

ACCADEMIC TITLES

- Degree in Pharmaceutical Chemistry and Technology, on 15/05/2009 at the University of Perugia.
Thesis in Pharmaceutical Technology: "Nanostructured compounds to improve the biopharmaceutical properties of drugs".

-December 2012: PhD in chemistry, with the thesis "Modern materials for modern problems: advanced layered double hydroxides for energy and bio-medical applications".

SCIENTIFIC PUBLICATIONS

1. M. Bastianini, D. Costenaro, C. Bisio, L. Marchese, U. Costantino, R. Vivani, M. Nocchetti. "On the intercalation of the iodine-iodide couple on layered double hydroxides with different particle sizes", *Inorg Chem*, 2012, **51**, 2560-2568.

2. C.L.M. Bianchi, C. Pirola, D.C. Boffito, A. Di Fronzo, A. Di Michele, R. Vivani, M. Nocchetti, M. Bastianini, S. Gatto "Co-Zn-Al Based Hydrotalcites as Catalysts for Fischer-Tropsch Process" Preprints of the DGMK-conference Catalysis – "Innovative Applications in Petrochemistry and Refining" ISBN 9783941721173, 93-98, 2011.

3. A. Di Fronzo, C. Pirola, A. Comazzi, F. Galli, C.L. Bianchi, A. Di Michele, R. Vivani, M. Nocchetti, M. Bastianini, D.C. Boffito. "Co-based hydrotalcites as new catalysts for the Fischer-Tropsch synthesis process", *Fuel*, 2014, **119**, 62–69.

4. M. Nocchetti, A. Donnadio, V. Ambrogio, P. Andreani, M. Bastianini, D. Pietrella and L. Latterini. "Ag/AgCl nanoparticle decorated layered double hydroxides: synthesis, characterization and antimicrobial properties", *J. Mater. Chem. B*, 2013, **1**, 2383-2393.

5. L. Perioli, M. Nocchetti, P. Giannelli, C. Pagano, M. Bastianini "Hydrotalcite composites for an effective fluoride buccal administration: A new technological approach", *Int. J. Pharm.*, 2013, **454**, 259-268.

6. M. Bastianini, R. Vivani, M. Nocchetti, D. Costenaro, C. Bisio, F. Oswald, T.B. Meyer, L. Marchese, “Effect of iodine intercalation in nanosized layered double hydroxides for the preparation of quasi-solid electrolyte in DSSC devices” *Solar Energy*, 2014, **107**, 692–699.
7. U. Costantino, R. Vivani, M. Bastianini, F. Costantino, M. Nocchetti, “Ion exchange and intercalation properties of layered double hydroxides towards halide anions” *Dalton Trans.*, 2014, **43**, 11587-11596.
8. F. Costantino, R. Vivani, M. Bastianini, L. Ortolani, O. Piermatti, M. Nocchetti, L. Vaccaro “Accessing stable zirconium carboxyaminophosphonate nanosheets as support for highly active Pd nanoparticles” *Chem. Commun.*, 2015, **51**, 15990-15993.
9. M. Bastianini, M. Sisani, A. Petracchi, “Ascorbyl Tetraisopalmitate Inclusion into γ -Cyclodextrin and Mesoporous SBA-15: Preparation, Characterization and In Vitro Release Study”, *Cosmetics*, 2017, **4**, 21.
10. C. Pagano, L. Perioli, F. Blasi, M. Bastianini, C. Chiesi, L. Cossignani “Optimisation of phenol extraction from wine using layered double hydroxides and technological evaluation of the bioactive-rich powder”, *International Journal of Food Science and Technology*, doi:10.1111/ijfs.13544

CONGRESS PARTICIPATIONS

1. M. Bastianini, L. Perioli, V. Ambrogi, C. Pagano, M. Nocchetti, M. Sisani “Nanostructured compounds to improve drug biopharmaceutical properties”. Proceedings of: Prima scuola estiva di nano biotecnologie, Torino, 8-11 Settembre, 2009.
2. M. Bastianini, M. Nocchetti, R. Vivani, M. Taddei, D. Costenaro, C. Bisio, L. Marchese “Intercalation of I_3^-/I^- redox couple on lamellar solids”, Proceedings of: 16th International Symposium on Intercalation Compounds (ISIC), Pardubice-Sec, Czech Republic, Maggio 2011.
3. M. Nocchetti, T. Posati, F. Costantino, M. Bastianini, L. Tarpani, L. Latterini “Synthesis and characterization of nanosized lanthanide(III)-hydrotalcites” Proceedings of: 16th International Symposium on Intercalation Compounds, Pardubice-Sec, Czech Republic, Maggio 2011.

