

## Prof. Antonio Massa

Department of Chemistry and Biology  
University of Salerno

Via Giovanni Paolo II, 132, 84084-Fisciano, SA, Italy; amassa@unisa.it

### Curruculum vitae et studiorum

**Antonio Massa**, born in Cava de' Tirreni in 1971 (Salerno-Italy), received his Master's degree in Chemistry (*summa cum laude*) in 1996 at University of Salerno with a thesis in Organic Chemistry: "*Synthesis of Incrustasterols, two Cytotoxic Polyoxygenated Sponge Steroids*", under the supervision of prof. G. Sodano.

- October 1996 - october 1999: he worked in the company "Montefibre S.p.A." in Naples area, as young researcher. He did applied research on polyester polymers.
- 1999 – 2003. PhD (Dottorato di Ricerca) in organic chemistry at University of Salerno under the supervision of professor A. Scettri, on diastereo- and enantioselective oxidation and C-C bond formation.
- In 2002, during his PhD, he was visiting student at University of Glasgow, Scotland (UK), in prof. Kocovsky's lab.
- 2003, post-doc at University of Salerno.
- 2004-2014, assistant professor (researcher) at the Department of Chemistry of University of Salerno in Organic Chemistry.
- In 2008 he was awarded of the *Fulbright Research Scholarship*. He spent 6 months at the Scripps Research Institute, San Diego – California, as visiting investigator in the laboratory of prof. Carlos F. Barbas III.
- Since 2015 he is associate professor.
- 2015, visiting professor at the Institute of Organic chemistry, University of Linz, Austria, within Erasmus program.
- He is in the editorial board of *Asymmetric Catalysis*, *De Gruyter Open*; *Mediterranean Journal of Chemistry*; *Current Catalysis* Edited by Bentham; *Monatshefte für Chemie* Edited by Springer. In 2012 he has been Guest Editor for *Current Organic Chemistry* Edited by Bentham.

### Research activity and current position.

- Since 2015, he is Associate Professor in Organic Chemistry at the Department of Chemistry and Biology, University of Salerno. His research interests are focused on the development of new methodologies, asymmetric catalysis, cascade reactions, the synthesis of bioactive compounds.
- He is co-coordinator of financed research projects on neurochemistry for the development of new therapeutic approaches for Alzheimer disease and new non-benzodiazepines anxiolytic drugs.
- He is coordinator of research projects in collaboration with national and international companies: CHEMI S.p.A. (ITALFARMACO); BayerCropScience; CONCIARICERCHE (UNIC); ALTERGON; SOLENIS.

### Publications

- 1) "Reaction of benzal bromides in water/dioxane system for easy access to benzaldehydes and 2-formylbenzonitriles (2-cyanobenzaldehydes)" A. Di Mola, T. Caruso, P. De Caprariis, A. Massa *ARKIVOC* **2016**.
- 2) "Synthesis and Pharmacological Evaluation of Functionalized Isoindolinones on GABA-Activated Chloride Currents in Rat Cerebellum Granule Cells in Culture" Antonia Di Mola, Elena Gatta, Carmen Petronzi, Aroldo Cupello, Paolo De Caprariis, Mauro Robello, Antonio Massa,\* Rosanna Filosa,\* accepted by *Bioorg. Med. Chem Lett.* **2016**
- 3) "Highly diastereo- and enantioselective organocatalytic synthesis of new heterocyclic hybrids isoindolinone-imidate and isoindolinone-phthalide" A. Di Mola, F. Scorzelli, G. Monaco, L. Palombi, Antonio Massa\* *RSC Advances*, 2016, **6**, 60780 - 60786
- 4) "Asymmetric tandem hemiaminal-heterocyclization-aza-Mannich reaction of 2-formylbenzonitriles and amines using chiral phase transfer catalysis: an experimental and theoretical study" A. Capobianco, A. Di Mola, V. Intintoli, A. Massa, V. Capaccio, L. Roiser, M. Waser, L. Palombi *RSC Adv.*, **2016**, **6**, 31861.
- 5) "Exploring the role of chloro and methyl substitutions in 2-phenylthiomethyl-benzoinole derivatives for 5-LOX enzyme inhibition" Peduto, A.; Krauth, V.; Collarile, S.; Dehm, F.; Ambruosi, M.; Belardo, C.; Guida, F.; Massa, A.; Esposito, V.; Maione, S.; de Rosa, M.; Werz, O.; Filosa, R. *Eur. J. Med. Chem.*, **2016**, **108**, 466-475.
- 6) "Bifunctional Phase Transfer Catalysis in the Asymmetric Synthesis of Biologically Active Isoindolinones". A. Di Mola, M. Tiffner, F. Scorzelli, L. Palombi, R. Filosa, P. De Caprariis, M. Waser,\* A. Massa\* *Beilstein J. Org. Chem.* **2015**, **11**, 2591-2599

