistry (Praga, giugno 2001), 5<sup>th</sup> Spanish Italian Symposium on Organic Chemistry (Santiago de Compostela, Spagna, 2004),

COFEM, Giornate di Chimica Organica Fisica e Meccanicistica, (Catania, settembre 2006), Symposium "Organocatalysis" organizzato dalla Ernst Schering Foundation a Berlino (aprile 2007), Austrian-German-French-Italian-Hungarian meeting (Goslar, Germany, 2011), Bilateral Symposium Italy-China, (Padova, Italy, 2014), International Translational Chemistry Conference (Caparica, Lisbon, Portugal, 2015), GIC (Gruppo Interdivisionale Catalisi) (Bressanone 2016), 20<sup>th</sup> ESOC (European Symposium on Organic Chemistry) (Cologne, Germany July 2017), The First International Conference on Symmetry (Barcellona, Spain, September 2017), FROST (Frontier Organic Synthesis and Technologies) (Budapest, Hungary, September 2017), PBS International Conference - (Barcellona, Spain, December 2018), Flow Chemistry Europe Conference - (Cambridge, UK, February 2019, WCCE Int. Conference — (Bruxelles, Belgium, June 2019).

E' stato invited speaker a diverse scuole nazionali e internazionali quali Summer School on Organic Synthesis "A. Corbella" e WISPOC (Winter School of Physical Organic Chemistry).

E' stato recentemente membro partecipante (su invito) della rete Europea COST :

ORCA-Organocatalysis CM0905 (2009-2014)

E' stato il **Direttore** della Scuola Internazionale (2014-2017):

ISOS – International Summer School on Organic Synthesis "A. Corbella"  
che si tiene ogni anno a giugno a Gargnano (BS), presso Palazzo Feltrinelli.

E' **co-fondatore e Direttore** della Scuola Internazionale (2017-...)

ISPROCHEM – International School of Process Chemistry

Prima edizione: Marzo 2017 a Gargnano (BS), Italy. Seconda edizione: Aprile 2018.

Membro dell' Editorial Board della rivista "Molecules" (open access journal, MDPI).

E' stato **Editore** del libro "Recoverable and recyclable catalysts" (Wiley, 2009).

Dal 2014 membro dell' Advisory Board della start up DexLeChem (Berlino, Germania).

Referee per: Angewandte Chemie International Edition, Organic letters, Advanced Synthesis and Catalysis, Journal of American Chemical Society, Chemistry A European Journal, Chemical Communication, Journal of Organic Chemistry, Journal of Molecular Catalysis, Tetrahedron Letters, Journal of Catalysis, Organic and Biomolecular Chemistry, European Journal of Organic Chemistry, Tetrahedron, Tetrahedron Asymmetry, New Journal of Chemistry, Journal of Catalysis Communication, Advanced Functional Materials, Synlett, Synthesis, ChemSusChem, ChemCatChem, ACS Catalysis, J. Flow Chem.

## **METRICS**

Ha presentato diversi posters, oral communications, key note and invited lectures a congressi

nazionali e internazionali

Autore di più' **200 pubblicazioni** (54 articoli negli ultimi 5 anni, 2013-2017) su riviste scientifiche internazionali, inclusi quattro brevetti, dieci reviews e nove capitoli di libri.

**H Index : 43 (citations: 6226 font: Scopus); H Index : 42 (Average cit. per item 31,65; citations: 5730, font: Web of Science).**

### **ATTIVITÀ DIDATTICA**

Attualmente titolare dell'insegnamento di Laboratorio di Chimica Organica per il corso di Chimica Industriale (II anno, laurea triennale); titolare dell'insegnamento di Catalytic Methodologies in Organic Chemistry (laurea magistrale in Scienze Chimiche and laurea in Industrial Chemistry); già' titolare dell'insegnamento di Complementi di Chimica Organica con Laboratorio (per il corso di Chimica Applicata e Ambientale (II anno, laurea triennale).

Svolge un'ampia attività tutoria nei confronti di laureandi dei corsi di laurea triennali di Chimica e Chimica Industriale, e di laureandi dei corsi di laurea magistrali in Scienze Chimiche e Industrial Chemistry.

E' stato relatore o correlatore di più di 80 tesi di Laurea triennale di chimica e chimica industriale e di Laurea Magistrale in Scienze Chimiche e Chimica Industriale.

E' stato tutor supervisore di 8 tesi di dottorato (incluso un dottorato europeo, come cotutor presso l'Università di Evora, Portogallo). E' attualmente tutor supervisore di altre 3 tesi di dottorato in corso.

Tiene anche lezioni per la Scuola di Dottorato in Scienze Chimiche dell'Università di Milano; è membro del Collegio dei Docenti della Scuola di Dottorato in Scienze e Tecnologie Chimiche dell'Università di Milano (Dottorato di Ricerca in Chimica Industriale).

Ha tenuto lezioni anche per la Scuola di Specializzazione per l'Insegnamento nelle Scuole Superiori (classe di concorso A013 e A060).

### **PARTECIPAZIONE AD ORGANI COLLEGIALI E DI RAPPRESENTANZA**

E' attualmente membro di:

- Presidente della Commissione Paritetica
- Commissione Dipartimentale Programmazione
- Commissione Dipartimentale nuovo Campus area MIND
- Commissione interdipartimentale (ex Facoltà) per i corsi di formazione degli insegnanti delle scuole superiori.

### **ATTIVITÀ DI RICERCA**

L'attività di ricerca si incentra attualmente su: sintesi di catalizzatori supportati, sviluppo di reattori catalitici per reazioni stereoselettive in flusso continuo, progettazione e sintesi di

nuove specie catalitiche organiche e organometalliche chirali, studio di reazioni enantioselettive in micro e mesoreattori in condizioni di flow chemistry, sintesi di composti di interesse farmaceutico, catalisi stereoselettiva in soluzioni acquose e in ambienti di reazione non convenzionali, progettazione di micro(meso) reattori con tecnologie 3D-printing, sviluppo di materiali fluorurati come nuovi agenti per imaging, sintesi di sistemi supramolecolari a chiralità definita.

## **FINANZIAMENTI**

- **Coordinatore del progetto europeo MSCA 2018** (Marie Skłodowska Curie Actions) ITN-EID (European Industrial Doctorate) TECHNOTRAIN (784.5000 euro budget) (2018-2022)
- **Coordinatore nazionale** del progetto PRIN-2017 “Unlocking Sustainable Technologies Through Nature-Inspired Solvents” - (NATUREChem) (457.700 euro budget, 2019-2021)
- Vincitore e **responsabile scientifico** del progetto finanziato da Fondazione Cariplo “Biodegradable polymers with controlled macromolecular architecture as new polyfunctional agents for 19F MR imaging (budget: 410.000 euro- 2010)
- Progetto finanziato da Regione Lombardia - Bando PON\_FESR 2014-2020 – Linea R&S Aggregazioni “Semilavorati nutraceutici e tecnologici fermentati per il miglioramento nutrizionale e sensoriale di prodotti da forno tradizionali e gluten-free” (budget 1.750.00 euro- UNIMI budget: 410.000 – 2017-2019), Coordinatore di unità
- Responsabile scientifico** del progetto finanziato da Fondazione Cariplo “Multifunctional hybrid materials as novel chiral recyclable catalysts for one-pot, multi-step synthesis of structurally complex molecules” (budget 350.000 - 2011),
- Membro del team del progetto FIRB Giovani - Futuro in Ricerca 2010 (codice RBFR10BF5V) “Multifunctional hybrid materials for the development of sustainable catalytic processes” (budget Unimi 326.500 euro).
- Coordinatore di una proposta di rete ITN per un MSC-EID (European Industrial Doctorate), : (H2020-MSCA-ITN-2015), *THE QUEST*, valutata sopra la soglia (valutazione 87/100 , soglia 70/100) ma non finanziata e di una proposta di ITN network per un MSC-EID (European Industrial Doctorate, H2020-MSCA-ITN-2016), *STEREOTECH* valutata sopra la soglia (valutazione 85/100 , soglia 70/100) ma non finanziata.

Titolare di contratti con diverse aziende (per un totale di 330.000 euro di finanziamenti nel decennio 2003-2013).

Titolare di contratti con quattro aziende nel periodo 2014-2018 per un totale di 210.000 euro.

Titolare di un brevetto venduto ad una ditta tedesca DeLexChem (2015).

