



BENEDETTA DEL SECCO

Ph.D in Photochemistry

ABOUT ME

I am a simple, solar and curious girl.
I really think that the curiosity is the most super power existing, because it is fundamental doing research, and research is the life core.
I think the most important attitude is to make questions rather than give answers, so I feel really stimulated on what I do.

SKILLS

- Team Work
- Organization&Planning
- Photography
- Independence

LANGUAGES

English (certified IELTS 6.5)
Italian

Certified ECDL

Driving Licence B

DETAILS & CONTACTS

Via del Pratello 96,
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EDUCATION

University of Bologna

2016-2020 | PhD in Photochemistry

University of Bologna

2012 - 2015 | MSc in Organic Chemistry

Perugia University

2009-2012 | BSc in Chemistry

WORK EXPERIENCE

- 2020 Post Doc position CNR-ISAC
Bologna, ITA *European Project ASINA*
- 2020 Teacher in Applied Sciences
Bologna, ITA *2 grade school IPSAS Aldrovandi Rubbiani*
- 2019 VISITING PhD NYU, New York University
Oct-May (6 months Grant)
New York, USA *Supervisor Dr. S. Sacanna*
 - *Synthesis of colloidal material as pathogen mimetic and self propelled micro objects*
- 2018 VISITING PhD, Zurich University
Apr. *Supervisor Prof. B. Weber*
 - *In vivo experiments in Oxygen sensing in mice brains*
- 2018-2020 PhD student, Bologna University
Bologna, ITA *Supervisor Prof. N. Zaccheroni-L.Prodi Group*
 - *THESIS: Photoactive tools for biomedical applications. From Supramolecules to micro-objects.*
- 2016 TERM CONTRACT, Bologna University
May-July *Supervisor Prof. L. Gentilucci*
Bologna, ITA
 - *Chemical modification of amino acids*

EXTRA WORKING ACTIVITIES

Tutor in General chemistry and Organic chemistry Laboratory
Frontal lessons and exams (3 years)

Student Helper

GRANT, AWARDS & CERTIFICATES

- Certified abilitation to the chemist profession
- *Ugo Mazzucato* award BEST THESIS in PHOTOCHEMISTRY (XXII cicle)
- Financial Grant "Marco Polo" 2018
Funding 3 research months stay at New York University
- Best Oral Communication 2017
- Recognized Expert on the subject in General Chemistry

REFERENCES

N. Zaccheroni - Unibo, Bologna
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E. Rampazzo - Unibo, Bologna
enrico.rampazzo@unibo.it
L. Prodi - Unibo, Bologna
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L. Gentilucci - Unibo, Bologna
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S. Sacanna - NYU, New York
s.sacanna@nyu.edu

S.A. Vinogradov - UPenn, Philadelphia
vinogradov.upenn@gmail.com

- In-Depth Study of the Electronic Properties of NIR-Emissive κ 3N Terpyridine Rhenium(II) Dicarbonyl Complexes
T. Auvray, B. Del Secco, J. Dubreuil, N. Zaccheroni*, G. S. Hanan*
Inorg. Chem. **2021**, *60*, *1*, 70–79
- Bright Phosphorescence of All-Organic Chromophores Confined within Water-Soluble Silica Nanoparticles
M. Villa, B. Del Secco, et al.
J. Phys. Chem. C **2019**, *123*, *49*, 29884
- Optimized synthesis of luminescent silica nanoparticles by a direct micelle-assisted method
B. Del Secco, et al.
Photochem. Photobiol. Sci., **2019**, *18*, 2142
- New Lanthanide Metalloligands and Their Use for the Assembly of Ln-Ag Bimetallic Coordination Frameworks: Stepwise Modular Synthesis, Structural Characterization, and Optical Properties
M. Visconti, et al.
Cryst. Growth Des. **2019**, *19*, *9*, 5376
- The Role of Onium Salts in the Pro-Oxidant Effect of Gold Nanoparticles in Lipophilic Environments
A. Baschieri, B. Del Secco et al.
Chem. Eur. J. **2018**, *24*, 9113
- Engineered Nanostructured Materials for Ofloxacin Delivery
S. Nuti, B. Del Secco et al.
Front Chem **2018**, *6*, 554
- Controlling Cyclopeptide Backbone Conformation with α/β -Hybrid Peptide-Heterocycle
L. Gentilucci, F. Gallo, F. Meloni, M. Mastandrea, B. Del Secco, R. De Marco
Eur. J. Org. Chem **2016**, 3243
- Form Matters- Stable Helical Foldamers Preferentially target Human Monocytes and granulocytes
B. Del Secco, et al.
ChemMedChem **2017**, *12*, 337
- Factors Affecting the Stabilization of Polyproline II Helices in a Hydrophobic Environment
N. Zanna, L. Milli, B. Del Secco, and C. Tomasini
Org. Lett. **2016**, *18*, 1662

SCIENTIFIC CONTRIBUTIONS

Oral presentations

- E-MRS Fall meeting 2019- Warsaw, Poland
- NanoBio 2018 - Heraklion, Crete
- PhD day, supramolecular chemistry - Bologna, Italy
- IPM2017 - Bologna Italy
- XVII chemistry day Emilia Romagna - Bologna, Italy

Technical Skills

All Chemistry laboratory material for Organic and inorganic synthesis

Focused: schlenk material, laboratory glassware, vacuum line, all coupling reagents, all amino acids, all protector groups, chromatography techniques, microwave, solid phase liquid phase, Kaiser test, preparative hplc, rotavapor, any solvent, nanoparticles, silica derivatives, ruthenium (complexes), dimensional exclusion separation, use of dangerous molecules for inorganic synthesis and nanomaterial synthesis. Shape colloidal modification, and synthesis.

Instruments: NMR, IR, chiral HPLC and MS, GC-MS, Spectrophotometry Spectrofluorimetry, Dynamic Light Scattering, SEM, TEM, Confocal microscope and Optical microscope.

System software

Operating system: Windows, Linux; (good), Mac OS

Office software: Microsoft Office, Open Office, Libre office

Technical software: SigmaPlot, Origin, ChemBioOffice, MatLab (good), Gaussian 09, Specfit, VnmrJ, Spinworks, PyMol, ImageJ, Fortran77, Photoshop, Lightroom.

EXTRA CURRICULAR ACTIVITIES

volleyball and beach volleyball professional level

Lead animators in summer camps/school

beginners bartender

cinema addicted

video games lovers