(Highlighted in chemistryview.org:

[http://www.chemistryviews.org/details/news/8680601/An\\_Easier\\_Way\\_to\\_Isoindolinones.html](http://www.chemistryviews.org/details/news/8680601/An_Easier_Way_to_Isoindolinones.html)

Highlighted in Aldrich:

<http://www.sigmaaldrich.com/catalog/product/aldrich/349089?lang=it&region=IT>)

- 7) "Design of chiral urea-quaternary ammonium salt hybrid catalysts for asymmetric reactions of glycine Schiff bases" M. Tiffner, J. Novacek, A. Busillo, K. Gratzner, A. Massa,\* M. Waser\* *RSC Adv.*, **2015**, *5*, 78941
- 8) "Quick and easy access to *N*-Mannich bases of 1-isoindolinones by catalytic electroactivation of primary and secondary amines and tandem reaction with 2-formylbenzotrioles" Palombi, L.; Di Mola, A.; Massa, A. *New J. Chem.*, **2015**, *39*, 81-84
- 9) " Isoindolinones as Michael donors under phase transfer catalysis: enantioselective synthesis of phthalimidines containing a tetra-substituted carbon stereocenter" F. Scorzelli, A. Di Mola, L. Palombi, A. Massa *Molecules* (special issue: Phase Transfer Catalysis), **2015**, *20*, 8484-8498.
- 10) "3-Carboxylate Substituted Isoindolinones in K<sub>2</sub>CO<sub>3</sub>-Catalyzed Michael Reactions" F. Scorzelli, A. Di Mola, G. Croce, L. Palombi, R. Filosa, A. Massa *Synthetic Communications* **2015**, *45*, 1552-1558.
- 11) "Organocatalytic asymmetric synthesis of highly functionalized pyrrolizidines *via* cascade Michael/hemi-aminalization reactions of isoindolinones" F. Scorzelli, A. Di Mola, G. Croce, L. Palombi, A. Massa *Tetrahedron Lett.* **2015**, *56*, 2787–2790.
- 12) "Chiral phase transfer catalysts enable the synthesis of diverse chiral *N*-heterocycles through a combination of asymmetric cascade reactions" S. Tiso, A. Massa *J. of Heterocyclic Chemistry* in press **2015** DOI: 10.1002/jhet.2170
- 13) "New chelating agents for Cu(II), Fe(III), Al(III) and Zn(II) based on β-diketonate-3-substituted phthalide (isobenzofuranone) and isoindolinone" L. Di Matteo, O. Christodoulakis, R. Filosa, P. De Caprariis, A. Di Mola, E. Vasca, A. Massa *Journal of Coordination Chemistry* **2014**, *67*, 2217-2228
- 14) "Cascade reactions of glycine Schiff bases and chiral phase transfer catalysts in the synthesis of α-amino acids 3-substituted phthalides or isoindolinones" M. Perillo, A. Di Mola, R. Filosa, L. Palombi, A. Massa\* *RSC Advances.*, **2014**, *4*, 4239
- 15) "Combined electrochemical/chemical methods for the synthesis of molecular diversifying of isoindolinones-based heterocyclic scaffolds" L. Palombi, C. Vignes, A Di Mola, A. Massa *Molecular Diversity* **2014**, *18*, 323.