## PUBBLICAZIONI

### Prof. MAURIZIO BENAGLIA

- 1) R. Annunziata, M. Cinquini, F. Cozzi, P. Giaroni, M. Benaglia.  
Diastereo- and Enantioselective Synthesis of 1,2-Diols by Vanadium (II) Promoted Pinacol  
Cross Coupling  
*Tetrahedron*, **1991**, 47, 5737.
- 2) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, P. Giaroni.  
Synthesis of Optically Active 3-(1-Hydroxyalkyl)phthalides by Stereoselective Pinacol Cross  
Coupling.  
*J. Org. Chem.*, **1992**, 57, 782.
- 3) M. Benaglia, M. Cinquini, L. Raimondi.  
Catalytic Enantioselective Homogeneous Reactions Mediated by Transition Metal Lewis  
Acids.  
*Seminars in Organic Synthesis - XVIII Summer School "A. Corbella"*, **1993**, 155.
- 4) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, F. Ponzini.  
Synthesis of  $\beta$ -Lactams of High Enantiomeric Purity by Chiral Ligand Accelerated Osmylation  
of Racemic 4-(2-Styryl)-azetidino-2-ones.  
*Bioorg. Med. Chem. Lett.*, **1993**, 3, 2397.
- 5) R. Annunziata, M. Benaglia, M. Cinquini, L. Raimondi.  
Electrostatic Effects in 1,3-Dipolar Cycloaddition Reactions to Chiral Allyl Ethers: a Rationale  
for the Experimentally Observed Diastereoselectivities.  
*Tetrahedron*, **1993**, 49, 8629.
- 6) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, F. Ponzini.  
Stereoselective Synthesis of Azetidino-2-ones Precursors of Biologically Active *syn*-3- Amino-2-  
hydroxybutanoic Acids.  
*J. Org. Chem.*, **1993**, 58, 4746.
- 7) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, L. Raimondi.  
Stereoselective Synthesis of  $\beta$ -Lactams by Condensation of Titanium Enolates of 2-  
Pyridylthioesters with Imines Bearing a Chiral Auxiliary.  
*Tetrahedron Lett.*, **1993**, 34, 6921.
- 8) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, F. Ponzini, L. Raimondi.  
Synthesis of  $\beta$ -Lactams by Condensation of Titanium of 2-Pyridylthioesters with Imines.  
Influence of the Imine Structure on the *trans/cis* Stereoselectivity.  
*Tetrahedron*, **1994**, 50, 2939.
- 9) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, L. Raimondi.  
Synthesis of  $\beta$ -Lactams by Condensation of the Tin Enolates of 2-Pyridylthioesters with Imines. A  
Comparison between Titanium and Tin Enolates.  
*Tetrahedron*, **1994**, 50, 5821.
- 10) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, L. Raimondi.  
Stereoselective Synthesis of  $\beta$ -Lactams by Condensation of Titanium Enolates of 2-  
Pyridylthioesters with Imines Bearing a Chiral Auxiliary.  
*Tetrahedron*, **1994**, 50, 9471.
- 11) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi.  
Enantioselective One-pot Synthesis of  $\beta$ -Lactams from Achiral 2-Pyridylthioesters and Aromatic  
Imines.

- Tetrahedron Lett.*, **1995**, 36, 613.
- 12) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, A. Scolaro.  
Stereoselective electrophilic hydroxylation at C-3 of 2-azetidinones.  
*Gazz. Chim. Ital.*, **1995**, 125, 65.
  - 13) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, L. Raimondi.  
1,3-Dipolar Cycloaddition of Diazomethane to Chiral Baylis-Hillman Adducts: a Rationale for the Observed Diastereoselectivity.  
*J. Org. Chem.*, **1995**, 60, 4697.
  - 14) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, V. Molteni, L. Raimondi.  
Optically Active Aminoalcohol Promoted Addition of 2-Pyridylthioester Boron Enolates to Imines: Enantioselective One-pot Synthesis of  $\beta$ -Lactams.  
*Tetrahedron*, **1995**, 51, 8941.
  - 15) R. Annunziata, M. Benaglia, A. Chiovato, M. Cinquini, F. Cozzi.  
Highly Stereoselective Synthesis of  $\beta$ -Lactams by Condensation of the Titanium Enolate of a Chiral 2-Pyridylthioester with Chiral Imines.  
*Tetrahedron*, **1995**, 51, 10025.
  - 16) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, O. Martini, V. Molteni.  
Stereoselective One-pot Synthesis of  $\beta$ -Lactams by Reaction of 2-Pyridylthioester with Imines in the Presence of AlBr<sub>3</sub> or EtAlCl<sub>2</sub>.  
*Tetrahedron*, **1996**, 52, 2583.
  - 17) C.R. Woods, M. Benaglia, J.S. Siegel, F. Cozzi.  
Enantioselective Synthesis of Copper(I) Bipyridine Based Helicates by Chiral Templating of Secondary Structure: Transmission of Stereochemistry on the Nanometer Scale .  
*Angew. Chem. Int. Ed. Engl.*, **1996**, 35, 1830.
  - 18) R. Annunziata, M. Benaglia, M. Cinquini and L. Raimondi  
Diazomethane Cycloadditions to  $\gamma$ -Alkoxy- $\alpha,\beta$ -unsaturated Esters: a Violation of the Inside Alkoxy Theory?  
[http:// www.ch.ic.ac.uk/ectoc/echet 96/papers/026/index/.htm](http://www.ch.ic.ac.uk/ectoc/echet96/papers/026/index/.htm)  
*Rzepa, M.S.; Synder, J.; Eds. (CD-ROM) - Royal Society of Chemistry Publications*, **1996**. CD-ROM included in *J. Chem.Soc., Chem. Commun.* **1997**, n° 6.
  - 19) M. Benaglia, S. Toyota, C.R. Woods and J.S. Siegel.  
Palladium Catalyzed Stannylation of Halopyridines with Hexamethyldistannane.  
*Tetrahedron Lett.*, **1997**, 38, 4737.
  - 20) V. Molteni, R. Annunziata, M. Benaglia, F. Cozzi and M. Cinquini  
Soluble Polymer-Supported Synthesis of Imines and  $\beta$ -Lactams.  
*Tetrahedron Lett.*, **1998**, 39, 1257.
  - 21) S. Toyota, C.R. Woods, M. Benaglia and J.S. Siegel.  
Synthesis of Unsymmetrical 2,8- and 2,9- Dihalophenanthrolines and Derivatives.  
*Tetrahedron Lett.*, **1998**, 39, 2697.
  - 22) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi and L. Raimondi  
Diastereoselective Synthesis of 1,2-Diphenyl-1,2-Diaminoethanes by Yb(OTf)<sub>3</sub> Accelerated Reductive Coupling of Imines.  
*Tetrahedron Lett.*, **1998**, 39, 3333.
  - 23) M. Benaglia and L. Raimondi.  
Stereoselection in Pinacol Coupling Reactions of C=O and C=N Bonds .  
*Seminars in Organic Synthesis - XXIII Summer School "A. Corbella"*, **1998**, 155.
  - 24) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi and L. Raimondi  
The Importance of Electrostatic Interactions in the Stereoselective 1,3-Dipolar Cycloadditions of Nitrones to Chiral Allyl Ethers: an Experimental and Force Field Approach.  
*Eur. J. Org. Chem.*, **1998**, 1823-1832.
  - 25) M. Benaglia, R. Annunziata, M. Cinquini, F. Cozzi, and S. Ressel

- Synthesis of New Poly(ethyleneglycol)s with a High Loading Capacity.  
*J. Org. Chem.*, **1998**, 63, 8628.
- 26) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, F. Montanari, L. Raimondi  
 Stereoselective Synthesis of New  $\beta$ -Lactams by Cyclocondensation of 1-Methoxy-3-(trimethylsilyloxy)-1,3-Butadiene with 4-Formyl Substituted Azetidinones.  
*Il Farmaco*, **1998**, 53, 629.
  - 27) M. Benaglia, M. Cinquini, F. Cozzi  
 Improved Procedure for the Purification of PEG Bound Molecules by the Use of Trioctylamine.  
*Tetrahedron Lett.*, **1999**, 40, 2019.
  - 28) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, L. Poletti, L. Raimondi and A. Perboni  
 A Novel Approach to the Synthesis of Precursors of Tricyclic  $\beta$ -Lactams Antibiotics.  
*Eur. J. Org. Chem.*, **1999**, 3067.
  - 29) R. Annunziata, M. Benaglia, M. Cinquini, L. Raimondi  
 The Effect of Lewis Acids on the Pinacol Homocoupling Reaction of Aldehydes Promoted by Samarium Diiodide.  
*Eur. J. Org. Chem.*, **1999**, 3369.
  - 30) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi  
 Stereoselective Synthesis of 2-Azetidinones as Cholesterol Adsorption Inhibitors.  
*Tetrahedron: Asymmetry* **1999**, 10, 4841.
  - 31) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi  
 Soluble Polymer Supported Synthesis of  $\beta$ -Lactams on a Modified Poly(ethylene glycol).  
*Chem.Eur. J.*, **2000**, 6, 133.
  - 32) M. Benaglia, M. Cinquini, F. Cozzi  
 The S-Thiolester Enolate/Imine Condensation: a Short-cut to  $\beta$ -Lactams.  
*Eur. J. Org. Chem.*, **2000**, 563.
  - 33) M. Benaglia, M. Cinquini, F. Cozzi  
 Stereoselective Synthesis of Enantiomerically Pure Drugs.  
 In: *New Trends in Medicinal Chemistry* - Ed. F. Gualtieri, Wiley, Weinheim, pp. 97- 133, Chapter 5, **2000**.
  - 34) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, G. Tocco  
 A Poly(ethylene glycol)-Supported Quaternary Ammonium Salt: an Efficient, Recoverable, and Recyclable Phase-Transfer Catalyst.  
*Org. Lett.*, **2000**, 2, 1737.
  - 35) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, C.R. Woods, J.S. Siegel  
 Long-Distance Propagation of Stereochemical Information by Stereoselective Synthesis of Copper(I) Bipyridine Helicates.  
*Eur. J. Org. Chem.*, **2001**, 173.
  - 36) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi  
 Synthesis of a Bifunctional Ligand for the Sequential Enantioselective Catalysis of Various Reactions.  
*Eur. J. Org. Chem.*, **2001**, 1045-1048.
  - 37) M. Benaglia, G. Celentano, F. Cozzi  
 Enantioselective Aldol Condensation Catalyzed by Poly(ethylene glycol)-Supported Proline.  
*Adv. Synth. Catal.*, **2001**, 343, 2, 171-173.
  - 38) M. Benaglia, L. Raimondi  
 Stereoselection in Reactions of Chiral Allyl Ethers: The Case of 1,3-Dipolar Cycloaddition  
*Eur. J. Org. Chem.*, **2001**, 1033-1043.
  - 39) C.R. Woods, M. Benaglia, S. Toyota, K. Hardcastle, J.S. Siegel  
 Trinuclear Copper(I)-Bipyridine Triskelion: Template/Bascule Control of Coordination Complex Stereochemistry in a Trefoil Knot Precursor.  
*Angew. Chem. Int. Ed.*, **2001**, 40, 4, 749-751.
  - 40) S. Toyota, C.R. Woods, M. Benaglia, R. Haldimann, K. Warnmark, K. Hardcastle, J.S. Siegel

