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# PERSONAL INFORMATION

# Matteo Savastano

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Sex Male | Date of birth 23/07/1988 | Nationality Italian Married, one Daughter

WORK EXPERIENCE	
01/06/2023 – Present	Associate Professor of General and Inorganic Chemistry (SSD CHIM/03). University San Raffaele Roma
01/12/2022 - 31/05/2023	Temporary Research Fellow (Assegnista) at Department of Chemistry "Ugo Schiff", University of Florence.
	Research project: "Metals and metal alloys deposition from vapor phase (PVD) and their characterization"
	Supervisor: Prof. Matteo Mannini
01/12/2019 – 30/11/2021	Temporary Research Fellow (Assegnista) at Department of Chemistry "Ugo Schiff", University of Florence.
	Research project: "Light-activated Metal Complexes as Antimicrobial Agents."
	Supervisor: Prof. Claudia Giorgi
01/12/2018 – 30/11/2019	Temporary Research Fellow (Assegnista) at Department of Chemistry "Ugo Schiff", University of Florence.
	Research project: "Synthesis, thermodynamic and structural study of metal complexes, in particular platinum group metal complexes (PGM), and their adsorption on carbon solid substrates."
	Supervisor: Prof. Antonio Bianchi
01/12/2017 – 30/11/2018	Temporary Research Fellow (Borsista) at CSGI, University of Florence. Research project: "Preparation and Study of Nanostructured Catalysts Supported on Carbon Nanotubes".
	Supervisor: Prof. Antonio Bianchi
01/10/2014 – 20/10/2014	Temporary Research Fellow (Co.Co.Co.) at Department of Chemistry "Ugo Schiff", University of Florence. Research project: "Polyfunctional Receptors for Cations and Anions".
	Supervisor: Prof. Antonio Bianchi



EDUCATION AND TRAINING	
Since February 2022	Appointed Fellow ( <b>cultore della materia</b> ) of Dept. of Industrial Engineering, University of Florence, for Principles of Chemistry for Applied Technologies ( <b>SSD CHIM/07</b> ).
Since 01/02/2022	National Scientific Qualification ( <b>ASN</b> ) from Italian MUR as Associate Professor, National Field ( <b>SSD</b> ) <b>03/B1</b> - Principles of Chemistry and Inorganic Systems (Fondamenti delle Scienze Chimiche e Sistemi Inorganici), see <u>Appendix.</u>
Since 01/02/2022	National Scientific Qualification ( <b>ASN</b> ) from Italian MUR as Associate Professor, National Field ( <b>SSD</b> ) <b>03/B2</b> - Principles of Chemistry for Applied Technologies (Fondamenti Chimici delle Tecnologie), see <u>Appendix</u> .
05/09/2019	COST Academy: Leadership Workshop. COST Association – Brussels Headquarters - Belgium
	Leadership workshop meant to prepare for leadership positions within the COST European program. Invite-only training event (see Projects section below for further information).
Since March 2018	Appointed Fellow ( <b>cultore della materia</b> ) of Dept. of Chemistry "Ugo Schiff", University of Florence, for General and Inorganic Chemistry ( <b>SSD CHIM/03</b> ).
01/11/2014 - 23/02/2018	<b>Ph.D.</b> in Inorganic and Supramolecular Chemistry. Department of Chemistry "Ugo Schiff", University of Florence
	Ph.D has been obtained with <b>*real* full honours</b> and with the additional award of the EU supranational title of " <b>Doctor Europaeus</b> ". Refer to <u>Appendix</u> for further information.
	Thesis title: "Polyfunctional Receptors for Ionic Species: Theoretical and Applicative Aspects".
	Ph.D. Supervisor: Prof. A. Bianchi
05/03/2016 - 21/07/2016	<b>Visiting</b> Ph.D. student in the Supramolecular Chemistry Group, Institute of Molecular Science ICMol, <b>University of Valencia</b> , Spain. Local supervisor: Prof. E. García-España (cf. <u>Appendix</u> )
30/04/2014 - 30/07/2014	"Perfezionando" student at Department of Chemistry "Ugo Schiff", University of Florence. post-Master's Degree training/research student position.
	Supervisor: Prof. A. Bianchi
September 2011 –29/04/2014	Master's Degree in Chemical Sciences. Grade: 110/110 cum laude
	Average exams' grade: 30.0/30.0
	Institution: University of Florence
31/01/2014 – 16/03/2014	<b>Visiting</b> student in the research group of Prof. R. Lopez-Gárzon, <b>University of Jaén</b> , Spain. (cf. <u>Appendix</u> )
September 2007 – 20/04/2011	Bachelor's Degree in Chemistry. Grade 110/110 cum laude
	Average exam's grade: 29.1/30.0
	Institution: University of Florence
September 2002 – June 2007	High-school Diploma. Grade: 100/100



PERSONAL SKILLS						
Mother tongue(s)	Italian					
Other language(s)	UNDERSTANDING		SPEAKING		WRITING	
	Listening	Reading	Spoken interaction	Spoken production		
English	C1/C2	C1/C2	C1/C2	C1/C2	C1/C2	
		ty of Cambridge ESC	L Examinations: C1 (20	06), B2 (2005), B1 (2004	,	
Deutsch	B1	B1 Go	B1 bethe Institut: B1 (2007)	B1	B1	
Español	B1	B1	B1	B1	A1	
	I have been studying/working in Spain for about 8 months					
	Levels: A1/A2: Basic user - Common European Frame			er		
Communication skills	Good communication collaboration and perior lectures at conference	ods abroad. Public	talking skills develop			
Organisational / managerial skills	Able to handle a chen as done by training Ba				king responsibilities,	
Job-related skills	Main Research Area	S				
	I have a diverse set of interests and capabilities, listed below in no particular order (publication numbers refer to the list on the CV). In broad terms, I can say I am fascinated by chemical equilibrium and molecular structure, with particular emphasis on supramolecular and metallic complexes. a) <u>Cation Coordination Chemistry</u>					
	Synthesis and characterization of ligands intended as metal cation-binders (mostly polyamines). Mechanistic elucidation of binding phenomena, solution thermodynamics, determination of equilibrium constants and partitioning in entropic/enthalpic contributions (potentiometry, ITC, UV-VIS, fluorescence, NMR).					
	Crystallization of "sma elucidation of interacti	ons in play.		·	) CSD depositions),	
	Cf. publications 3, 4, 1	, , , , ,	, , , , ,	gands or metal comple		
	We have been deve complexes to all ma graphene nanoplatele BET). Purposes include	loping a modular nners of graphitic ts). Characterizatio	functionalization stra surfaces (activated on of obtained surface	ategy for attaching lig I carbon, carbon na	gands and/or metal notubes, graphene,	
	Surface decoration of in organic (Sonogash catalysis.	graphitic surfaces ira cross coupling	with designed metal ) and electrochemic	al (cathodic, oxygen		
	Characterization of the Cf. publications 10, 15	•		es		
				ccies from aqueous solution		
	means from their reco from ores or recovery	very/removal. This	phitic surfaces with designed ligands for anions/cations can provid al. This might meet application both in remediation, metal extraction metals from wastes.			
	Cf. publication 2,12.					
	<ul> <li>c) <u>Anion Coorc</u> Synthesis and charac</li> <li>Mechanistic elucidatic constants and partition NMR).</li> </ul>	on of binding pheno	omena, solution therr	nodynamics, determi	nation of equilibrium	
	тянун <i>т</i> у.					