- 16) "Further studies on ethyl 5-hydroxy-indole-3-carboxylate scaffold: Design, synthesis and evaluation of 2-phenylthiomethyl-indole derivatives as efficient inhibitors of human 5-lipoxygenase" A. Peduto, F. Bruno, F. Dehm, V. Krauth, P. De Caprariis, C. Weinigel, D. Barz, A. Massa, M. De Rosa, O. Werz, R. Filosa, *Eur. J. Med. Chem.* **2014**, *81*, 492.
- 17) "Organocatalysts and sequential asymmetric cascade reactions in the synthesis of functionalized isoindolinones and benzoindolizidinones" Tiso, S.; Palombi, L.; Vignes, C.; Di Mola, A.; Massa,\* A. *RSC Adv.* **2013**, *3*, 19380.
- 18) "Discovery and biological evaluation of novel 1,4-benzoquinone and related resorcinol derivatives that inhibit 5-lipoxygenase" Filosa, R., Peduto, A., Aparoy, P., Schaible, A.M., Luderer, S., Krauth, V., Petronzi, C., Massa, A., De Rosa, M., Reddanna, P., Werz, O. *Eur. J. Med. Chem.* **2013**, *67*, 269-279
- 19) "Absolute configuration assignment made easier by the VCD of coupled oscillating carbonyls: the case of (–)-propanedioic acid, 2-(2,3-dihydro-3-oxo-1*H*-isoindol-1-yl)-1,3-dimethyl ester". Massa, A.,\* Rizzo, P., Monaco, G., Zanasi, R.\* *Tetrahedron Lett.* **2013**, *54*, 6242–6246
- 20) "Cyclohexa-2,5-diene-1,4-dione-based antiproliferative agents: design, synthesis, and cytotoxic evaluation". C. Petronzi, M. Festa, A. Peduto, M. Castellano, J. Marinello, A. Massa, A. Capasso, G. Capranico, A. La Gatta, M. De Rosa, M. Caraglia, R. Filosa *Journal of Experimental & Clinical Cancer Research* **2013**; *32*(1). 24.
- 21) "Design of Inhibitors of Influenza Virus Membrane Fusion: Synthesis, Structure-Activity Relationship and in vitro Antiviral Activity of a Novel Indole Series" V. Brancato, A. Peduto, S. Wharton, S. Martin, V. More, A. Di Mola, A. Massa, B. Perfetto, G. Donnarumma, C. Schiraldi, M. A. Tufano, M. de Rosa, R. Filosa, A. Hay *Antiviral research* **2013**, *99*, 125-135
- 22) "Chiral sulfoxides in the enantioselective allylation of aldehydes with allyltrichlorosilane: a kinetic study." G. Monaco, C. Vignes, F. De Piano, A. Bosco, A. Massa.\* *Org. Biomol. Chem.*, **2012**, *10* (48), 9650 - 9659
- 23) "The Aldol Reactions of Active Methylene Compounds" A. Di Mola, A. Massa\* *Current Organic Chemistry* **2012**, *16*, 2290-2301.
- 24) "Active Methylene Compounds in the Synthesis of 3-substituted Isobenzofuranones, Isoindolinones and Related Compounds" A. Di Mola, L. Palombi, A. Massa\* *Current Organic Chemistry* **2012**, *16*, 2302 - 2320.
- 25) "Synthesis and reactivity of 3-substituted isoindolinone framework to assemble highly functionalised related structures" C. Petronzi, S. Collarile, G. Croce, R. Filosa, P. De Caprariis, A. Peduto, L. Palombi, V. Intintoli, A. Di Mola, A. Massa\* *Eur JOC*, **2012**, 5357–5365