- Tetranuclear Copper(I)-Biphenanthroline Gridwork: Violation of the Principle of Maximal Donor Coordination Caused by Intercalation and CH-to-N Forces.  
*Angew. Chem. Int. Ed.* **2001**, 40, 4, 751-753.
- 41) M. Benaglia, F. Ponzini, C. R. Woods, and J. S. Siegel  
Synthesis of Oligopyridines and Their Metal Complexes as Precursors to Topological Stereoisomers.  
*Org. Lett.*, **2001**, 3, 967-969.
- 42) R. Annunziata, M. Benaglia, A. Famulari, L. Raimondi  
Structural Elucidation of Bipyridine Helicates Complexes and Their Precursors by NMR Spectroscopy.  
*Magn. Res. Chem.*, **2001**, 39, 341-354.
- 43) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, M. Pitillo  
Poly(ethylene glycol)-Supported Bisoxazolines as Ligands for Catalytic Enantioselective Synthesis.  
*J. Org. Chem.*, **2001**, 66, 3160-3166.
- 44) R. Annunziata, M. Benaglia, L. Raimondi  
Mild Synthesis of Enantiomerically Pure Imidazo-[1,2-*a*]azepines Mediated by Yb(Tf)<sub>3</sub>.  
*Tetrahedron*, **2001**, 57, 10357-10363.
- 45) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi  
Poly(ethylene glycol)-Supported 4-Alkylthio-Substituted Aniline – A Useful Starting Material for the Soluble Polymer-Supported Synthesis of Imines and 1,2,3,4-Tetrahydroquinolines.  
*Eur. J. Org. Chem.*, **2002**, 1184-1190.
- 46) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, A. Puglisi  
Efficient and Highly Stereoselective Synthesis of a  $\beta$ -Lactam Inhibitor of the Serine Protease Prostate-Specific Antigen.  
*Bioorg. Med. Chem.*, **2002**, 10, 1813-1818.
- 47) M. Benaglia, G. Celentano, M. Cinquini, F. Cozzi, A. Puglisi  
Poly(ethylene glycol)-Supported Chiral Imidazolidin-4-one: an Efficient Organic Catalyst for the Enantioselective Diels-Alder Cycloaddition.  
*Adv. Synth. Catal.*, **2002**, 344, 149-152.
- 48) M. Benaglia, M. Cinquini, F. Cozzi, G. Tocco  
Synthesis of a Poly(ethylene glycol)-tetrakis Ammonium Salt: a Recyclable Phase-transfer Catalyst of Improved Catalytic Efficiency.  
*Tetrahedron Lett.*, **2002**, 43, 3391-3393.
- 49) R. Annunziata, M. Benaglia, A. Bologna  
<sup>1</sup>H and <sup>13</sup>C NMR Assignments of New Oligo-bipyridine-phenanthroline Hybrids as Potential Precursors of Helicate Complexes.  
*Magn. Reson. Chem.*, **2002**, 40, 461-466.
- 50) M. Benaglia, T. Danelli, F. Fabris, D. Sperandio and G. Pozzi  
Poly(ethylene glycol)-Supported Tetrahydroxyphenyl Porphyrin: a Convenient, Recyclable Catalyst for Photooxidation Reactions  
*Org. Lett.*, **2002**, 4, 4229-4232.
- 51) M. Benaglia  
Critical Survey Covering the Year 2001: Solid Supported Synthesis  
*Seminars in Organic Synthesis - XXVII Summer School "A. Corbella"*, **2002**, 281-304.
- 52) D. Albanese, M. Benaglia, D. Landini, A. Maia, V. Lupi, M. Penso  
Use of a Quaternary Ammonium Salt on a Liposoluble Poly(ethylene glycol) Matrix for Laboratory and Industrial Synthetic Applications of Phase-Transfer Catalysis.  
*Ind. Eng. Chem. Res.*, **2002**, 41, 4928-2935.
- 53) R. Annunziata, M. Benaglia, M. Caporale, L. Raimondi  
Synthesis of Enantiomerically Pure C<sub>2</sub> Symmetric Acyclic and Cyclic 1,2-Diamines via Pinacol Coupling of Imines.



- Tetrahedron: Asymmetry* **2002**, 13, 2727-2734.
- 54) M. Benaglia, M. Cinquini, F. Cozzi, A. Puglisi, G. Celentano  
Poly(ethylene glycol)-Supported Proline: a Versatile Catalyst for the Enantioselective Aldol and Iminoaldol Reactions.  
*Adv. Synth. Catal.*, **2002**, 344, 533-542.
- 55) M. Benaglia, M. Caporale, A. Puglisi  
An Improved Methodology for the Synthesis of Enantiomerically Pure(*S*)-2,3-*O*-Cyclohexylidene-glyceraldehyde.  
*Enantiomer* **2002**, 7, 383-388.
- 56) F. Cozzi, R. Annunziata, M. Benaglia, M. Cinquini, L. Raimondi, K.K. Baldrige, J.S. Siegel  
Through-space Interactions between Face-to-face, Center-to-edge Oriented Arenes: Importance of Polar- $\pi$  Effects.  
*Org. Biomol. Chem.*, **2003**, 1, 157-162.
- 57) T. Danelli, R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, G. Tocco  
Immobilization of Catalysts Derived from *Cinchona* Alkaloids on Modified Poly(ethylene glycol).  
*Tetrahedron: Asymmetry* **2003**, 14, 461-467.
- 58) M. Benaglia, M. Cinquini, F. Cozzi, A. Puglisi, G. Celentano  
Poly(ethylene-glycol)-Supported Proline: a Recyclable Aminocatalyst for the Enantioselective Synthesis of  $\gamma$ -Nitroketones by Conjugate Addition  
*J. Mol. Catal., A Chemicals* **2003**, 204-205, 157-163.
- 59) M. Benaglia, T. Danelli, G. Pozzi  
Synthesis of a Poly(ethylene glycol)-supported Manganese Porphyrins: Efficient, Recoverable and Recyclable Catalyst for Epoxidation of Alkenes.  
*Org. Biomol. Chem.*, **2003**, 1, 454-456.
- 60) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, F. Maggioni, A. Puglisi  
Efficient Synthesis of an Enantiopure  $\beta$ -Lactam as an Advanced Precursor of Thrombin and Trypsin Inhibitors.  
*J. Org. Chem.*, **2003**, 68, 2952-2955.
- 61) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, G. Pozzi  
Synthesis of Perfluoroalkyl-Substituted Bis(oxazolines) as Ligands for Catalytic Enantioselective Reactions  
*Eur. J. Org. Chem.*, **2003**, 1191-1197.
- 62) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, A. Puglisi  
Sequential Stereoselective Catalysis: Two Single-Flask Reactions of a Substrate in the Presence of a Bifunctional Chiral Ligand and Different Transition Metals.  
*Eur. J. Org. Chem.*, **2003**, 1428-1432.
- 63) A. Puglisi, M. Benaglia, R. Annunziata, A. Bologna  
Enantiomerically Pure Phenanthroline or Bipyridine containing macrocycles: a New Class of Ligands for Asymmetric Catalysis.  
*Tetrahedron Lett.*, **2003**, 44, 2947-2951.
- 64) A. Puglisi, M. Benaglia, G. Roncan  
Palladium Catalyzed Synthesis of Nonsymmetrically Functionalized Bipyridines, Poly(bipyridines) and Terpyridines.  
*Eur. J. Org. Chem.*, **2003**, 1552-1558.
- 65) M. Benaglia, F. Cozzi, A. Puglisi,  
Polymer Supported Organic Catalysts.  
*Chem.Rev.*, **2003**, 103, 9, 3401-3429.
- 66) S. Orlandi, M. Benaglia, M. Caporale, R. Annunziata  
Synthesis of New Enantiomerically pure  $C_1$  and  $C_2$ -symmetric *N*-Alkyl-Benzimidazolium and Thiazolium Salts.  
*Tetrahedron: Asymmetry* **2003**, 14, 3827-3830.
- 67) A. Puglisi, M. Benaglia, M. Cinquini, F. Cozzi, G. Celentano