Crystallization of "small molecule" complexes, XRD structure determination (> 50 CSD depositions), elucidation of interactions in play.

Cf. publications 1, 2, 5-9, 13, 14, 16, 20, 21, 25, 26.

## d) <u>Anion-π interactions</u>

I have been working on the topic several years now (cf. publications 1, 7-9, 13, 14, 16, 20, 21), also providing some well-known insights (cf. publication 1, *J. Am. Chem. Soc.* **2013**, 60+ citations).

Our work with *s*-tetrazine based receptor was particularly well received and is summarized in a popular *Coord. Chem. Rev.* (publication 21, 2019, 31 citations).

I was invited to give a keynote lecture on the topic in a national conference (Supramol 2022) Cf. publications 2, 4, 12.

### e) Investigation of "problematic" solution equilibria

Skilled in the determination of stability constants in "problematic" systems including: very low stability constants (cf. anion coordination chemistry section), very high stability constants, high number of simultaneous equilibria, highly hydrolysable cations (e.g. Zr(IV)).

Cf. publications 1,11,19, 27, 30, 37.

I am also involved into development of best-practice protocols for stability constant determination within the NECTAR COST action.

### f) Solution thermodynamics for metals in medicine.

Thermodynamic data are mandatory for drug safety. Oftentimes some of these systems fall into the "problematic" solution equilibria category and require special attention (for Zr(IV) cf. publications 19, 30, 37). Partly for this reason, one of target standard procedures under development within the NECTAR COST action is for potentiometric determination of protonation/metal binding properties of DOTA.

g) <u>Polyiodides</u>

Polyiodides are among my favourite anions.

As an inorganic chemist passioned about supramolecular chemistry, it is a wonderful opportunity to contrast bonding theories and current understanding of supramolecular forces, especially in borderline cases. Of relevance, electronic properties of polyiodide networks depend crucially on their structure, rendering evaluation of supramolecular forces even more relevant in terms of structure-properties relationship, which affect the solid in terms of material properties.

In this niche (and nice) topic I made it to the side bar of Scifinder, listing the most prolific authors for the "polyiodide" keyword. (cf. publications 8, 17, 23, 25, 31, 36, 38, 40 among the others)

I have also produced on my own a quite popular perspective/review on the topic (publication 34, 2021, 14 citations).

This has won me a spot among the finalists of Premio Primo Levi 2021, the most prestigious prize offered by the Italian Chemical Society (SCI) to its young fellows. My work has received the mention for most popular video at Primo Levi prize award ceremony.

Also, I had the chance to explore other techniques relevant to polyiodides (e.g. Raman spectroscopy). h) Molecular recognition and sensing

Elucidation of the interplay of supramolecular forces (salt-bridge, H-bond,  $\pi$ - $\pi$  stacking, anion- $\pi$ ) in selective recognition, in search of selectivity criteria or selective signalling of target species.

The work expands to unsaturated metal centres and their ability to accept further donors, especially for what concerns fluorescent sensing of anions.

Cf. publications 16, 24, 41

# i) In silico work

I perform Hirshfeld surface analysis of crystal structures and have contributed to the recognition of intermolecular forces from fingerprint plots. (cf. publications 25,26,29). Computation of relevant descriptors (e.g., ESP) onto the Hirshfeld surface itself or breaking down of crystal packing into so-called energy framework is also among my interests.

I recently expanded Hirshfeld methodology, generally intended for small molecules, to meaningfully address regions of interest in macromolecular crystal structures (e.g. complexes of small molecule ligands with G-quadruplex DNA) (cf. publication 44).

I also like working on large datasets (e.g. CSD/PDB surveys) and producing 2D/3D plots to support or put in a statistical perspective trends or peculiar instances found in crystal structures (cf. publications 21, 29, 34, 39, 40).

When the focus of the work is on solution species and no structural data is available, we resorted to in silico modelling.

Other skills Proficient in using computers as partially attested by the ECDL certification (2005)

Driving licence B



**ADDITIONAL INFORMATION** 

**Publications** 

Metrics as of June 2023: 48 Papers in Scopus, H index = 16, ≈620 Citations 7 Cover Articles (Inorg. Chem., Chem. Eur.-J., Dalton Trans., Molecules) 2 HOT Articles (Dalton. Trans.) Number of Citations reported for papers with >10 Citations Pyrene-Containing Polyamines as Fluorescent Receptors for Recognition of PFOA in Aqueous 48 Media Y. T. Simonini Steiner, G. M. Romano, L.Massai, M. Lippi, P. Paoli, P. Rossi, M. Savastano, A. Bencini Molecules 2023, 28(11), 4552 47. Evaluation of coumarin-tagged deferoxamine as a Zr(IV)-based PET/fluorescence dual imaging probe G. M. Romano, V. Zizi, G. Salvatore, R. Bani, M. Mangoni, S. Nistri, G. Anichini, Y. T. Simonini Steiner, D. Bani, A. Bianchi, A. Bencini, M. Savastano J. Inorg. Biochem., 2023, 245, 112259 46. Anion Coordination into Ligand Clefts M. Savastano, C. Cappanni, C., Bazzicalupi, C., Lofrumento, A. Bianchi Crystals, 2023, 13(5), 823 45. Inorganic anion recognition in aqueous solution by coupling nearby highly hydrophilic and hydrophobic moieties in a macrocyclic receptor G.M. Romano, M. Savastano, C. Bazzicalupi R. Chelli, V. Lippolis, A. Bencini Dalton Trans., 2023, 52(19), pp. 6457-6472 44. Probing the Efficiency of 13-Pyridylalkyl Berberine Derivatives to Human Telomeric G-Quadruplexes Binding: Spectroscopic, Solid State and In Silico Analysis. C. Bazzicalupi, A. Bonardi, T. Biver, M. Ferraroni, F. Papi, M. Savastano, P. Lombardi, P. Gratteri Int. J. Mol. Sci. 2022, 23(22), 14061; https://doi.org/10.3390/ijms232214061 IF 6.208 43. Non-covalent assembly and catalytic activity of new hybrid materials based on Pd complexes adsorbed on multi-walled carbon nanotubes, graphene and graphene nanoplatelets. A.M. Valbuena-Rus, M. Savastano, P. Arranz-Mascarós, C. Bazzicalupi, M.P. Clares, M.L. Godino -Salido, M.D. Gutiérrez-Valero, M. Inclán, A. Bianchi, E. García-España, R. López-Garzón. Inorganic Chemistry 2022, 61, 32, 12610-12624 IF 5.436 42. Magnetic Field Effect on the Handedness of Electrodeposited Heusler Alloy W. Giurlani, M. Vizza, F. Pizzetti, M. Bonechi, M. Savastano, L. Sorace, A. Stefani, C. Fontanesi, M. Innocenti Appl. Sci. 2022, 12(11), 5640 IF 2.679 41. Polyamine receptors containing anthracene as fluorescent probes for ketoprofen in H<sub>2</sub>O/EtOH solution G.M. Romano, L. Mummolo, M. Savastano, P. Paoli, P. Rossi, L. Prodi, A. Bencini ChemCommun 2022, 58, 7022-7025 IF 6.222 40. Novel Cyclen-Polyiodide Complexes: A Reappraisal of I-I Covalent and Secondary Bond Limits M. Savastano, C. Bazzicalupi and A. Bianchi Dalton Transactions 2022, Advance Article, DOI: 10.1039/D2DT00185C Invited contribution in the "New Talents Europe - 2022" Special Issue