- 26) "Electro-initiated tandem and sequential conjugate addition processes: one-pot synthesis of diverse functionalised isoindolinones" P. Antico, V. Capaccio, A. Di Mola, A. Massa,\* L. Palombi\* *Adv. Synth. Cat* **2012**, *354*, 1717.
- 27) "Active methylene compounds in a very effective approach to 3-substituted isobenzofuranones through tandem aldol/lactonization reactions" A Di Mola, G. Croce, V. More, P. De Caprariis, R. Filosa, A. Massa,\* *Tetrahedron*, **2012**, *68*, 6146-6151
- 28) "The First Organocatalytic Asymmetric Synthesis of 3-Substituted Isoindolinones" V. More, R. Rohlmann, O. García Mancheño,\* C. Petronzi, L. Palombi, A. De Rosa, A. Di Mola, A. Massa\* *RSC Advances* **2012**, *2*, 3592 - 3595
- 29) "New reactions exploring the chemical spaces of aldol addition of active methylene compounds" A. Massa, account *Synlett* **2012**, *23*, 524.
- 30) "A one-pot multicomponent methodology for the aldol addition  $\beta$ -ketoesters: scope and applications" V. More, A. Di Mola, G. Croce, C. Tedesco, C. Petronzi, P. De Caprariis, A. Peduto, R. Filosa, A. Massa.\* *Organic Biomolecular Chemistry* **2011**, *9*, 8483.
- 31) "Design, synthesis, biophysical and biological studies of trisubstituted naphthalimides as G-quadruplex ligands" A. Peduto, B. Pagano, C. Petronzi, A. Massa, V. Esposito, A. Virgilio, F. Paduano, F. Trapasso, F. Fiorito, S. Florio, C. Giancola, A. Galeone, R. Filosa *Bioorganic & Medicinal Chemistry* **2011**, *19*, 6419-6429
- 32) "The aldol addition of readily enolizable 1,3-dicarbonyl compounds to 2-cyanobenzaldehyde in the synthesis of 3-substituted isoindolinones" V. More, A. Di Mola, M. Perillo, P. De Caprariis, R. Filosa, A. Peduto, A. Massa,\* *Synthesis*, **2011**, *18*, 3027.
- 33) "Design, Synthesis and Anti Flaviviridae Activity of New 2,3-dihydro-1,2-diphenyl-substituted 4H-pyridinone Derivatives" A. Peduto, A. Massa,\* P. de Caprariis, P. La Colla, R. Loddo, G. Maga, S. Altamura, R. Filosa,\* *Chemical Biology & Drug Design* **2011**, *77*, 441-449.
- 34) "Structure-based design, synthesis and preliminary anti-inflammatory activity of bolinaquinone analogues" Petronzi C, Filosa R, Peduto A, Monti MC, Margarucci L, Massa A, Ercolino SF, Bizzarro V, Parente L, Riccio R, de Caprariis P. *European Journal of Medicinal Chemistry* **2011**, *46*, 488-496
- 35) "Trimethylchlorosilane and silicon tetrachloride in two novel methodologies for the efficient and mild aldol addition of  $\beta$ -ketoesters and malonates to aldehydes" A. Massa,\* A. Roscigno, P. De Caprariis, R. Filosa, A. Di Mola *Adv. Synth. Catalysis* **2010**, *352*, 3348-3354.
- 36) "Sulfoxides in the Allylation of Aldehydes in the presence of silicon tetrachloride and allyltributylstannane." Antonio Massa,\* Laura Capozzolo, Arrigo Scettri *Central European Journal of Chemistry* **2010**, *8*, 1210-1215.
- 37) "Chiral sulfoxides as activators of allyl trichlorosilanes in the stereoselective allylation of aldehydes" V. De Sio, A. Massa,\* A. Scettri\* *Org. Biomol. Chem.*, **2010**, *8*, 3055.