- Enantioselective 1,3-Dipolar Cycloadditions of Unsaturated Aldehydes Promoted by a Poly(ethylene glycol)-Supported Organic Catalyst.  
*Eur. J. Org. Chem.*, **2004**, 567-573.
- 68) S. Orlandi, M. Benaglia, F. Cozzi  
Cu(II)-Catalyzed enantioselective aldol condensation between malonic acid hemithioesters and aldehydes.  
*Tetrahedron Lett.*, **2004**, 45, 1747-1749.
- 69) R. Annunziata, M. Benaglia, M. Cinquini, F. Cozzi, L. Raimondi  
A molecular gate: control of the free intramolecular rotation by application of an external signal.  
*J. Phys. Org. Chem.*, **2004**, 17, 749-751.
- 70) G. Pozzi, M. Cavazzini, S. Quici, M. Benaglia, G. Dell'Anna  
Poly(ethylene glycol)-Supported TEMPO: an Efficient, Recoverable, Metal-free Catalyst for the Selective Oxidation of Alcohols.  
*Org. Lett.*, **2004**, 6, 441-443.
- 71) B. Simonelli, S. Orlandi, M. Benaglia, G. Pozzi  
New Perfluoroalkyl Substituted Bisoxazolines as Chiral Ligands in Asymmetric Cu(II)-Catalyzed Reactions.  
*Eur. J. Org. Chem.*, **2004**, 2669-2673.
- 72) M. Benaglia, D. Negri, G. Dell'Anna  
Enantioselective addition of phenyl and alkyl acetylenes to imines catalyzed by chiral Cu(I) complexes  
*Tetrahedron Lett.*, **2004**, 45, 8705-8708.
- 73) M. Benaglia, M. Cinquini, F. Cozzi, G. Celentano  
Enantioselective catalysis in water: Mukaiyama-aldol condensation promoted by copper complexes of bisoxazolines supported on poly(ethylene glycol)  
*Org. Biomol. Chem.*, **2004**, 2, 3401-3407.
- 74) Luca Pignataro, Maurizio Benaglia, Mauro Cinquini, Franco Cozzi and Giuseppe Celentano.  
Readily Available Pyridine- and Quinoline-*N*-Oxides as New Organocatalysts for the Enantioselective Allylation of Aromatic Aldehydes with Allyl(trichloro)silane  
*Chirality*, **2005**, 17, 396-403.
- 75) S. Orlandi, F. Colombo, M. Benaglia.  
Chiral Diamine-Copper(I) Complexes as Asymmetric Catalysts in the Enantioselective Addition of Phenylacetylene to Imines.  
*Synthesis*, **2005**, 1689-1692.
- 76) S. Orlandi, R. Annunziata, M. Benaglia, F. Cozzi, L. Manzoni  
Synthesis of Some Oligopyridine-galactose Conjugates and their Metal Complexes: a Simple Entry to Multivalent Sugar Ligands.  
*Tetrahedron*, **2005**, 61, 10048-10060.
- 77) M. Benaglia, T. Benincori, P. Mussini, T. Pilati, S. Rizzo, F. Sannicolo'  
Steric and Electronic Tuning of Chiral Bis(oxazoline) Ligands with 3,3'-Bithiophene Backbone.  
*J. Org. Chem.*, **2005**, 70, 7488-7495.
- 78) M. Benaglia, S. Guizzetti, C. Rigamonti, A. Puglisi  
PEG-supported Pyridylthioesters for Racemization-free Amide Synthesis: a Reagent That Allows Simultaneous Product Formation and Removal from the Polymer.  
*Tetrahedron*, **2005**, 61, 12100-12106.
- 79) M. Benaglia, A. Puglisi, O. Holczknecht, S. Quici, G. Pozzi  
Aerobic oxidation of alcohols to carbonyl compounds mediated by poly(ethylene glycol)-supported TEMPO radicals.  
*Tetrahedron*, **2005**, 61, 12058-12064.
- 80) L. Pignataro, M. Benaglia, R. Annunziata, F. Cozzi, M. Cinquini

- Structurally simple pyridine *N*-oxides as efficient organocatalysts for the enantioselective allylation of aromatic aldehydes.  
*J. Org. Chem.*, **2006**, *71*, 1458-1463.
- 81) F. Colombo, M. Benaglia, S. Orlandi, F. Uselli, G. Celentano  
A Very Mild, Enantioselective Synthesis of Propargyl-amines Catalyzed by Copper (I)-Bisimines Complexes.  
*J. Org. Chem.*, **2006**, *71*, 2064-2070.
- 82) F. Colombo, R. Annunziata, L. Raimondi, M. Benaglia,  
Synthesis of new enantiomerically pure macrocycles containing phenanthroline subunits  
*Chirality*, **2006**, *18*, 446-456.
- 83) S. Bacchi, M. Benaglia, F. Cozzi, F. Demartin, G. Filippini, A. Gavezzotti  
X-ray diffraction and theoretical studies for the quantitative assessment of intermolecular arene-perfluoroarene stacking interactions  
*Chem., Eur. J.*, **2006**, *12*, 3538-3546.
- 84) M. Bandini, M. Benaglia, T. Quinto, S. Tommasi, A. Umani-Ronchi  
New Recoverable Poly(ethylen glycol)-supported C<sub>1</sub>-Diamino-oligothiophene Ligands for Pd-Promoted AAA Reactions.  
*Adv. Synth. Catal.*, **2006**, *348*, 1521-1527.
- 85) F. Colombo, M. Benaglia, S. Orlandi, F. Uselli  
Asymmetric Multicomponent Copper Catalyzed Synthesis of Chiral Propargylamines.  
*J. Mol. Catal., A: Chemicals.*, **2006**, *260*, 128-134.
- 86) M. Benaglia,  
Recoverable and Recyclable Chiral Organic Catalysts  
*New J. Chem.* **2006**, *30*, 1525-1533.
- 87) C. Biaggi, M. Benaglia, F. Cozzi, L. Raimondi  
The Organocatalytic Synthesis of Dipyrromethanes by the Addition of *N*-Methylpyrrole to Aldehydes  
*Tetrahedron*, **2006**, *62*, 12375-12379.
- 88) S. Guizzetti, M. Benaglia, L. Pignataro, A. Puglisi  
A multifunctional proline-based organic catalyst for the enantioselective aldol reactions  
*Tetrahedron, Asymm.*, **2006**, *17*, 2754-2760.
- 89) M. Benaglia, F. Cozzi, A. Puglisi  
Solvent-free, one pot synthesis of  $\beta$ -lactams by the Sc(OTf)<sub>3</sub>-catalyzed reaction of silyl ketene thioacetals with imines  
*Eur. J. Org. Chem.*, **2007**, 2865-2869.
- 90) S. Orlandi, M. Benaglia, G. Dell'Anna, G. Celentano  
Synthesis of new C<sub>1</sub>-symmetric bis(oxazoline) ligands with a chelating sidearm for stereoselective Mukaiyama aldol condensations.  
*J. Organomet. Chem.* **2007**, *692*, 2120-2124.
- 91) S. Guizzetti, M. Benaglia, L. Raimondi, G. Celentano  
Enantioselective direct aldol reaction "on water" promoted by chiral organic catalyst.  
*Org. Lett.*, **2007**, *9*, 1247-1250.
- 92) F. Colombo, R. Annunziata, M. Benaglia  
Catalytic, Enantioselective allylation of  $\alpha$ -iminoesters promoted by Silver (I) Complexes of Chiral Imines.  
*Tetrahedron Lett.*, **2007**, *48*, 2687-2690.
- 93) G. Chelucci, N. Belmonte, M. Benaglia, L. Pignataro  
Enantioselective allylation of aldehydes with allyltrichlorosilane promoted by new chiral dipyridylmethane *N*-oxides..  
*Tetrahedron Lett.*, **2007**, *48*, 4037-4041.
- 94) M. Bandini, M. Benaglia, R. Sinfisi, S. Tommasi, A. Umani-Ronchi  
Recoverable PEG-supported copper catalyst for highly stereocontrolled nitroaldol condensation.  
*Org. Lett.*, **2007**, *9*, 2151-2153.

- 95) G. Dell'Anna, M. Benaglia, L. Raimondi, F. Cozzi  
An experimental reinvestigation of the role of aromatic-aromatic interactions in a templated synthesis of a macrocyclic pseudopeptide.  
*Org. Biomol. Chem*, **2007**, *5*, 2205-2206.
- 96) C. Biaggi, M. Benaglia, S. Rossi, S. Proto, R. Annunziata  
Synthesis of new chiral cyclic 1,2-diamines and their evaluation as catalysts for enantioselective Diels-Alder reactions  
*Tetrahedron Lett.*, **2007**, *48*, 8521-8524.
- 97) C. Biaggi, M. Benaglia, A. Puglisi  
Catalysis in water: synthesis of  $\beta$ -amino amides by Sc (III) promoted condensation of silylketene pyridylthioacetal and imines  
*J. Organomet. Chem*, **2007**, *692*, 5795
- 98) M. Benaglia  
Recoverable, soluble polymer-supported organic catalysts.  
*Ernest Schering Foundation Symposium Proceedings* – Springer Verlag Berlin Heidelberg **2008**.
- 99) M. Benaglia, S. Guizzetti, L. Pignataro,  
Steroselective reactions involving hypervalent silicate complexes  
*Coord. Chem. Rev.*, **2008**, *252*, 492-512.
- 100) F. Cozzi, R. Annunziata, M. Benaglia, K. Baldrige, G. Aguirre, J. Estrada, Y. Sritana-Anant. J.S. Siegel  
Through-space interactions between parallel-offset arenes at the van der Waals distance: 1,8-diarylbiphenylene syntheses, structure and QM computations  
*Phys. Chem. Chem Phys.*, **2008**, *10*, 2686-2694.
- 101) V. Simonini, M. Benaglia, T. Benincori  
Novel chiral biheteroaromatic diphosphine oxides for Lewis base activation of Lewis acids in enantioselective allylation and epoxide opening  
*Adv. Synth. Catal.*, **2008**, *350*, 561-564.
- 102) V. Simonini, M. Benaglia, S. Guizzetti, L. Pignataro, G. Celentano  
A new class of chiral Lewis basic metal-free catalysts for stereoselective allylations of aldehydes  
*Synlett*, **2008**, 1061-1065.
- 103) G. Chelucci, S. Baldino, G.A. Pinna, M. Benaglia, S. Guizzetti, L. Buffa  
Chiral pyridine N-Oxides derived from monoterpenes as organocatalysts for stereoselective reactions with allyltrichlorosilane and tetrachlorosilane  
*Tetrahedron*, **2008**, *64*, 7574-7582.
- 104) R. Annunziata, M. Benaglia, A. Puglisi, F. Cozzi, L. Raimondi  
Synthesis of some terpyridines disubstituted in positions 6 and 6'' with head to tail oriented amino  
*Eur. J. Org. Chem*, **2008**, 3976-3983.
- 105) M. Benaglia  
Heterogenized organocatalysts for asymmetric transformations.  
*Handbook of Asymmetric Heterogeneous Catalysis* **2008**, eds. K. Ding, Y. Uozomi, Wiley-VCH Verlag, Weinheim.
- 106) A. Puglisi, M. Benaglia, R. Annunziata, D. Rossi  
Stereoselective nucleophilic addition to imines catalyzed by chiral bifunctional thiourea organocatalysts  
*Tetrahedron Asymm.*, **2008**, *19*, 2258-2264.
- 107) S. Guizzetti, M. Benaglia, F. Cozzi, S. Rossi, G. Celentano  
Enantioselective catalytic reduction of ketoimines with trichlorosilane promoted by readily available chiral Lewis bases.  
*Chirality*, **2009**, *21*, 233-238.
- 108) A. Puglisi, R. Annunziata, M. Benaglia, F. Cozzi, A. Gervasini, V. Bertacche, M. C. Sala  
Hybrid inorganic-organic materials carrying tertiary amine and thiourea residues tethered on mesoporous silica nanoparticles: synthesis, characterization and cooperative catalysis.  
*Adv. Synth. Catal.*, **2009**, *351*, 219-229.