Chosen as Dalton's quarterly HOT article. IF 4.390



 Supramolecular interaction of inositol phosphates with Cu(II): comparative study InsP<sub>6</sub>-InsP<sub>3</sub>
 Description of Comparative Study InsP<sub>6</sub>-

D. Quiñone, N. Veiga, M. Savastano, J. Torres, A. Bianchi, C.Kremer and C. Bazzicalupi *CrystEngComm* **2022**, *24*(11), 2126–2137 IF 3.545

- Bidimensional Polyiodide Netting Stabilized by a Cu(II) Macrocyclic Complex. Savastano, M.; Monini, V.; Bazzicalupi, C.; Bianchi, A. *Inorganics* 2022, 10, 12. <u>https://doi.org/10.3390/inorganics10010012</u> IF 3.149
- Metal Coordination Properties of a Chromophoric Desferrioxamine (DFO) Derivative: Insight on the Coordination Stoichiometry and Thermodynamic Stability of Zr<sup>4+</sup> Complexes. Savastano, M.; Boscaro, F.; Bianchi, A. Molecules 2022, 27, 184. <u>https://doi.org/10.3390/molecules27010184</u> IF 4.412
- Assembly of Polyiodide Networks with Cu(II) Complexes of Pyridinol-Based Tetraaza Macrocycles
   Á. Martínez-Camarena, M. Savastano, S. Blasco, E. Delgado-Pinar, C. Giorgi, A. Bianchi, E. García-España, and C. Bazzicalupi *Inorg. Chem.* 2022, *61*, 1, 368–383
   IF 5.165
- 35. On the oxygen reduction reaction mechanism catalyzed by pd complexes on 2d carbon. A <u>theoretical study</u> Bonechi, M.; Giurlani, W.; Vizza, M.; Savastano, M.; Stefani, A.; Bianchi, A.; Fontanesi, C.; Innocenti, M. *Catalysts* **2021**, 11, 764. <u>https://doi.org/10.3390/catal11070764</u> IF 4.146
- 34. Words in Supramolecular Chemistry: the Ineffable Advances of Polyiodide Chemistry M. Savastano Dalton Transactions, 2021, 50(4), pp. 1142–1165. Cover Article. Chosen as Dalton's quarterly HOT article. Finalist for "SCI Premio Primo Levi 2021". Awardee for most popular video in the Primo Levi prize competition at MYCS2022 conference, November 2022, Rimini, Italy IF 4.390, 14 Citations
- Linear, Tripodal, Macrocyclic: Ligand Geometry and ORR Activity of Supported Pd(II) Complexes
   M. Savastano, M. Passaponti, W. Giurlani, L. Lari, N. Calisi, E. Delgado-Pinar, E. Salvador-Serrano, E. García-España, M. Innocenti, V. K. Lazarov, A. Bianchi, *Inorganica Chimica Acta*, 2021, 518, 120250
   IF 2.545
- Multi-walled carbon nanotubes supported Pd(II) complexes: A supramolecular approach towards single-ion oxygen reduction reaction catalysts
   M. Savastano, M. Passaponti, W. Giurlani, L. Lari, A. Bianchi, M. Innocenti Energies, 2020, 13(21), 5539
   IF 2.702
- Stabilization of polyiodide networks with Cu (II)-complexes of small methylated polyazacyclophanes: shifting directional control from H-bonds to I…I interactions Á. Martínez-Camarena, M. Savastano, J. Miguel Llinares, B. Verdejo, A. Bianchi, E. García-España, C. Bazzicalupi *Inorg. Chem. Front.*, **2020**, 7(21), pp. 4239–4255. IF 5.958



- Comment on "Investigation of Zr(IV) and <sup>89</sup>Zr (IV) complexation with hydroxamates: progress towards designing a better chelator than desferrioxamine B for immuno-PET imaging" by F. Guérard, Y.-S. Lee, R. Tripier, LP Szajek, JR Deschamps and MW Brechbiel, Chem. Commun., 2013, 49, 1002 A. Bianchi, M. Savastano Chem. Commun., 2020, 56(83), pp. 12664–12666 IF 5.996
- Stabilisation of exotic tribromide (Br<sub>3</sub>) anions via supramolecular interaction with a tosylated macrocyclic pyridinophane. A serendipitous case.
   Á. Martínez-Camarena, M. Savastano, C. Bazzicalupi, A. Bianchi, E. García-España *Molecules* 2020, *25*, 3155. Cover Article of Molecules.
   IF 3.267
- Synthesis and coordination properties of a new ligand designed for surface functionalization of carbon substrates M. Savastano, C. Zoppi, A. Bianchi, C. Bazzicalupi. *Inorg. Chim. Acta* 2020, 511, 119793. IF 2.433
- myo-inositol hexakisphosphate: Coordinative versatility of a natural product C. Kremer, J. Torres, A. Bianchi, M. Savastano, C. Bazzicalupi. *Coord. Chem. Rev.* 2020, 419, 213403. IF 13.476, 11 Citations
- 26. Porous Frameworks Based on Supramolecular Ball Joints: Bringing Flexibility to Ordered <u>3D Lattices</u>
  M. Savastano, C. Bazzicalupi, A. Bianchi. *Chem. Eur. J.* 2020, 26, 5994. Cover Article of Chemistry A European Journal IF 5.16
- <u>Genesis of complex polyiodide networks: Insights on the blue box/I<sup>-</sup>/I<sub>2</sub> ternary system</u> M. Savastano, C. Bazzicalupi, C. Gellini, A. Bianchi. *Crystals* **2020**, *10*(5), 387. IF 2.061, 13 Citations
- 24. Sensing Zn<sup>2+</sup> in aqueous solution with a fluorescent scorpiand macrocyclic ligand decorated with an anthracene bearing tail.
   M. Savastano, M. Fiaschi, G. Ferraro, P. Gratteri, P. Mariani, A. Bianchi, C. Bazzicalupi. *Molecules* 2020, *25*, 1355. Collection: Exclusive Feature Papers in Inorganic Chemistry IF 3.060, 13 Citations
- Infinite supramolecular pseudo-polyrotaxane with poly[3]catenane axle: assembling nanosized rings from mono- and diatomic l<sup>-</sup> and l<sub>2</sub> tectons
   M. Savastano, C. Bazzicalupi, C. Gellini, A. Bianchi Chem. Commun. 2020, 2020,56, 551-554.
   IF 6.164, 13 Citations
- A new heterogeneous catalyst obtained via supramolecular decoration of graphene with a <u>Pd2+ azamacrocyclic complex.</u>
   M. Savastano, P. Arranz-Mascarós, M. Paz Clares, R. Cuesta, M. L. Godino-Salido, L. Guijarro, M. D. Gutiérrez-Valero, M. Inclán, A. Bianchi, E. García-España, and R. López-Garzón *Molecules* 2019, *24(15)*, 2714. Cover article of Molecules. IF 3.098, 13 Citations
- Anion-π and lone pair-π interactions with s-tetrazine-based ligands
   M. Savastano, C. García, M. D. López de la Torre, C. Bazzicalupi, A. Bianchi and M. Melguizo
   *Coord. Chem. Rev.* 2019, *397*, 112-137
   IF 13.476, 37 Citations