- 38) "Synthesis of  $\beta$ -hydroxymalonates: The Direct Aldol Addition of Malonates to Aldehydes in the presence of  $\text{SiCl}_4$  and  $i\text{-Pr}_2\text{EtN}$ " A. Massa,\* A. Scettri, R. Filosa, L. Capozzolo *Tetrahedron Lett.* **2009**, 50, 7318-7321.
- 39) "A catalytic asymmetric allylation of aldehydes with allyl trichlorosilane activated by a chiral tetradentate bis-sulfoxide" A. Massa,\* M. R. Acocella, V. De Sio, R. Villano, A. Scettri\* *Tetrahedron: asymmetry* **2009**, 20, 202-204.
- 40) "Solvent-free asymmetric vinylogous aldol reaction of Chan's diene with aromatic aldehydes catalyzed by hydrogen bonding" R. Villano, M.R. Acocella, A. Massa, L. Palombi, A. Scettri, *Tetrahedron* **2009**, 65, 5571-5576
- 41) "A new approach to di- and tetra-substituted 2,3-dihydropyridin-4(1H)-ones through Aza-Diels-Alder reaction promoted by  $\text{SiCl}_4$ " A. Massa,\* V. de Sio, R. Villano, M. R. Acocella, L. Palombi, G. Sellitto, A. Peduto, R. Filosa, P. De Capraris, A. Scettri *Synthesis* **2009**, 643-649.
- 42) "Design, Synthesis and Biological Evaluation of Novel Bicyclo[1.1.1]pentane-based omega-Acidic Amino Acids as Glutamate Receptors Ligands." R. Filosa, M. C. Fulco, M. Marinozzi, A. Macchiarulo, N. Giacchè, A. Peduto, A. Massa, P. de Capraris, C. Thomsen, C. T. Christoffersen, R. Pellicciari *Bioorganic & Medicinal Chemistry* **2009**, 17, 242.
- 43) "N-tosyl imidates in highly enantioselective organocatalytic Michael reactions" A. Massa, N. Utsumi, C. F. Barbas, III *Tetrahedron Letters* **2009**, 50, 145
- 44) "Phosphido Pincer Complexes of Palladium as New Efficient Catalysts for Allylation of Aldehydes" M. Mazzeo, M. Lamberti, A. Massa, A. Scettri, C. Pellecchia, J. C. Peters *Organometallics* **2008**, 27, 5741.
- 45) Organocatalytic asymmetric aza-Michael addition of aniline to chalcones under solvent-free conditions A. Scettri, A. Massa, L. Palombi, R. Villano, M. R. Acocella *Tetrahedron: Asymmetry* **2008**, 19, 2149.
- 46) "The Effect Of Additives And Complexing Agents On The Synthesis And Thermo-Oxidation Stability Of Poly(Butylene Terephthalate)" A. Massa,\* V. Bugatti, A. Scettri, S. Contessa *Macromolecules: An Indian Journal* **2008**, 4 (1), 45-50.
- 47) "Enantioselective Vinylogous Aldol Reaction of Chan's Diene Catalyzed by Hydrogen-bonding" R. Villano, M. R. Acocella, A. Massa, L. Palombi, A. Scettri *Tetrahedron Letters* **2007**, 48, 891-895
- 48) "A convenient approach to  $\delta$ -amino- $\beta$ -ketoesters by vinylogous Mannich reaction of masked acetoacetates" R. Villano, M. R. Acocella, A. Massa, L. Palombi and A. Scettri *Tetrahedron* **2007**, 63, 12317-12323.
- 49) "New catalyst for the synthesis of poly(butylene terephthalate) with high thermo-oxidative stability" A. Massa,\* A. Scettri, S. Contessa,\* V. Bugatti, S. Concilio, P. Iannelli, *Journal of Applied Polymer Science* **2007**, 104, 3071.
- 50) "A New Procedure for the Enantioselective Vinylogous Aldol Reaction of Chan's Diene"