4. C.L. Bianchi, C. Pirola, D.C. Boffito, A. Di Fronzo, A. Di Michele, R. Vivani, M. Nocchetti, M. Bastianini, S. Gatto “Co-Zn-Al based Hydrotalcites as catalysts for Fischer-Tropsch process” Proceedings of: CATALYSIS – INNOVATIVE APPLICATIONS IN PETROCHEMISTRY AND REFINING, DGMK Conference October 4 – 6, 2011, Dresden, Germany
5. M. Bastianini, M. Nocchetti, D. Costenaro, F. Carniato, C. Bisio, L. Marchese, F. Oswald, T. B. Meyer “Immobilization of the I₃⁻/I⁻ redox couple on lamellar solids and their application for DSSC technology” Proceedings of: The Energy and Materials Research Conference, EMR 2012, Torremolinos (Spain) 20-22 June, 2012.
6. M. Nocchetti, M. Bastianini, V. Ambrogi, P. Andreani, A. Donnadio, D. Pietrella, L. Latterini “Efficient approach for preparing silver nanoparticles on layered double hydroxides: synthesis, characterization and properties” Proceedings of: V WORKSHOP on OXIDE BASED MATERIALS: OXIDE 2012, 23rd-26th September 2012, Torino, Italy.
7. M. Nocchetti, M. Bastianini, V. Ambrogi, M. Molinelli, A. Donnadio, M. Marmottini “Novel composites based on acrylic resins and fluorinated hydrotalcites for dental applications” Proceedings of: V WORKSHOP on OXIDE BASED MATERIALS: OXIDE 2012, 23rd-26th September 2012, Torino, Italy.
8. C.L. Bianchi, C. Pirola, A. Di Fronzo, D.C. Boffito, A. Di Michele, R. Vivani, M. Nocchetti, M. Bastianini "Synthetic Hydrotalcites as suitable Co-based catalysts for Fischer-Tropsch Process" Proceedings of: XVIII Congresso Nazionale della Divisione di Chimica Industriale della Società Chimica Italiana LE SFIDE DELLA CHIMICA INDUSTRIALE PER UN'INNOVAZIONE SOSTENIBILE, Firenze 11-14 Giugno 2012.
10. C.L. Bianchi, C. Pirola, A. Di Fronzo, D.C. Boffito, A. Di Michele, R. Vivani, M. Nocchetti, M. Bastianini “Synthetic Hydrotalcites as suitable Co-based catalysts for Fischer-Tropsch Process” Proceedings of : 7th International Conference on Environmental Catalysis, Lyon, France, September 2–6, 2012.
11. C. Chiesi, F. Blasi, L. Cossignani, R. Spogli, M. Bastianini, M. Nocchetti “Intercalation of long chain fatty acids with different unsaturation degree into layered double hydroxides”

EMIRATES JOURNAL OF FOOD AND AGRICULTURE, In: -. Abstracts of ChimAlSi_2012 IX Italian Congress of Food Chemistry. "Food, Functional Foods and Nutraceuticals". Ischia (NA), 3-7 Giugno 2012, vol. 24, p. 35.

12. C.L. Bianchi, C. Pirola, A. Di Fronzo, D.C. Boffito, A. Di Michele, R. Vivani, M. Nocchetti, M. Bastianini "Development of Co-Hydroxide-like compounds for enhanced catalytic synthetic fuel production" Proceedings of: 4° Forum Nazionale Giovani Ricercatori di scienza e Tecnologia dei Materiali, Padova, 28-30 Maggio, 2012.

13. L. Perioli, M. Sisani, C. Pagano, M. Bastianini, F. Blasi, C. Chiesi, L. Cossignani. "LE IDROXIDI IN CAMPO NUTRACEUTICO E COSMETICO: INTERCALAZIONE DELLE SOSTANZE FENOLICHE DEL VINO" 53° SIMPOSIO AFI – Rimini 12th -14th June 2013 (abstract page 236-237).

14. F. Costantino, M. Nocchetti, M. Bastianini, O. Piermatti, L. Vaccaro, A. Ienco, M. Caporali, "Layered Zirconium Carboxyphosphate Nanosheets as Efficient Support for Highly Active Pd Nanoparticles in Sustainable Processes" ISIC 18, Strasbourg, May 31-June 4, 2015

15. R. Spogli, M. Bastianini, M. Sisani, "Drug delivery improvements for topic formulation obtained by double layered hydroxides technology" PBP Word meeting, 4-7 aprile 2016, Glasgow. Oral presentation

16. M. Sisani, R. Spogli, M. Bastianini, M. Scatto, A. Sánchez, S. Villanueva, A. Egizabal, "Layered compounds as active fillers of biopolymeric nanocomposites for 3D printed functionally graded scaffolds for bone tissue regeneration" ISIC 19, Assisi, 28 maggio-1 giugno 2017

17. A. Di Michele, R. Vivani, F. Costantino, M. Bastianini, M. Nocchetti "New insight on the synthesis of LDH with urea method: morphology and intercalated anion control" ISIC 19, Assisi, 28 maggio-1 giugno 2017

18. M. Scatto, M. Bastianini, M. Sisani, P. Scopece, A. Patelli, "Benefit of LDH intercalation compound in Polymer Nanocomposite for Biomedical materials: from clay properties to Bionanocomposite performance" ISIC 19, Assisi, 28 maggio-1 giugno 2017

19. M. Sisani, R. Spogli, M. Bastianini, "Lamellar solids for better delivery of active ingredients, Naturals in Cosmetic Science" London, 4-5 July 2017
20. M. Scatto, M. Bastianini, M. Sisani, P. Scopece, A. Patelli, "Benefit of clay in polymer nanocomposite for biomedical engineering: from clay properties to polymer composite performance" 16 ICC, Granada, 17-21 July 2017
21. M. Bastianini, M. Sisani, A. Petracci and R. Spogli, "Layered double hydroxides as multifunctional excipients for topic formulations" 16 ICC, Granada, 17-21 July 2017
22. M. Sisani, M. Bastianini, M. Scatto, P. Scopece, A. Patelli, A. Sanchez, S. Villanueva and A. Egizabal, "Layered compounds as active fillers of biopolymeric nanocomposites for 3D printed functionally graded bone scaffolds" 16 ICC, Granada, 17-21 July 2017