- Solid State and Solution Study on the Formation of Inorganic Anion Complexes with a Series of Tetrazine-Based Ligands M. Savastano, C. García, C. Giorgi, P. Gratteri, M. D. López de la Torre, C. Bazzicalupi, A. Bianchi and M. Melguizo *Molecules* 2019, 24(12), 2247. Cover article of Molecules. IF 3.098
- <u>Tales of the Unexpected: The Case of Zirconium(IV) Complexes with Desferrioxamine</u> M. Savastano, C. Bazzicalupi, G. Ferraro, E. Fratini, P. Gratteri and A. Bianchi *Molecules* **2019**, *24*(11), 2098 IF 3.098, 16 Citations
- <u>Recycling of Waste Automobile Tires: Transforming Char in Oxygen Reduction Reaction</u> <u>Catalysts for Alkaline Fuel cells</u>
   M. Passaponti; L. Rosi; M. Savastano; W. Giurlani; H. A. Miller; A. Lavacchi; J. Filippi; G. Zangari; F. Vizza; M. Innocenti
   *J. Power Sources* 2019, 427, 85-90
   IF 6.945, 25 Citations
- <u>Stabilization of Supramolecular Networks of Polyiodides with Protonated Small Tetra-azacyclophanes</u>
   M. Savastano, A. Martínez-Camarena, C. Bazzicalupi, E. Delgado-Pinar, J. M. Llinares, P. Mariani, B. Verdejo, E. García-España and A. Bianchi *Inorganics* **2019**, *7*(4), 48
   20 Citations
- Supramolecular forces and their interplay in stabilizing complexes of organic anions: tuning binding selectivity in water.
   M. Savastano, C. Bazzicalupi, C. García-Gallarín, M. D. López de la Torre, A. Bianchi, M. Melguizo
   Org. Chem. Front., 2019, 6, 75-86.
   IF 5.455, 17 Citations
- <u>MWCNTs-Supported Pd(II) Complexes with High Catalytic Efficiency in Oxygen Reduction</u> <u>Reaction in Alkaline Media.</u>
   M. Passaponti, M. Savastano, M.P. Clares, M. Inclán, A. Lavacchi, A. Bianchi, E. García-España and M. Innocenti *Inorg. Chem.*, **2018**, *57* (23), 14484–14488. Cover article of Inorganic Chemistry. IF 4.700, 17 Citations
- <u>Network Formation via Anion Coordination: Crystal Structures Based on the Interplay of Non-Covalent Interactions.</u>
   M. Savastano, C. Bazzicalupi, P. Mariani and A. Bianchi *Molecules*, **2018**, *23*(3), 572.
   IF 3.098
- <u>Halide and Hydroxide Anions Binding in Water.</u>
   M. Savastano, C. García, M. D. López de la Torre, F. Pichierri, C. Bazzicalupi, C. Giorgi, A. Bianchi and M. Melguizo *Dalton Transactions*, **2018**, *47*, 3329-3338. IF 4.099, 20 Citations
- Polyfunctional Tetraaza-Macrocyclic Ligands: Zn(II), Cu(II) Binding and Formation of <u>Hybrid Materials with Multiwalled Carbon Nanotubes.</u>
   M. Savastano, P. Arranz-Mascarós, C. Bazzicalupi, M. P. Clares, M. L. Godino-Salido, L. Guijarro, M. D. Gutíerrez-Valero, A. Bianchi, E. García-España and R. Lopez-Garzón *ACS Omega*, **2017**, *2* (7), 3868-3877. 18 Citations



- <u>Cation, Anion and Ion-Pair Complexes with a G-3 Poly(ethylene imine) Dendrimer in Aqueous Solution.</u>
   M. Savastano, C. Bazzicalupi, C. Giorgi, P. Gratteri and A. Bianchi *Molecules*, **2017**, *22* (5), 816.
   IF 2.861
- Construction of Green Nanostructured Heterogeneous Catalysts via Non-Covalent Surface Decoration of Multi-Walled Carbon Nanotubes with Pd(II) Complexes of Azamacrocycles. M. Savastano, P. Arranz-Mascarós, C. Bazzicalupi, M. P. Clares, M. L. Godino-Salido, M. D. Gutíerrez-Valero, M. Inclán, A. Bianchi, E. García-España and R. Lopez-Garzón *J. Catal.*, 2017, 353, 239-249. IF 6.844, 22 Citations
- 9. Interplay between salt bridge, hydrogen bond and anion-π interactions in thiocyanate binding.
  M. Savastano, C. García, M. D. López de la Torre, F. Pichierri, C. Bazzicalupi, A. Bianchi, M. Melguizo *Inorg. Chim. Acta*, **2017**, *470*, 133-138.
  IF 2.002, 21 Citations
- <u>Iodide and triiodide anion complexes involving anion-π interactions with a tetrazine-based receptor.</u>
   M. Savastano, C. Bazzicalupi, C. García, C. Gellini, M. D. López de la Torre, P. Mariani, F. Pichierri, A. Bianchi and M. Melguizo
   *Dalton Trans.*, 2017, 46, 4518-4529. Cover article of Dalton Transactions.
   IF 4.029, 50 Citations
- Anion Complexes with Tetrazine-Based Ligands: Formation of Strong Anion-π Interactions in Solution and in the Solid State.
   M. Savastano, C. Bazzicalupi, C. Giorgi, C. García-Gallarín, M. D. López de la Torre, F. Pichierri, A. Bianchi and M. Melguizo *Inorg. Chem.*, **2016**, *55* (16), 8013–8024.
   IF 4.820, 39 Citations
- <u>Complessi Anione-π.</u> Matteo Savastano La Chimica & L'Industria, Gennaio-Febbraio 2016 (official journal of the Italian Chemical Society SCI)
- <u>ATP dephosphorylation can be either enhanced or inhibited by pH-controlled interaction</u> with a dendrimer molecule.
   C. Bazzicalupi, A. Bianchi, C. Giorgi, M. Savastano, F. Morales-Lara *Chem. Comm.*, **2015**, *51*, 3907-3910.
   IF 6.384
- Inorganic Mercury Sequestration by a Poly(ethylene imine) Dendrimer in Aqueous Solution.
  E. Salvador-Serrano, M. Savastano, A. Bianchi *Molecules*, **2015**, *20*, 3783-3790.
  IF 2.416
- Formation of double-strand dimetallic helicates with a terpyridine-based macrocycle.
   C. Bazzicalupi, A. Bianchi, T. Biver, C. Giorgi, S. Santarelli, M. Savastano Inorg. Chem., 2014, 12215-12224.
   IF 4.762, 22 Citations



- Binding and removal of octahedral, tetrahedral, square planar and linear anions in water by means of activated carbon functionalized with a pyrimidine-based receptor.
   P. Arranz-Mascarós, C. Bazzicalupi, A. Bianchi, C. Giorgi, M.L. Godino-Salido, M.D. Gutiérrez-Valero, R. López-Garzón, M. Savastano *RSC Adv.*, **2014**, *4*, 58505-58513.
   IF 3.840, 25 Citations
- <u>Thermodynamics of Anion-π Interactions in Aqueous Solution.</u>
   P. Arranz-Mascarós, C. Bazzicalupi, A. Bianchi, C. Giorgi, M.L. Godino-Salido, M.D. Gutiérrez-Valero, R. López-Garzón, M. Savastano
   *J. Am. Chem. Soc.*, **2013**, *135* (1), 102–105.
   IF 11.444, 62 Citations

### Projects

# Electra Synchrotron

Synchrotron XRD session for the characterization of small-molecule/DNA complexes Proposal: 20215897 (Dec 2021). Proposer: Carla Bazzicalupi.