- 109) R. Annunziata, M. Benaglia, F. Cozzi, A. Mazzanti, L. Lunazzi  
The Intramolecular Edge-to-Face Interactions of an Aryl C-H Bond and of a Pyridine Nitrogen Lone Pair with Aromatic and Fluoroaromatic Systems in Some [3,3]Metaparacyclophanes: A Combined Computational and NMR Study.  
*Chem. Eur. J.*, **2009**, *15*, 4373-4381.
- 110) G. Dell'Anna, M. Benaglia, R. Annunziata, F. Cozzi, O. Francesconi, S. Roelens  
Aromatic tripodal receptors for (C-60-I-h)[5,6]fullerene  
*Org. Biomol. Chem.*, **2009**, *7*, 3871-3877.
- 111) C. Biaggi, M. Benaglia, R. Annunziata, S. Rossi,  
Stereoselective synthesis and characterization of new enantiomerically pure phosphoric acids  
*Chirality*, **2010**, *22*, 369-378.
- 112) S. Guizzetti, M. Benaglia, G. Celentano  
1,1'-binaphthyldiamine-based Lewis bases as readily available and efficient organocatalysts for the reduction of *N*-aryl and *N*-alkyl ketimines  
*Eur. J. Org. Chem.*, **2009**, 3683-3687.
- 113) S. Guizzetti, M. Benaglia, S. Rossi  
Highly stereoselective metal-free catalytic reduction of imines: an easy entry to enantiomerically pure amines and natural and unnatural  $\alpha$ -amino esters.  
*Org. Lett.*, **2009**, *11*, 2928-2931.
- 114) A. Puglisi, L. Raimondi, M. Benaglia, M. Bonsignore, S. Rossi  
Enantioselective catalytic addition of nitroesters to *N*-carboalkoxy imines: a route to quaternary stereocenters.  
*Tetrahedron Lett.*, **2009**, *50*, 4340-4342.
- 115) S. Guizzetti, M. Benaglia, R. Annunziata, F. Cozzi  
Chiral Lewis base promoted trichlorosilane reduction of ketimines. An enantioselective organocatalytic synthesis of chiral amines.  
*Tetrahedron*, **2009**, *65*, 6354-6363.
- 116) S. Guizzetti, A. Puglisi, L. Raimondi, M. Benaglia  
Isophthalic acid-derived dicarbothioamides as novel metal-free catalysts in hydrogen bond-promoted reactions  
*Synthetic Comm.*, **2009**, *39*, 3731-3742.
- 117) M. Benaglia  
Recoverable organic catalysts.  
*Recoverable and Recyclable Catalysts 2009*, ed. M. Benaglia, John Wiley and Sons.
- 118) S. Guizzetti, M. Benaglia  
Process for the stereoselective reduction of ketoimines catalysed by trichlorosilane  
PCT/EP/2008/010079, Nov. 27, 2008. WO2009068284 (A2) — 2009-06-04
- 119) S. Guizzetti, M. Benaglia  
Chiral organic catalysts for the enantioselective reduction of *N*-alkyl and *N*-benzyl- substituted alicyclic and cyclic imines  
European Patent Appl. n.EP07023240.0, September 22, 2008.
- 120) R. Annunziata, M. Benaglia, F. Cozzi, A. Mazzanti, L. Lunazzi  
The Intramolecular Edge-to-Face Interactions of an Aryl C-H Bond and of a Pyridine Nitrogen Lone Pair with Aromatic and Fluoroaromatic Systems in Some [3,3]Metaparacyclophanes: A Combined Computational and NMR Study.  
*Chem. Eur. J.*, **2009**, *15*, 4373-4381.
- 121) S. Guizzetti, C. Biaggi, M. Benaglia, G. Celentano  
A convenient, highly stereoselective, metal-free synthesis of chiral amines  
*Synlett*, **2010**, 134-136.
- 122) S. Rossi, M. Benaglia,  
Chiral Phosphine Oxides in Present-Day Organocatalysis  
*Org. Biomol. Chem.*, **2010**, *8*, 3824-3830.

- 123) S. Guizzetti, M. Benaglia,  
Trichlorosilane-mediated stereoselective reduction of carbon-nitrogen double bonds.  
*Eur. J. Org. Chem.*, **2010**, 5529-5541.
- 124) M. Benaglia, F. Cozzi, A. Mazzanti, M. Mancinelli  
The Intramolecular Interaction of Thiophene and Furan with Aromatic and Fluoroaromatic Systems in some[3,3]meta(heterocyclo)paracyclophanes: a Combined Computational and NMR study.  
*Chem. Eur. J.*, **2010**, *16*, 7456-7468.
- 125) S. Guizzetti, M. Benaglia, M. Bonsignore, L. Raimondi  
Trichlorosilane-mediated stereoselective synthesis of  $\beta$ -amino esters and their conversion to highly enantiomerically enriched  $\beta$ -lactams.  
*Org. Biomol. Chem.*, **2011**, *9*, 739-743.
- 126) S. Rossi, M. Benaglia, A. Genoni, T. Benincori, G. Celentano  
Biheteroaromatic diphosphine oxides-catalyzed stereoselective direct aldol reactions  
*Tetrahedron*, **2011**, *67*, 158-166.
- 127) A. Puglisi, L. Raimondi, M. Benaglia, L. Lay, L. Poletti  
Novel carbohydrate-based bifunctional organocatalysts for nucleophilic addition to nitroolefins and imines  
*Org. Biomol. Chem.*, **2011**, *9*, 3295-3302.
- 128) S. Rossi, M. Benaglia, A. Genoni, F. Cozzi, T. Benincori  
Organocatalytic stereoselective direct aldol reaction of trifluoroethyl thioesters  
*Adv. Synth. Catal.*, **2011**, *353*, 848-854.
- 129) M. Benaglia, S. Guizzetti, S. Rossi  
Silicate-mediated stereoselective reactions catalyzed by chiral Lewis bases  
*Catalytic Methods in Asymmetric Synthesis: Advanced Materials, Techniques and Applications 2011*, ed. M. Gruttaduria, F. Giacalone, John Wiley and Sons.
- 130) M. Bonsignore, M. Benaglia, R. Annunziata, G. Celentano  
New, readily available organocatalysts for the enantioselective reduction of  $\alpha$ -imino- and  $\beta$ -imino esters  
*Synlett*, **2011**, 1085-1088.
- 131) A. Genoni, M. Benaglia, A. Puglisi, S. Rossi  
Chiral Bis-pyridinium Salts as Novel Stereoselective Catalysts for the Metal-free Diels-Alder Cycloaddition of  $\alpha,\beta$ -Unsaturated Aldehydes.  
*Synthesis*, **2011**, 1926-1929.
- 132) S. Rossi, M. Benaglia, M. Ortenzi, E. Micotti, C. Perego, M.G. De Simoni  
Poly(ethylene-glycol)-based Fluorinated Esters: a Readily Available Entry for Novel  $^{19}\text{F}$ -MRI agents  
*Tetrahedron Lett.*, **2011**, *52*, 6581-6583.
- 133) D. Meroni, S. Ardizzone, G. Cappelletti, M. Ceotto, M. Ratti, R. Annunziata, M. Benaglia, L. Raimondi  
Interplay between Chemistry and Texture in Hydrophobic  $\text{TiO}_2$  Hybrids  
*J. Phys. Chem. C*, **2011**, *115*, 18649.
- 134) S. Guizzetti, M. Benaglia, J. S. Siegel  
Poly(methylhydrosiloxane)-supported chiral imidazolinones: new versatile, highly efficient and recyclable organocatalysts for stereoselective Diels-Alder cycloaddition reactions.  
*Chem. Commun.*, **2012**, *48*, 3188-3190.
- 135) A. Puglisi, M. Benaglia, R. Annunziata, J. S. Siegel  
Immobilization of Chiral Bifunctional Organocatalysts on Poly(methylhydrosiloxane)  
*ChemCatChem.*, **2012**, *7*, 972-974.
- 136) M. Bonsignore, M. Benaglia, F. Cozzi, A. Genoni, S. Rossi, L. Raimondi  
Readily available (S)-proline-derived organocatalysts for the Lewis acid-mediated Lewis base-catalyzed stereoselective aldol reactions of activated thioesters  
*Tetrahedron*, **2012**, *68*, 8251-8255.
- 137) A. Puglisi, M. Benaglia, E. Massolo, G. Celentano