R. Villano, M. R. Acocella, A. Massa, L. Palombi, A. Scettri *Tetrahedron: Asymmetry* **2006**, *17*, 3332.

- 51) "Highly enantioselective vinylogous addition of 2-trimethylsilyloxyfuran to aldehydes promoted by the SiCl<sub>4</sub>/chiral Lewis base system" L. Palombi, M. R. Acocella, N. Celenta, A. Massa, R. Villano and A. Scettri *Tetrahedron: Asymmetry* **2006**, *17*, 3300.
- 52) "Diastereo- and Enantioselective Synthesis of trans-2,3-Disubstituted 2,3-Dihydropyran-4-one Derivatives" A. Scettri,\* M. R. Acocella, L. Palombi, C. Scalera, R. Villano, and A. Massa *Adv. Synth. Catal.* **2006**, *348*, 2229 – 2236
- 53) "Polymeric Ti(IV) glycolate: a heterogeneous catalyst for solvent-free sulfoxidation by t-butyl hydroperoxide" A. Massa,\* E. M. De Lorenzo, A. Scettri *J. Mol. Catalysis: A Chemical.* **2006**, *250*, 27.
- 54) "Solvent-free Mukaiyama aldol reaction of O-silyl dienolates catalyzed by benzoic acid" M. R. Acocella, A. Massa, L. Palombi, R. Villano, A. Scettri\* *Tetrahedron Letters* **2005**, *46*, 6141.
- 55) "A re-investigation of Modena's protocol for the asymmetric oxidation of prochiral sulfides" A. Massa, V. Mazza, A. Scettri\* *Tetrahedron: Asymmetry* **2005**, *16*, 2271.
- 56) "Silicon tetrachloride in organic synthesis: new applications for the vinylogous aldol reaction" M. R. Acocella, M. De Rosa, A. Massa, L. Palombi, R. Villano, A. Scettri\* *Tetrahedron* **2005**, *61*, 4091–4097.
- 57) a) "Asymmetric allylation of aldehydes with allyltrichlorosilane promoted by chiral sulfoxides" A. Massa,\* A. V. Malkov, P. Kočovský', A. Scettri, *Tetrahedron Lett.* **2003**, *44*, 7179 – 7181; b) (correction) A. Massa, A. V. Malkov, P. Kočovský, A. Scettri, *Tetrahedron Lett.* **2003**, *44*, 9067.
- 58) "New Lewis-Basic N-Oxides as Chiral Organocatalysts in Asymmetric Allylation of Aldehydes" A. V. Malkov, M. Bell, M. Orsini, D. Pernazza, A. Massa, P. Herrmann, P. Meghani, P. Kočovský, *J. Org. Chem.* **2003**, *68*, 9659 – 9668.
- 59) "Synthesis of new chiral 2,2'-bipyridine ligands and their application in the copper-catalyzed asymmetric allylic oxidation" A. V. Malkov, D. Pernazza, M. Bell, M. Bella, A. Massa, F. Teply, P. Meghani, P. Kočovský. *Journal of Organic Chemistry* **2003**, *68*, 4727-4742.
- 60) "Mo(CO)<sub>6</sub>-catalyzed oxidation of furan derivatives to *E*- and *Z*-enediones by cumyl hydroperoxide" A. Massa, R. Acocella, M. De Rosa, A. Soriente, R. Villano, A. Scettri. *Tetrahedron Letters* **2003**, *44*, 835-837.
- 61) "Novel Highly Regioselective VO(acac)<sub>2</sub>/TBHP Mediated Oxidation of o-Alkenyl Phenols to o-Hydroxybenzyl Ketones." Lattanzi, Alessandra; Senatore, Antonello; Massa, Antonio; Scettri, Arrigo. *Journal of Organic Chemistry* **2003**, *68*, 3691-3694.
- 62) "Convenient procedure of Horner-Wadsworth-Emmons olefination for the synthesis of simple and functionalised  $\alpha,\beta$ -unsaturated nitriles" A. Lattanzi, L. R. Orelli, P. Barone, A. Massa, P. Iannece and A. Scettri *Tetrahedron Letters*, **2003**, *44*, 1333.

- 63) "Matrices for mono-material composites (MMC). The case of poly(ethylene terephthalate)." Acierno, Domenico; Amendola, Eugenio; Concilio, Simona; Iannelli, Pio; **Massa, Antonio**; Scarfato, Paola. *Macromolecular Symposia* **2002**, 180 (Polymer Processing and Structure Relationships), 61-71.
- 64) "New procedures for enantioselective oxidation of sulfides under stoichiometric and catalytic conditions" **A. Massa**, F. R. Siniscalchi, V. Bugatti, A. Lattanzi, A. Scettri *Tetrahedron: Asymmetry* **2002**, 13, 1277.
- 65) "Catalytic enantioselective oxidation of sulfides to sulfoxides with a renewable hydroperoxide." **A. Massa**, F. R. Siniscalchi, A. Lattanzi, A. Scettri *Tetrahedron: Asymmetry* **2001**, 12, 2775.
- 66) "A convenient approach to renewable hydroperoxides". **Antonio Massa**, Laura Palombi, Arrigo Scettri *Tetrahedron Letters*, **2001**, 42, 4577-4579
- 67) "Critical importance of molecular sieves in titanium(IV)-calix[4]arene catalyzed epoxidation of allylic alcohols". **Antonio Massa**, Antonietta D'Ambrosi, Antonio Proto, Arrigo Scettri *Tetrahedron Letters*, **2001**, 42, 1995-1998.
- 68) "Epoxidation of allylic alcohols by polymeric Ti(IV) glycolates". **Antonio Massa**, Arrigo Scettri *Synlett* **2000**, No. 9, 1348-1350.
- 69) "Synthesis of Incrustasterols, two cytotoxic polyoxygenated sponge steroids". I. Izzo, F. de Riccardis, **A. Massa**, G. Sodano *Tetrahedron Letters*, **1996**, 37(27), 4775.