Title: "Structural characterization of c-Kit1 DNA quadruplex complexed with the natural alkaloid Berberine"

Role: Participant. Please refer to publication 44 about the type of conducted study.

<u>COST Action CA18202 – Network for Equilibria and Chemical Thermodynamics Advanced</u> <u>Research (NECTAR)</u>

# Status: started

COST (European Cooperation in Science and Technology) are official worldwide research networks funded by EU (more information at <a href="https://www.cost.eu/">https://www.cost.eu/</a>)

Roles I have occupied within the CA18202 so far:

- 1. Second Proposer of the Action
- 2. Leadership training in Brussels (organized by COST)
- 3. Participation in international conferences (see below)
- 4. Member of working groups 1 (highly hydrolysable and/or low-valence state metal cations), 2 (strong and/or multifunctional ligands, macromolecules, polyelectrolytes) and 3 (formerly) (multicomponent solutions and complex matrices) of the Action.
- Participation in the NECTAR/ISMEC SOLvE International Training School on the Determination, Analysis and Use of Thermodynamic Data (25-27 July 2022, info at <u>https://www.cost-nectar.eu/pages/1st\_ts.html</u>) as lecturer for the ITC technique

In the frame of the NECTAR COST action I dealt with revision of available literature material about hydrolysis of metal cations and developed (or working towards it) standard recommended procedures, built with international inter-laboratory exercises, for accurate and rigorous determination of stability constants of metal complexes and/or supramolecular adducts via potentiometry and ITC techniques.

# Attended COST NECTAR official meetings:

- 3. Valencia (Spain) (June 2022)
- 2. Spring online meeting (March 2021)
- 1. Belgrade (Serbia) (March 2020)

# POR CREO FESR - Project EL.PLA. - 2019

# Status: closed

Academia-Industry knowledge transfer project founded by European Regional Development Fund (ERDF) (Fondo Europeo di Sviluppo Regionale, FESR, in Italian) through the Progetto Operativo Regionale (POR, Operative Regional Project) of the Tuscany region.

This project led by Prof. Massimo Innocenti (Dept. of Chemistry "Ugo Schiff", University of Florence, Italy) is devoted in assisting a Tuscan company (Eco-Tech Finish srl) in the development of a galvanic electrodeposition process of platinum alloys.

I participated in the project as active staff member on the Academia's side.



# POR CREO FESR – Project Oroplac 4.0 – 2019

# Status: closed

Academia-Industry knowledge transfer project founded by European Regional Development Fund (ERDF) (Fondo Europeo di Sviluppo Regionale, FESR, in Italian) through the Progetto Operativo Regionale (POR, Operative Regional Project) of the Tuscany region.

This project led by Prof. Massimo Innocenti (Dept. of Chemistry "Ugo Schiff", University of Florence, Italy) is devoted in assisting a Tuscan company (Oroplac srl) both in the development of low-cost Bluetooth sensors for the monitoring of galvanic wastewaters and in establishing commercial relationships with high-fashion brands, according to the innovative vocation of the company itself in view of its fruitful exchange with a scholarly setting.

I participated in the project as active staff member on the Academia's side.

# PRIN 2015 - Project 2015MP34H3: Multiple equilibria in natural and biological fluids: from speciation to selective sequestering

# Status: closed

MIUR (Italian Ministry of Education, Universities and Research) founded project within the PRIN (Projects of Relevant National Interest) founding framework. The funding is now over (covering 2015-2018).

I participated in this project as part of the research staff (global published papers: 46; of which 11 are co-authored by myself).

Conferences, Lectures, Seminars

# Organized Conferences:

ISMEC 2018 – June 2018 – Florence (Italy)
 I have been part of the Organizing Committee of the 45<sup>th</sup> edition of this prestigious conference, featuring over 130 participants from 19 different Countries.

# Invited Lectures:

- Invited Lecture for the Ph.D. Program University of Jaén May 2023 Jaén (Spain) Lecture Title: Polyiodides and I<sup>--</sup>I interactions: from history and nomenclature towards supramolecular structures
- Invited Oral Contribution Humboldt Kolleg Montevideo 2022 November 2022 Montevideo (Uruguay) – International Conference Lecture Title: Renewable energy and endangered elements: fuelling vehicles and challenges in catalysis
- Keynote Lecture Supramol2022 June 2022 Salerno (Italy) National Conference Lecture Title: From Anions to Lone Pairs: Evidence, Relevance and Directionality of Pi Interactions
- Keynote Lecture ISMEC 2021 June 2021 Białystok (Poland) International Conference Lecture Title: Polyiodide Complexes: the thin line between coordination chemistry and crystal engineering.
- From Solution Chemistry to Nanomaterials: A Different Take on Nanostructures.
   28/11/2018 ICMol-University of Valencia Valencia (Spain)
   Event organised in within the Prometeo II 2015-002 Program (Generalitat Valenciana) (cf. Appendix)
- 1. <u>Award Lecture ISMEC 2015 June 2015 Wrocław (Poland) International Conference</u> Lecture Title: Thermodynamics of Anion-π Interactions (Pulidori Award, see Awards section)

# **Invited Seminars:**

 <u>I poliioduri nella chimica supramolecolare: dalle origini verso nuove architetture allo stato solido</u> 21/04/2021-Online-Host Institution: University of Cagliari (Italy)
 I had the pleasure to open the cycle of "Virtual Supramolecular Chemistry Seminars" organized by Italian Supramolecular Chemistry Group.



 Supramolecular Forces: From Theory to Toolbox 14/03/2019 – ICCOM-CNR – Florence (Italy) 13<sup>th</sup> quarterly joint seminar between the Dept. of Chemistry "Ugo Shiff" and the ICCOM-CNR research centers

# **Oral Communications:**

- ISMEC 2022 June 2022 Valencia (Spain) International Conference Communication Title: A Simple Tripodal Ligand for Surface Decoration of Carbon-based Materials with Pd(II) Catalytic Centres
- <u>Supramolecular Chemistry Days for Young Researchers October 2021 Online International</u> <u>Conference</u> Communication Title: Lone Pair-π Bonding and Bombing.
- NECTAR (CA 18202) Spring Web Meeting March 2021 Online International Conference Communication Title: Strong complexes bearing labile ligands: challenges in catalysis with supported metal complexes.
- NECTAR (CA 18202) First Conference March 2020 Belgrade (Serbia) International Conference Communication title: Complexes of Organic Anions with Tetrazine-based Ligands in Water or How Multifaceted Equilibria Can Arise from Apparently Simple Systems.
- <u>ISMEC 2019 June 2019 Debrecen (Hungary) International Conference</u> Communication title: Decorating Graphitic Surfaces with Pd(II) Complexes: Towards Discrete Metal Ion Catalytic Sites.
- Supramol2019 June 2019 Lecce (Italy) National Conference Communication title: Electrical Conductivity Criteria in Polyiodides Networks: Stunning Architectures in the Solid State.
- <u>Advanced Workshop on Solution Chemistry of TCEs January 2019 Byałistok (Poland)</u> Communication title: Presumption of Innocence and Solution Chemistry. Event organized and financed in the framework of COST action TD 1407. TCEs = Technologically Critical Elements.
- 3. <u>XLVI National Congress on Inorganic Chemistry September 2018 Bologna National Conference</u> Communication title: Painting the Blue Box violet. *I have been awarded the Dalton Transactions Best Oral Presentation Award.*
- Supramol2017 June 2017 S. Margherita di Pula (Italy) National Conference Communication title: Macrocyclic Complexes as Surface Functionalities for CNTs: Pd(II) Catalysis. I have been awarded the Best Oral Presentation Award by the Scientific Committee.
- 1. <u>ISMEC 2016 June 2016 Barcelona (Spain) International Conference</u> Communication title: Halide Anion Complexes with a Tetrazine-based Ligand.