- Poly(methylhydrosiloxane)-supported chiral thiourea-based bifunctional catalysts.  
*Recyclable Catalysis*, **2012**, *1*, 1-5.
- 138) M. Benaglia, A. Genoni, M. Bonsignore  
Enantioselective organocatalytic reductions  
*Stereoselective Organocatalysis : From C-C to C-heteroatom bond formation*, **2012**  
ed. Ramon Rios Torres, Wiley.
- 139) M. Benaglia, M. Bonsignore  
METODO PER LA RIDUZIONE DI NITRO DERIVATI AD AMMINE  
Deposito domanda di brevetto n: MI2012A001489, **Data di deposito: 06/09/2012**
- 140) G. Cappelletti, S. Ardizzone, D. Meroni, G. Soliveri, M. Ceotto, C. Biaggi, M. Benaglia, L. Raimondi.  
Wettability of bare and fluorinated silanes: A combined approach based on surface free energy evaluations and dipole moment calculations  
*Journal of colloid and interface science*, **2013**, *389*, 284-291.
- 141) M. Bonsignore, M. Benaglia, L. Raimondi, M. Orlandi, G. Celentano  
Enantioselective reduction of ketoimines promoted by easily available (*S*)-proline derivatives  
*Beilstein J. Org. Chem.* **2013**, *9*, 633–640.
- 142) M. Orlandi, M. Benaglia, L. Raimondi, G. Celentano  
2-Aminoimidazolyl and 2-Aminopyridyl (*S*)-Prolinamides as Versatile Multifunctional Organic Catalysts for Aldol, Michael, and Diels–Alder Reactions.  
*Eur. J. Org. Chem.*, **2013**, 2346–2354.
- 143) A. Puglisi, M. Benaglia, V. Chirolì  
Stereoselective organic reactions promoted by immobilized chiral catalysts in continuous flow systems  
*Green Chem.*, **2013**, *15*, 1790-1813
- 144) A. Genoni, M. Benaglia, S. Rossi, G. Celentano  
Enantiomerically Pure Bithiophene Diphosphine Oxides as Catalysts for Direct Double Aldol Reactions  
*Chirality*, **2013**, *25*, 643-647.
- 145) C. Biaggi, M. Benaglia, M. Ortenzi, E. Micotti, C. Perego, M.-G. De Simoni  
Easily Available, Low Cost <sup>19</sup>F-MRI Agents: Poly(ethylene-glycol)-functionalized Fluorinated Ethers.  
*J. Fluorine Chem.*, **2013**, *153*, 172-177.
- 146) V. Chirolì, M. Benaglia, F. Cozzi, A. Puglisi, R. Annunziata, G. Celentano  
Continuous-flow stereoselective organocatalyzed Diels Alder reactions in a chiral catalytic “homemade” HPLC column  
*Org. Lett.*, **2013**, *15*, 3590-3593.
- 147) A. Genoni, M. Benaglia, E. Massolo, S. Rossi  
Stereoselective metal-free catalytic synthesis of chiral trifluoromethyl aryl and alkyl amines *Chem. Commun.*, **2013**, *49*, 8365-8367.
- 148) S. Mondini, A. Puglisi, M. Benaglia, D. Ramella, C. Drago, A. M. Ferretti, A. Ponti  
Magnetic Nanoparticles Conjugated To Chiral Imidazolidinone As Recoverable Catalyst  
*Journal of Nanoparticles Research*, **2013**, *15*, 2025-2036.
- 149) S. Orlandi, M. Benaglia, M. Ghisetti, G. Pozzi  
Synthesis and catalytic activity of fluorous chiral primary amine-thioureas  
*New Journal of Chemistry*, **2013**, *37*, 4140-4147.
- 150) A. Puglisi, M. Benaglia, R. Annunziata, V. Chirolì, R. Porta, A. Gervasini  
Chiral hybrid inorganic-organic materials: synthesis, characterization and application in stereoselective organocatalytic cycloadditions  
*J. Org. Chem.*, **2013**, *78*, 11326-11334.
- 151) T. Benincori, M. Benaglia, A. Pozzi; S. Gabrieli, S. Rossi  
DIOLI BIETEROAROMATICI E LORO DERIVATI  
Deposito domanda di brevetto n: MI2013A001612, **Data di deposito: 30/09/2013**

- 152) E. Massolo, M. Benaglia, R. Annunziata, A. Palmieri, G. Celentano, A. Forni  
Stereoselective synthesis of highly functionalized chiral 2-nitro-cyclohexane carboxylic esters via catalytic dienamine addition to  $\beta$ -substituted- $\beta$ -nitroacrylates.  
*Adv. Synth. Catal.*, **2014**, 356, 493-500.
- 153) E. Massolo, M. Benaglia, A. Palmieri, G. Celentano  
Stereoselective addition of 1,3-diketones to  $\beta$ -nitroacrylates catalyzed by chiral metal-free bifunctional catalysts  
*Asian J. Org. Chem.*, **2014**, 3, 416-420.
- 154) S. Rossi, M. Benaglia, A. Genoni  
Organic reactions mediated by tetrachlorosilane  
*Tetrahedron*, **2014**, 70, 2065-2080.
- 155) V. Chirolì, M. Benaglia, A. Puglisi, R. Porta, R. P. Jumde, A. Mandoli  
A chiral organocatalytic polymer-based monolithic reactor  
*Green Chem.*, **2014**, 16, 2798-2806.
- 156) S. Cauteruccio, D. Dova, M. Benaglia, A. Genoni, M. Orlandi, E. Licandro  
Synthesis, Characterization and Organocatalytic Activity of Chiral Tetrathiahelicene Diphosphine Oxides  
*Eur. J. Org. Chem.*, **2014**, 2694-2702.
- 157) R. Porta, M. Benaglia, V. Chirolì, F. Coccia, A. Puglisi,  
Stereoselective Diels-Alder reactions promoted under continuous-flow conditions by silica supported chiral organocatalysts  
*Isr. J. Chem.*, **2014**, 54, 381-394.
- 158) S. Rossi, M. Benaglia, E. Massolo, L. Raimondi  
Organocatalytic strategies for enantioselective metal-free reduction  
*Catal. Science Technol.*, **2014**, 9, 2708-2723.
- 159) P. Barrulas, M. Benaglia, A. Burke  
Synthesis of novel organocatalysts derived from *Cinchona* Alkaloids for asymmetric aldol reactions  
*Tetrahedron, Asymmetry*, **2014**, 25, 923-935.
- 160) L. Raimondi, M. Benaglia, F. Cozzi  
Aliphatic C-H/ $\pi$  and Heteroatom/ $\pi$  Interactions in some *N*-Aryl-3,4-(9',10'-Dihydroanthracene- 9',10'-diyl)-Succinimides.  
*Eur. J. Org. Chem.*, **2014**, 4993-4998.
- 161) R. Porta, M. Benaglia, A. Puglisi, A. Mandoli, A. Gualandi, P.G. Cozzi  
A catalytic reactor for organocatalyzed enantioselective continuous flow alkylation of aldehydes  
*ChemSusChem*, **2014**, 7, 3534-3540.
- 162) S. Rossi, M. Benaglia, A. Puglisi, C.C. De Filippo, M. Maggini  
Continuous-flow stereoselective synthesis in microreactors: nucleophilic additions to nitrostyrenes organocatalyzed by a chiral bifunctional catalyst  
*J. Flow Chem.*, **2014**, *accepted*.
- 163) P. Barrulas, A. Genoni, M. Benaglia, A. Burke  
Cinchona-Derived Picolinamides: Effective Organocatalysts for Stereoselective Imine Hydrosilylation  
*Eur. J. Org. Chem.*, **2014**, 7339-7442.
- 164) E. Massolo, M. Benaglia, D. Parravicini, D. Brenna, R. Annunziata  
Synthesis of highly decorated chiral 2-nitro-cyclohexane carboxylic esters through microwave-assisted organocatalyzed cascade reactions.  
*Tetrahedron Lett.*, **2014**, *accepted*
- 165) R. Porta, M. Benaglia, F. Coccia, F. Cozzi, A. Puglisi,  
Solid supported 9-amino-9-deoxy-*epi*-quinine as efficient organocatalysts for stereoselective reactions in batch and under continuous flow conditions.  
*Adv. Synth. Catal.*, **2015**, 357, 377-383.
- 166) E. Massolo, M. Benaglia, M. Orlandi, S. Rossi, G. Celentano  
Enantioselective organocatalytic reduction of  $\beta$ -trifluoromethyl nitroalkenes: an efficient strategy for



- the synthesis of chiral  $\beta$ -trifluoromethyl amines.  
*Chemistry, Eur. J.*, **2015**, *21*, 3589-3595.
- 167) S. Rossi, M. Benaglia, R. Porta, L. Cotarca, P. Maragni, M. Verzini  
A stereoselective catalytic nitroaldol reaction as key step in a novel strategy for the synthesis of the renin inhibitor Aliskiren.  
*Eur. J. Org. Chem.* **2015**, 2531-2537.
- 168) S. Rossi, M. Benaglia, R. Cirilli, T. Benincori  
Synthesis of novel chiral bithiophene-based phosphine oxides as Lewis bases in organocatalytic stereoselective reactions  
*Asymm. Catalysis*, **2015**, *accepted*,
- 169) E. Massolo, M. Benaglia, A. Genoni, R. Annunziata, G. Celentano, N. Gaggero  
Stereoselective reaction of 2-carboxythioesters-1,3-dithiane with nitroalkenes: an organocatalytic strategy for the asymmetric addition of a glyoxylate anion equivalent.  
*Org. Biomol. Chem.*, **2015**, *13*, 5591-5596.
- 170) A. Puglisi, M. Benaglia, R. Porta, F. Coccia  
Organocatalysis in flow (review).  
*Current Organocatalysis*, **2015**, *2*, 79-101.
- 171) S. Rossi, M. Benaglia, D. Brenna, R. Porta, M. Orlandi  
Three Dimensional (3D) Printing: A Straightforward, User-Friendly Protocol To Convert Virtual Chemical Models to Real-Life Objects  
*J. Chem. Educ.*, **2015**, *13*, 5591-5596.
- 172) R. Porta, M. Benaglia, F. Coccia, S. Rossi, A. Puglisi  
Enantioselective Organocatalysis in Microreactors: Continuous flow Synthesis of a (*S*)-Pregabalin Precursor and (*S*)-Warfarin  
*Symmetry* **2015**, *7*, 1395-1409.
- 173) M. Orlandi, F. Tosi, M. Bonsignore, M. Benaglia  
Metal-Free Reduction of Aromatic and Aliphatic Nitro-compounds to Amines: a  $\text{HSiCl}_3$ -mediated Reaction of Wide General Applicability  
*Org. Lett.*, **2015**, *17*, 3941-3943.
- 174) A. Genoni, M. Benaglia, E. Mattiolo, S. Rossi, L. Raimondi, P. C. Barrulas, A. J. Burke  
Synthesis of an Advanced Precursor of Rivastigmine: *Cinchona*-derived Quaternary Ammonium Salts as Organocatalysts for Stereoselective Imine Reductions  
*Tetrahedron. Lett.*, **2015**, *56*, 5752-5756
- 175) E. Massolo, M. Benaglia, S. Palmieri, V. Capriati, F. M. Perna  
Stereoselective organocatalysed reactions in deep eutectic solvents: highly tunable and biorenewable reaction media for sustainable organic synthesis  
*Green Chem.*, **2016**, *18*, 792-797.
- 176) R. Porta, M. Benaglia, A. Puglisi  
Flow chemistry: recent developments in the synthesis of pharmaceutical products  
*Org. Process Res. Dev.* **2016**, *20*, 2-25.
- 177) M. Orlandi, M. Benaglia, F. Tosi, R. Annunziata, F. Cozzi  
 $\text{HSiCl}_3$ -mediated Reduction of Nitro-derivatives to Amines: Is Tertiary amine-stabilized  $\text{SiCl}_2$  the Actual Reducing Species?  
*J. Org. Chem.*, **2016**, *81*, 3037-3041.
- 178) S. Rossi, A. Puglisi, M. Benaglia, D. M. Carminati, D. Intriери, E. Gallo  
Synthesis in mesoreactors: Ru(porphyrin)CO-catalyzed aziridination of olefins under continuous flow conditions  
*Catal. Sci. Technol.*, **2016**, *6*, 4700-4704.
- 179) M. Orlandi, M. Benaglia, M. Ceotto  
Kinetics *versus* thermodynamics in the proline catalyzed aldol reaction  
*Chem. Sci.* **2016**, *7*, 5421-5427.
- 180) M. Orlandi, D. Brenna, R. Harms, S. Jost, M. Benaglia