#### Patent:

1. Italian patent n°. MI 99/A 001529 del 13/07/**1999**: "Complessi a base di Titanio nella sintesi di poliesteri" (Titanium complexes in Polyester synthesis). S. Contessa, F. Francalanci, **A. Massa**.
2. Italian patent RM2015A000196 del 5/5/**2015** "Isoindolinoni, procedimenti per la produzione di loro derivati chirali e impiego di questi ultimi" (Isoindolinones, methods for the production of chiral derivatives and their applications) A. Massa, A. Di Mola, P. De Caprariis.

#### Invited chapter on books:

- 1) ELECTRONIC ENCYCLOPEDIA OF REAGENTS FOR ORGANIC SYNTHESIS (EROS) on "[2,2-Dimethyl-4-methylene-4H-1,3-dioxin-6-yl)oxy]trimethylsilane" Authors: R. Villano, A. Massa, L. Palombi, A. Scettri.
- 2) "Thermo-oxidation stability of poly(butylene terephthalate) and catalyst composition" A. Massa, V. Bugatti, A. Scettri, S. Contessa in "Polymer Aging, Stabilizers and Amphiphilic Block Copolymers" Editors: Liudvikas Segewicz and Marijus Petrowsky, Nova Science Publisher ® **2010** ISBN: 978-1-60692-928-5



- 3) Editorial [Hot Topic: Recent Advances in the Chemistry of Active Methylene Compounds], *Current Organic Chemistry* Antonio Massa **2012**, 16(19), 2159
- 4) "An Overview on asymmetric synthesis of 3-substituted isoindolinones" A. Di Mola, L. Palombi, A. Massa *Targets in Heterocyclic Systems* O. A. Attanasi, R. Noto, D. Spinelli Eds. Italian Society of Chemistry. Vol. 18 **2014**, 113-140.

### Congress

- 1) Poster at 13 OMCOS international congress 2005, Geneve-Swiss. "Highly enantioselective catalytic sulfoxidation" A. Massa, V. Mazza, A. Scettri.
- 2) Invited speaker and chairman at IUPAC Symposium NMS-III and FCFP-XVII, 17-20 october 2007 Shanghai-China. "Synthesis of Chiral Sulfoxides and Application in Enantioselective Allylation of Aldehydes with Allyltrichlorosilane" A. Massa, V. De Sio, R. Villano, A Scettri
- 3) Invited speaker at BIT's 2<sup>nd</sup> Annual World Congress of Catalytic Asymmetric Synthesis-2011 Beijing-China. "On the mechanism of Enantioselective Allylation of Aldehydes with Allyltrichlorosilane promoted by Chiral Sulfoxides" A. Massa, G.Monaco
- 4) Oral presentation and Poster: "New methods in The Synthesis of highly functionalized isoindolinones and isobenzofuranones." at XXV European Colloquium On Heterocyclic Chemistry, University of Reading (UK), August 13th—17th, 2012. A. Di Mola, A. Massa
- 5) A. Massa; P. Rizzo; G. Monaco; R. Zanasi(2014). Absolute configuration assignment made easier by the VCD of coupled oscillating carbonyls. In: Conference Proceedings Pisa 18-20/06/2014 Pag.14-14
- 6) Invited speaker: "Il titanio (IV) nella concia delle pelli (Titanium(IV) in tanning leather)" "SEMINARIO ICEC "SOSTENIBILITA' E CERTIFICAZIONI NEL SETTORE CONCIARIO (Sustainability and certifications in leather technology)" 14 Luglio 2014. Presso il Chostro di Santa Chiara – Solofra (AV).
- 7) Oral presentation: "*Cascade reactions in the asymmetric synthesis of related heterocyclic compounds*" at XXV congress of Italian Society of Chemistry (SCI), University of Calabria, Rende (CS), 7-12 September 2014, A. Di Mola and A. Massa.
- 8) Poster at Blu Danube Symposium 14-17 June 2015, Balatonalmadi, Hungary: BIFUNCTIONAL AMMONIUM SALT CATALYSIS IN STEREOSELECTIVE HETEROCYCLE SYNTHESIS USING GLYCINE SCHIFF BASES Maximilian Tiffner, Alfonso Busillo, Johanna Novacek, Antonio Massa, Mario Waser