# Poster Presentations:

- ISMEC 2023 June 2023 Urbino (Italy) International Conference Poster title: Ligand Denticity and Oxygen Reduction Reaction Activity of Pd(II) Macrocyclic Complexes: κ<sup>3</sup> vs κ<sup>4</sup>
- 6. <u>MYCS 2022 November 2022 Rimini (Italy) National Conference</u> Poster title: Polyiodides and supramolecular forces: what's in a name?
- <u>ISMSC 2019 June 2019 Lecce (Italy) International Conference</u> Poster title: From Discrete Crates to 3D Racks: Piling Blue Boxes with Iodide Anions
- 4. <u>ISMEC 2018 June 2018 Florence (Italy) International Conference</u> Poster title: Deferoxamine as Zr(IV) Chelator: the K to Understanding.



- 3. <u>ISMEC 2017 June 2017 Dijon (France) International Conference</u> Poster title: Effects of the Stereoelectronic Properties of Organic Anions on the Stability of their Anion  $\pi$  Complexes in Aqueous Solution.
- 2. <u>Supramol 2015 September 2015 Giardini Naxos (Italy) National Conference</u> Poster title: Iodide and Triiodide Anion Complexes with a Tetrazine-Based Ligand.
- <u>ISMEC 2015 June 2015 Wrocław (Poland) International Conference</u> Poster title: Metal Complexes of Multi-Walled Carbon Nanotubes Functionalized with Macrocyclic Ligands.

# Co-authored Conference Contributions (as non-presenting author):

- <u>ICCC 2022 August 2022 Rimini (Italy) International Conference</u> Oral communication Title: A Computational and Experimental Approach on the Design of Anion Receptors for PtCl<sub>6</sub><sup>2—</sup>Selectivity
- 9. <u>Supramol 2022 June 2022 Salerno (Italy) National Conference</u> Poster title: Metal complexes with a deferoxamine derivative containing a coumarin moiety as fluorescent probes for positron emission tomography
- 8. <u>EDNANO 14 June 2022 Krakow (Poland) International Conference</u> Poster title: New materials for Energy applications
- ISMEC 2022 June 2022 Valencia (Spain)– International Conference Poster title: Catalytic activity of new hybrid materials based on Pd complexes supported on multiwalled carbon nanotubes, graphene and graphene nanoplatelets.
- Supramolecular Chemistry Days for Young Researchers October 2021 Online International Conference Poster title: Polyamine receptors as fluorescent chemosensors for anti-inflammatory nonsteroidal drugs.
- <u>ISMEC 2021 June 2021 Białystok (Poland) International Conference</u> Poster title: Triamine receptors as fluorescent chemosensors for anti-inflammatory nonsteroidal drugs. The ketoprofen case.
- <u>GEI 2019 September 2019 Padova (Italy) National Conference</u> Poster title: Study of the Oxygen Reduction Reaction in Alkaline Media of Functionalized Carbon Nanotubes.
- ICSC 2018 August 2018 Szeged (Hungary) International Conference Poster title: Interactions of Polyamines with Phytate Polyanions.
- <u>ECHEMS 2017 June 2017 Milano Marittima (Italy) International Conference</u> Poster title: Evaluation by Rotating Ring-Disk Electrode Technique of the Catalytic Efficiency in ORR of Multi-Walled Carbon Nanotubes Functionalized with Pd(II)-Azamacrocycle Complexes.
- <u>GEI 2016 September 2016 Gargnano del Garda (Italy) National Conference</u> Poster title: Evaluation by Rotating Ring-Disk Electrode Technique of The Catalytic Efficiency of Functionalized Multi-Walled Carbon Nanotubes in O.R.R.

# Honours and awards

 <u>"The Most Popular Video" Mention at Primo Levi 2021 prize of the Italian Chemical Society (SCI)</u> for the best publication in Chemical Sciences by an Italian Researcher under 35 years of age. Presented work: M. Savastano, Words in Supramolecular Chemistry: the Ineffable Advances of Polyiodide Chemistry, *Dalton Transactions*, **2021**, 50(4), pp. 1142–1165. please see <u>Appendix</u> for the certification



- Finalist for the Primo Levi 2021 prize of the Italian Chemical Society (SCI) for the best publication in Chemical Sciences by an Italian Researcher under 35 years of age.
   Presented work: M. Savastano, Words in Supramolecular Chemistry: the Ineffable Advances of Polyiodide Chemistry, *Dalton Transactions*, **2021**, 50(4), pp. 1142–1165.
   please see Appendix for the certification
- <u>RSC Dalton Transactions: Inclusion in "New Talents Europe 2022"</u> Themed collection is about to be published, please find invitation letter in the <u>Appendix</u> and cf. publication 40 of the list.
- Wiki Science Competition 2019 Italian Winner Non-photographic Media Category Scientific/divulgation photo contest organized by Wikimedia/Wikipedia with scientific support from University of Tartu, Estonian Research Council, and Scuola Normale Superiore. I won the competition at the national level (first among Italians) and competed at the worldwide level. <u>https://commons.wikimedia.org/wiki/Commons:Wiki Science Competition 2019/Winners/Italy</u>
- Best Poster Award at GEI 2019 (as non-presenting author)
- ISMSC 2019 Participation Grant from SCI-Inorganic Chemistry Division June 2019
   ISMSC 2019 participation grant offered by SCI (Italian Chemical Society)-Inorganic Chemistry division to favour the participation of young researchers in such an international event (number of total available grants:1).
- <u>RSC Dalton Transactions: Best Oral Presentation at XLVI Inorganic Chemistry National Congress</u>
   <u>September 2018</u>

Award sponsored by RSC Dalton Transactions and bestowed by one of the journal's associate editors.

- Best Oral Presentation at Supramol2017- June 2017
- Fernando Pulidori International Prize June 2015 International prize for young scientists in the field of Coordination Chemistry.
   I have been awarded the 2015 prize by the Scientific Committee of International Symposium on Metal Complexes ISMEC 2015 in Wrocław (Poland).
   Awarded work: Thermodynamics of Anion-π Interactions, J. Am. Chem. Soc. 2013, 135 (1), 102–105 https://www.ismecgroup.org/pulidori-prize/
- Italian MIUR Ph.D. Grant October 2014
   First among the winners of the Ministerial Ph.D. Grants in Chemical Sciences (3 years) at the University of Florence (XXX Ciclo di Dottorato di Ricerca).