- Recent developments in the reduction of aromatic and aliphatic nitro compounds to amines.  
*Org. Process Res. Dev.* **2016**, *20*, DOI: 10.1021/acs.oprd.6b00205
- 181) E. Massolo, D. Brenna, N. Gaggero, F. Cozzi, L. Raimondi, M. Benaglia  
2-Carboxythioester-1,3-dithiane: a Functionalized Masked Carbonyl Nucleophile for the Organocatalytic Enantioselective Michael Addition to Enones  
*Synlett*, **2016**, *27*, 2716-2720.
- 182) S. D. Fernandes, R. Porta, P. C. Barrulas, A. Puglisi, A. J. Burke, M. Benaglia  
Stereoselective Reduction of Imines with Trichlorosilane using Solid-Supported Chiral Picolinamides  
*Molecules* **2016**, *21*, 1182-1190.
- 183) D. Brenna, E. Massolo, A. Puglisi, S. Rossi, G. Celentano, M. Benaglia, V. Capriati  
Towards the development of continuous, organocatalytic, and stereoselective reactions in deep eutectic solvents  
*Beilstein J. Org. Chem.* **2016**, *12*, 2620–2626.
- 184) R. Porta, A. Puglisi, G. Colombo, S. Rossi, M. Benaglia  
Continuous-flow synthesis of primary amines: Metal-free reduction of aliphatic and aromatic nitro derivatives with trichlorosilane  
*Beilstein J. Org. Chem.* **2016**, *12*, 2614–2619.
- 185) D. Brenna, M. Benaglia, R. Porta, S. D. Fernandes, A. J. Burke  
Stereoselective metal-free reduction of chiral imines in batch and in flow mode. A convenient strategy for the synthesis of chiral Active Pharmaceutical Ingredients.  
*Eur. J. Org. Chem.*, **2017**, 39-40.
- 186) D. Brenna, R. Porta, E. Massolo, L. Raimondi, M. Benaglia  
A new class of low-loading catalysts for a highly enantioselective, metal-free imine reduction of wide general applicability.  
*ChemCatChem* **2017**, *9*, 941-945.
- 187) D. Brenna, M. Pirola, L. Raimondi, A. J. Burke, M. Benaglia  
A stereoselective, catalytic strategy for the in-flow synthesis of advanced precursors of Rasagiline and Tamsulosin.  
*Bioorg. Med. Chem.* **2017**, *23*, 6242-6247.
- 188) S. Rossi, D. Brenna, R. Porta, A. Puglisi, M. Benaglia  
Stereoselective catalytic APIs synthesis in home-made 3D-printed mesoreactors  
*Angew. Chem. Int. Ed.* **2017**, *56*, 4290-4294.
- 189) R. Porta, M. Benaglia, R. Annunziata, A. Puglisi, G. Celentano  
Solid supported chiral *N*-picolylimidazolidinones: recyclable catalysts for the enantioselective, metal- and H<sub>2</sub>-free reduction of imines in batch and in flow mode  
*Adv. Synth. Catal.*, **2017**, *359*, 2375-2382.
- 190) D. Brenna, S. Rossi, F. Cozzi, M. Benaglia  
Iron catalyzed diastereoselective hydrogenation of chiral imines  
*Org. Biomol. Chem.*, **2017**, *15*, 5685-5688.
- 191) E. Massolo, L. Raimondi, M. Benaglia  
Metal-free, Stereoselective in batch and in flow synthesis of pharmaceutically relevant chiral amines  
*Chem Today – Chimica Oggi*, **2017**, *35*, 28-30.
- 192) S. Rossi, M. Ziliani, R. Annunziata, M. Benaglia  
Novel chiral bis-phosphoramides as organocatalysts for tetrachlorosilane-mediated reactions  
*Molecules*, **2017**, *22*, 2181-2192.
- 193) S. S. Abubakar, M. Benaglia, S. Rossi, R. Annunziata  
Organocatalytic □□trifluoromethylthiolation of silylenol ethers: batch vs continuous flow reactions  
*Catal. Today* **2018**, *308*, 94-101.
- 194) S. Rossi, A. Puglisi, M. Benaglia  
Additive Manufacturing Technologies: 3D printing in Organic Synthesis  
*ChemCatChem* **2018**, *10*, [1512-1525](#)
- 195) M. Pirola, M. Benaglia, M. E. Compostella, L. Raimondi, A. Puglisi

- A continuous flow, two-steps, metal-free process for the synthesis of differently substituted chiral 1,2-diamino derivatives  
*Synthesis*, **2018**, *50*, 1430-1438.
- 196) S. Rossi, A. Puglisi, L. Raimondi, M. Benaglia  
Synthesis of alpha-trifluoromethylthio carbonyl compounds: a survey of the methods for the direct introduction of the SCF<sub>3</sub> group on to organic molecules  
*ChemCatChem* **2018**, *10*, 2717-2733.
- 197) V. M. Abbinante, M. Benaglia, S. Rossi; T. Benincori, R. Cirili, M. Pierini  
TetraPh-Tol-BITIOPO: a new atropisomeric 3,3'-bithiophene based phosphine oxide as an organocatalyst in Lewis base-catalyzed Lewis acid mediated reactions  
*Org Biomol Chem* **2019**, *17*, 7474-7481.
- 198) I. Vigentini, V. Fabrizio, F. Dellaca, S. Rossi, I. Azario, C. Mondin, M. Benaglia, R. Foschino.  
Set-Up of Bacterial Cellulose Production From the Genus Komagataeibacter and Its Use in a Gluten-Free Bakery Product as a Case Study  
*Frontiers In Microbiology*, **2019**, *10*, 1953-1963
- 199) M. Pirola, A. Puglisi, L. Raimondi, A. Forni, M. Benaglia  
Evaluation of in-batch and in-flow synthetic strategies towards the stereoselective synthesis of a fluorinated analogue of retro-thiorphan  
*Molecules*, **2019**, *24*, 2260-2269.
- 200) L. Caruso, A. Puglisi, E. Gillon, M. Benaglia  
Organocatalytic Michael addition to (D)-mannitol-derived enantiopure nitroalkenes: a valuable strategy for the synthesis of densely functionalized chiral molecules.  
*Molecules*, **2019**, *24*, 4588-4597.
- 201) S. Rossi, T. Benincori, L. Raimondi, M. Benaglia  
3,3'-Bithiophene-based Chiral Bisphosphine Oxides as organocatalysts in silicon-derived Lewis acids mediated reactions  
*Synlett*, **2020**, *31*, 535-546.
- 202) S. Rossi, A. Puglisi, L. Raimondi, M. Benaglia  
Stereolithography 3D-printed catalytically active devices in organic synthesis  
*Catalysts*, **2020**, *10*, 109-117.
- 203) E. Massolo, M. Pirola, A. Puglisi, L. S. Rossi, M. Benaglia  
A one pot protocol to convert nitro-arenes into *N*-aryl amides  
*RSC Advances* **2020**, *10*, 4040-4044.
- 204) F. Franco, S. Mennino, A. Lattanzi, M. Benaglia  
Formal  $\alpha$ -trifluoromethylthiolation of carboxylic acid derivatives via *N*-acyl pyrazoles  
*Chem Comm* **2020**, *56*, 3073-3076.
- 205) E. Massolo, M. Pirola, M. Benaglia  
Amide bond formation strategies: latest advances on a dateless transformation  
*Eur. J. Org. Chem.* **2020**, <https://doi.org/10.1002/ejoc.202000080>