# Editorial Roles

Topic Editor of Crystals (MDPI) (IF 2.670)

Guest Editor of the MDPI Crystals Special Issue: "The Polyhedral Face of Coordination Chemistry" 5 Published Papers so far More information at: <u>https://www.mdpi.com/journal/crystals/special\_issues/2J2BV01564</u>

Co-editor of the Acta of the International Symposia on Metal Complexes 2018 (ISMEC 2018) (ISSN: 2239-2459) https://www.ismecgroup.org/ismec-acta/

Peer Review Activity I have been reviewing scientific papers since 2018, offering my expertise to international scientific journals. Journals I reviewed for include (alphabetical order):

- Analytical Methods (RSC)
- Applied Sciences (MDPI)
- Catalysts (MDPI)



- Chemical Papers (Springer Nature)
- Chemistry A European Journal (Wiley)
- Crystals (MDPI)
- Dalton Transactions (RSC)
- Journal of Molecular Structure (Elsevier)
- Journal of Physical Organic Chemistry (Wiley)
- Journal of Physical Chemistry (ACS)
- Journal of Raman Spectroscopy (Wiley)
- Molecules (MDPI)
- Nanoscale (RSC)
- New Journal of Chemistry (RSC)
- Physical Chemistry Chemical Physics (RSC)
- RSC Advances (RSC)
- Sensors (MDPI)
- Supramolecular Chemistry (T&F)

Papers reviewed so far ≈ 50. See <u>Appendix</u> for further details. Publons profile: <u>https://publons.com/researcher/1513521/matteo-savastano</u>

Teaching/Faculty Activities

# University of Florence, Bachelor's Degree in Chemical Sciences:

# Member of the examination board of the following courses:

Inorganic Chemistry I	(since A.Y. 2017/18)
Inorganic Chemistry Laboratory I	(since A.Y. 2017/18)

# Bachelor's Thesis Co-Advisor:

Number of students: 7

Students: Matteo Fiaschi, Giuseppe Vicidomini, Valeria Monini, Niccolò Borghi, Carlotta Cappanni Ilaria Maggini, Tommaso Materassi

# University of Florence, Master's Degree in Chemical Sciences:

**2023 – Planned lecture (2 hours)** within the **Structural Chemistry course** Lecture title: An Introduction to Hirshfeld Surfaces

2022 – Cycle of 3 lectures (6 hours) within the Supramolecular Chemistry course 2021 – Cycle of 3 lectures (6 hours) within the Supramolecular Chemistry course 2020 – Cycle of 3 lectures (6 hours) within the Supramolecular Chemistry course 2019 – Cycle of 2 lectures (4 hours) within the Supramolecular Chemistry course 2018 – Cycle of 3 lectures (6 hours) within the Supramolecular Chemistry course

Member of the examination board of the following courses: Supramolecular Chemistry (since A.Y. 2017/18)

Master's Thesis Co-Advisor: Number of Students: 1 Students: Francesco Bartoli

# University of Florence, Ph.D. in Chemical Sciences:

Co-supervisor of a Ph.D. Candidate: Pietro Gentilesca (XXXVIII Cycle)

Courses Held:

February 2021: Anion coordination chemistry fundamentals (8 hours course)



September 2020: Anion coordination chemistry fundamentals (8 hours course)

# University of Valencia (Spain), Ph.D. in Chemistry:

November 2018: ITC technique for Supramolecular Chemistry (2 hours lesson) (cf. <u>Appendix</u>)

# COST NECTAR/ISMEC SOLvE International Training School, Ph.D./Postdoc level 2022 – Lecturer for the ITC technique

More info at: https://www.cost-nectar.eu/pages/2nd ts.html

# University of Jaén (Spain), Ph.D. in Chemistry

May 2023 – Lecturer for Ph.D. program Lecture title: Polyiodides and I-I interactions: from history and nomenclature towards supramolecular structures

# University of Florence, Department of Chemistry "Ugo Schiff"

Appointed Fellow (Cultore della materia) for General and Inorganic Chemistry (SSD CHIM/03) since March 2018.

**In-lab tutoring/counselling for students' internship for bachelor's or master's degree**. Average internship duration: 6 months Total number of assisted students: 8 Bachelor's, 1 Master's

In-lab tutoring/counselling for international students' internship within the Erasmus program. Average internship duration: 6 months Number of assisted students: 1 (Álvaro Corrochano Fernández)

I have served as member of Bachelor's and Master's Thesis examination panel.

# University of Florence, Department of Industrial Engineering

Appointed Fellow (Cultore della materia) for Principles of Chemistry for Applied Technologies (SSD CHIM/07) since February 2022.

# ANNEXES

Most information herein contained can be verified simply by checking the following online resources:

ORCID: https://orcid.org/0000-0002-9780-7542 Scopus: https://www.scopus.com/authid/detail.uri?authorId=55551068500 Publons: https://publons.com/researcher/1513521/matteo-savastano/ Flore: https://flore.unifi.it/browse?type=author&authority=rp08019&authority\_lang=en#.YTthVFUzbIU Google Scholar: https://scholar.google.com/citations?user=AFDYN2YAAAAJ&hl=it Web of Science: ResearcherID S-8503-2019 COST Nectar: https://cost-nectar.eu/







COMMISSIONE GIUDICATRICE ESAME FINALE PER IL CONSEGUIMENTO DEL TITOLO DI DOTTORE DI RICERCA IN SCIENZE CHIMICHE E RILASCIO DELLA CERTIFICAZIONE AGGIUNTIVA DI DOCTOR EUROPAEUS

### Allegato n. 1

Il Dott. Matteo Savastano ha discusso la tesi di Dottorato dal titolo: Polyfunctional Receptors for Ionic Species: Theoretical and Applicative Aspects

La presentazione e la discussione (o parte della discussione) della tesi si è svolta in lingua inglese. Le ricerche oggetto della tesi sono estremamente originali e rilevanti per la comunità scientifica, anche sulla base del giudizi analitici sulla tesi redatti dai due valutatori.

Le metodologie appaiono appropriate ed innovative. I risultati sono interessanti ed analizzati con eccellente senso critico. Nel colloquio il candidato dimostra ottima conoscenza delle problematiche trattate. Il candidato risulta in possesso dei requisiti richiesti di cui all'art. 27 del Regolamento dell'Università di Firenze in materia di Dottorato, per il rilascio della certificazione aggiuntiva di Doctor Europaeus (vedi documenti allegati). A tal fine si allegano i documenti che costituiscono parte integrante del presente verbale.

La Commissione unanime giudica eccellente il lavoro svolto e propone che al Dott. Matteo Savastano venga conferito il titolo di Dottore di Ricerca (Ph.D) e venga rilasciata la certificazione aggiuntiva di Doctor Europaeus. Tenuto conto dell'elevata originalità e della forte rilevanza per la comunità scientifica, la Commissione, con voto unanime, decide di assegnare la lode. LA COMMISSIONE:

Presidente P Membro P Membro Pr Segretario Pr

Prof. Enrique Garcia-Espana Prof. Enzo Alessio Prof. Stefano Mangani Prof. Mario Piccioli

Sesto Fiorentino, 23 Febbraio 2018

Appendix 1 Evaluation of Ph.D. Thesis and granted titles



# VNIVERSITAT & Institut de Ciència Molecular

Valencia July 7th, 2016

To whom it may concern,

This is to CERTIFY that Dr. Matteo Savastano has performed a 5 month stage in our Laboratory of Supramolecular Chemistry of the Institute of Molecular Sciences at the University of Valencia. During this time Dr. Savastano has synthesized new pyrimidone containing azamacrocycles and has studied their coordination chemistry with several metal ions and anions. The work carried out by Dr. Savastano has been highly satisfactory and several research articles on this topic will be likely appearing in the next months. Therefore, I am glad to inform very satisfactorily about his stage in Valencia.