## Lectures and Oral communications

- 3° Congresso Nazionale di Chimica Supramolecolare (Rimini, settembre 1997).  
“Enantioselective Synthesis of Double Helicates “.  
(poster)
- 12<sup>th</sup> International Conference on Organic Synthesis ( ICOS-12 ) (Venezia, luglio 1998).  
“New Polyethylene Glycol Derivatives and their Use in Soluble Supported Synthesis  
( oral communication)
- 1<sup>th</sup> International Conference on Chemistry of Antibiotics and Related Microbial Products  
( ICCA-1, formerly ICSA-6 ) (Bologna, settembre 1998)  
“Soluble Polymer Supported Synthesis of  $\beta$ -Lactams ” ( oral communication)
- 11<sup>th</sup> European Symposium on Organic Chemistry ( ESOC-11 ) (Goteborg, luglio 1999).  
“Use of Trichlorotitanium Enolates of  $\beta$ -Hydroxy-Pyridylthioester in a Highly Stereoselective  
Synthesis of  $\beta$ -Lactams “ ( oral communication)
- COST Meeting (Vienna, maggio 2000)  
“Soluble Polymer Supported Synthesis of Small Organic Molecules”  
( oral communication)
- 36<sup>th</sup> ESF/EUCHEM Conference on Stereochemistry – Burgenstock (Burgenstock, maggio 2001)  
“Stereoselective Reactions Promoted by PEG-Supported Catalysts” ( poster)
- 9<sup>th</sup> Meeting on Stereochemistry (Praga, giugno 2001)  
“Stereoselective Reactions Promoted by Poly(ethylene glicol)-Supported Chiral Ligands and  
Catalysts”. (**invited lecture**)
- XXVII Convegno Nazionale della Divisione di Chimica Organica (Trieste, settembre 2001)  
“Sintesi di Piccole Molecole Organiche, Leganti e Catalizzatori Immobilizzati su Polimero  
Solubile”( **Invited plenary lecture for Ciamician medal** from Italian Chemical Society)
- COST Meeting (Vienna, aprile 2002)  
“Poly(ethylene glycol)-Supported Catalysts: New Efficient Tools for Organic Synthesis”  
( oral communication)
- XXVII Corso Estivo “A. Corbella” – Seminari di Chimica Organica (Gargnano, giugno 2002)
- The Merck lectureship reunion (Cambridge, settembre 2002)
  - Synthesis in organic chemistry (Cambridge, luglio 2003)
- “New enantiomerically pure phenanthroline and bipyridine macrocycles” (poster)
- 5<sup>th</sup> Spanish Italian Symposium on Organic Chemistry (Santiago de Compostela, Spagna,  
settembre 2004).  
“New chiral heterocycles as ligands and organic catalysts for enantioselective reactions”.  
( **invited lecture**)
- 40<sup>th</sup> ESF/EUCHEM Conference on Stereochemistry – Burgenstock (Burgenstock, aprile 2005)  
“**Enantioselective Synthesis of Propargyl Amines Promoted by Chiral Bis-Imines Copper  
(I) Complexes**”( **flash presentation**)
- Conference on Catalysis and Biocatalysis in Green Chemistry (Cambridge, dicembre 2005)  
“**Enantioselective Allylation of Aldehydes with Allyltrichlorosilane Promoted by New Chiral  
Organocatalysts.**” (oral communication)
- Ciclo di lezioni presso GSK (GlaxoSmithKline) (Verona, febbraio 2006)  
“**Catalisi Supportata**”
- Conferenza COFEM (Giornate di Chimica Fisica Organica e Meccanicistica (Catania, 2006)  
“**Bipyridine and terpyridines-based systems for the synthesis of supramolecular devices**”

**(Plenary lecture)**

- “Organocatalysis Symposium” held by Ernst Schering Foundation (Berlin, Germany, 2007).

**(Plenary lecture)**

- Conferences in NicheM (2008), Bayer (Frankfurt, 2008), Zambon (2007 e 2008), Roche (Basel, 2009), “Reazioni stereoselettive promosse da catalizzatori organici e organometallici”

**(invited lectures)**

- Conference at CNR Bologna (2009) Recyclable catalysts **(invited lecture)**
- Conference at IUPAC congress (Torino, 2007) Stereoselective reactions in water
- ICSSE International symposium on Environmental Chemistry (Stockholm, 2009) “Lewis bases promoted stereoselective reduction of ketoimines” (Short presentation)

- 45<sup>th</sup> ESF/EUCHEM Conference on Stereochemistry – Burgenstock (Burgenstock, may 2010)

**“Stereoselective direct aldol-type reaction catalyzed by chiral biheteroaromatic diphosphine oxides” (flash presentation)**

- EuChems 2010 – (Nurberg, Germany, 2010)

**“Organocatalytic direct aldol-type reaction catalyzed by chiral diphosphine oxides”**

**(oral presentation)**

- **COST meeting (Action ORCA, Organocatalysis) (Berlin, Germany, 2011) (oral presentation)**

• **WISPOC (European Winter School in Physical Organic Chemistry) (Bressanone, 2011): “Recoverable and recyclable catalysts” (Plenary lecture)**

- Austrian-German-French-Italian-Hungarian meeting (Goslar, Germany, 2011)

“Novel chiral Lewis bases in organocatalytic reactions” **(Plenary lecture)**

- Conference at Congresso Nazionale della Società Chimica Italiana (Lecce, 2011)

“Water Soluble Functionalized Polymers as New <sup>19</sup>F MRI agents “ (oral presentation)

- **COST meeting (Action ORCA, Organocatalysis) (Marseille, France, 2012) (oral presentation)**

- 47<sup>th</sup> ESF/EUCHEM Conference on Stereochemistry – Burgenstock (Burgenstock, may 2012)

**“Stereoselective reactions promoted by supported chiral organic catalysts” (poster)**

- ICCOS (International Congress of Catalysis in Organic Synthesis), Moscow, Russia, 2012 “Polymethylhydrosiloxane-supported chiral organic catalysts”

- **COST meeting (Action ORCA, Organocatalysis) (Rome, Italy, 2012) (invited lecture)**

- Conference at University of Bologna (2013) New chiral catalysts and novel synthetic methodologies **(invited lecture for PhD school)**

- **COST meeting (Action ORCA, Organocatalysis) (Amsterdam, Holland, 2013) (invited lecture)**

- Conference at University of Piemonte Orientale (Novara, 2013) New chiral catalysts and novel synthetic methodologies **(invited lecture for PhD school)**

- International Conference on Flow Chemistry (Munich 2013)

“Supported Chiral imidazolidinones for Diels Alder reactions in flow”

- Conference at Congresso Nazionale della Società Chimica Italiana (Sassari, 2013)

“Supported chiral catalysts in flow chemistry “ (oral presentation)

- University of Evora, Portugal “Stereoselective organocatalytic reactions in batch and under continuous-flow conditions” (2014) **(Invited lecture)**

• **COST meeting (Action ORCA, Organocatalysis) (Palermo, Italy, 2014) (invited lecture)**  
**“Stereoselective catalytic synthesis of chiral trifluoromethyl aryl and alkyl amines”**

- XX Consorzio Interuniversitario Nazionale “Metodologie e processi innovativi di sintesi” – C.I.N.M.P.I.S. (Bari, settembre 2014)

“Chiral catalytic reactors for stereoselective transformations under continuous flow conditions”  
**(invited plenary lecture per il premio “Innovazione alla ricerca” (2014)).**

- University of Regensburg, Germany “Organocatalysis in batch and under continuous-flow conditions” (May, 2015) **(Invited lecture)**
- **Bilateral Symposium Italy-China, University of Padova, Italy (Padova, Italy, April 2014)**  
**“Stereoselective synthesis in batch and in flow” (invited lecture)**
- Conference at DexLeChem company, Germany “New trends in organocatalytic transformations” (March, 2015) **(Invited lecture)**
- University of Paris 6, France “Catalytic reactions in batch and under continuous-flow conditions” (February, 2015) **(Invited lecture for Phd School)**
- International Translational Chemistry Conference (Caparica, Lisbon, Portugal, December 2015)  
**“Stereoselective organocatalytic reactions under continuous-flow conditions” (keynote lecture)**
- University of Evora, Portugal “Organocatalysis and flow chemistry” (Evora, Portugal, February 2016) **(Invited lecture)**
- ICIQ Tarragona, Spain “Enabling technologies-assisted organocatalysis: continuous flow stereoselective reactions in (micro)-mesoreactors and catalytic reactors ” (Tarragona, Spain, May 2016) **(Invited lecture)**
- GIC (Gruppo Interdivisionale Catalisi), “Batch and flow chemistry: new opportunities in stereoselective organocatalysis“ Bressanone, September 2016 **(Invited lecture)**
- FIRB meeting “Catalytic stereoselective reactions in micro- and mesoreactors” Palermo, Nov. 2016.
- International Conference on Green Chemistry “Organocatalysis and flow chemistry” (La Rochelle, France, May 2017) **(keynote lecture)**
- ESOC (European Symposium on Organic Chemistry) “Enabling technologies-assisted stereoselective organic synthesis” (Cologne, Germany July 2017) **(Invited lecture)**
- The First International Conference on Symmetry “Batch and flow asymmetric catalysis for the synthesis of chiral active pharmaceutical compounds” (Barcellona, Spain, September 2017) **(Invited lecture)**
- FROST (Frontier Organic Synthesis and Technologies) “Catalytic and 3D-printed reactors: stereoselective in-flow synthesis of chiral active pharmaceutical compounds” (Budapest, Hungary, September 2017) **(Plenary lecture)**
- Green and Sustainable Conference on Green Chemistry – Elsevier “Flow chemistry, organocatalysis and 3D-printing: valuable tools in the synthesis of chiral compounds” (Berlin, Germany, May 2018) (oral communication)
- PBS International Conference - “Catalysis in batch and flow” – (Barcellona, Spain, December 2018) **(keynote lecture)**
- Flow Chemistry Europe Conference - “Microreactors and 3D-printing: enabling technologies for the synthesis of chiral molecules” – (Cambridge, UK, February 2019) **(Invited lecture)**
- WCCE International Conference – “Metal-free reduction and organocatalytic stereoselective reactions of nitro derivatives“ – (Bruxelles, Belgium, June 2019) **(Plenary lecture)**
- The Fascinating World of Catalysis – One day event “Stereoselective catalytic reactions: batch vs flow chemistry” – (Pavia, September 2019) **(Plenary lecture)**
- XXXIX Convegno Nazionale della Divisione di Chimica Organica della Società Chimica Italiana,– “Development of catalytic stereoselective methodologies: sense and sensibility” (Torino, 8-12 Settembre, 2019) **Invited Plenary lecture for Piero Pino Medal** from Italian Chemical Society.