Yours Sincerely

6

Enrique García-España Instituto de Ciencia Molecular Universidad de Valencia Apdo Correos 22085 46071 Valencia Spain

Edificio de Institutos de Paterna Polígono la Coma, s/n 46980 PATERNA



Apartado de correos 22085 46071 Valencia TELÉFONO (96) 354 44 15 FAX (96) 354 32 73

Appendix 2 Certificate of 2016 stay in Valencia





Appendix 3 Certificate of 2014 stay in Jaén Jaén 10<sup>th</sup> March, 2014

To whom it may concern, This is to cortify that Dr. I

This is to certify that Dr. Matteo Savastano has been performing a 2 months stage in our group of the Department of Inorganic and Organic Chemistry at University of Jaén. During his period, Dr. Savastano has been working towards his Ms. Thesis performing supramolecular functionalization of carbon nanotubes with azamacrocyclic ligands for catalytical and metal-ion recovery purposes.

The stage has been successful both in terms of results and in expanding Dr. Savastano preparation, resulting in a satisfactory experience.

The performed studies yielded significant results, which are likely to appear briefly in the literature in the form of research articles.

Yours Sincerely,

ARRANZ MASCAROS PALOMA -51336427J Fecha: 2021.09.01 11:49:11 +02'00'

Paloma Arranz Mascarós, <u>parranz@uiaen.es</u>, tel.:953212696 Profesora Titular de Universidad Edificio Ciencias Experimentales y de la Salud B3 Campus Las Lagunillas, s/n - 23071 - Jaén

UJA.es



# VNIVERSITAT 🖗 Institut 🕫 Ciència Molecular

Valencia July 5th, 2022

To WHOM it may concern,

This to certificate that Dr. Matteo Savastano from the University of Florence came to Valencia from November 27<sup>th</sup> to November 30<sup>th</sup> 2018 to release a didactic lecture addressed to third year students of the Degree in Chemistry within the topic of Inorganic Chemistry. The lecture was entitled. "From Solution Chemistry to Nanomaterials: A Different Take on Nanostructures." and it was delivered November the 28<sup>th</sup>, 2018. The day after Dr. Savastano gave a two hours course for PhD students on Calorimetric Techniques applied to determining thermodynamic parameters in complex solution equilibria.

ENRIQUE VICTOR NEW CONSTRUCTION OF THE ADDRESS OF T

Enrique García-España Monsonis Professor of Inorganic Chemistry Institute of Molecular Sciences Department of Inorganic Chemistry University of Valencia

Edificio de Institutos de Paterna Polígono la Coma, s/n 46980 Paterna



Apartado de correos 22085 46071 Valencia TELÉFONO (96) 354 44 15 FAX (96) 354 32 73

Appendix 4 Certificate of 2018 stay in Valencia (Conference plus lecture for Ph.D. students)





# ATTESTATO



Roma, 16 giugno 2022

Appendix 5 Primo Levi Prize 2021 Certificate Il Consiglio Direttivo del Gruppo Giovani della Società Chimica Italiana, seguito dalla valutazione comparativa delle candidature pervenute per il **Premio Primo Levi 2021**, é lieto di comunicare che la pubblicazione "**Words in supramolecular chemistry: the ineffable advances of polyiodide chemistry**" (Dalton Trans. 50 (2021) 1142) a cura di

# Matteo SAVASTANO

risulta tra i migliori 10 articoli su rivista internazionale pubblicati nell'anno 2021, nell'ambito delle Scienze Chimiche, da scienziati under-35 membri della Società Chimica Italiana.

Il Premio Primo Levi è il più importante riconoscimento nazionale conferito nell'ambito delle Scienze Chimiche a giovani ricercatori.

Tale pubblicazione ed il suo autore accedono alla seconda fase di valutazione, operata da una giuria che include senior scientists in attività presso centri di ricerca e università al di fuori dei confini nazionali.

Master Da Ria

Marta Da Pian, Ph.D. Coordinatrice – Gruppo Giovani della Società Chimica Italiana Elsevier B.V. Radarweg 29, 1043 NX, Amsterdam, The Netherlands E-mail: marta.dapian@gmail.com



Dear Dr Savastano,

It is our pleasure to invite you to submit an article to the **New Talent: Europe** themed issue of *Dalton Transactions*.

This themed issue will focus on all areas of inorganic chemistry which encompasses the organometallic, bioinorganic and materials chemistry of the elements, with applications including synthesis, catalysis, energy conversion/storage, electrical devices and medicine. This themed issue ultimately aims to reflect the strength and vitality of inorganic chemistry in Europe.

As an emerging researcher in the field, we would be delighted if you would be willing to contribute to this themed issue. All types of manuscript will be considered for publication – Communications, Full Papers, Frontiers and Perspectives. Please refer to our <u>Author</u> <u>guidelines</u> for more information about these article types. Articles will be subject to the usual peer-review procedures of the journal and, if accepted, will be published online in a citeable form as soon as they are ready. The full issue will be published in mid-2022.

Please let us know if you plan to submit an article by replying to this email (<u>dalton-rsc@rsc.org</u>). We will then provide you with a personalised submission link for you to upload your manuscript.

# The submission deadline is February 25<sup>th</sup>, 2022.

We very much hope that you can contribute to this issue and look forward to hearing from you.

Kind regards,

Professor Russell Morris, Editorial Board Chair, Professor Paola Ceroni, Associate Editor, Professor Maarit Karppinen, Associate Editor, Dr Andrew Shore, Executive Editor



www.rsc.org

Appendix 6 RSC Dalton Transactions' invitation to publish in the "New Talent: Europe" 2022 Themed Collection



	You are accessing a free vie	w of the Web of Science	Learn Mo
author ProfileAuthor Profile	2		
	Savastano, Matteo University of Florence Web of Science ResearcherID: 5-8503-20	19	
Published names Organizations	Savastano, Matteo Savastano, M. 2015-2022 Dept Chem Ugo Schiff 2013-2022 University of Florence 2018-2018 Consorzio Sviluppo Sist	emi Grande Interfase CSGI	
Subject Categories Other Identifiers	Chemistry; Biochemistry & Molecular Chemistry; Biochemistry & Molecular https://orcid.org/0000-0002-9780	Biology; Materials Science; Crystallogr I-7542	aphy; Energy & Fuels
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16 Catalysts		44 Total documents	
14 Dalton Transaction	ons		ore Collection publications
3 Crystals		0 Preprint 49 Verified peer reviews	
3 Sensors		0 Verified editor rec	
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https://www.webofscience.com/wos/author/record/428663

Appendix 7 Publons' – now WOS – (partial) list of peer-review activity





SEGRETARIATO GENERALE Direzione generale delle istituzioni della formazione superiore

N: 828

Gent.le Matteo SAVASTANO E-Mail: matteo.savastano@unifi.it

OGGETTO: ASN 2021/2023 - Attestazione di avvenuto conseguimento dell'Abilitazione Scientifica Nazionale alle funzioni di professore universitario di Seconda Fascia nel Settore Concorsuale 03/B1 - FONDAMENTI DELLE SCIENZE CHIMICHE E SISTEMI INORGANICI.

Con la presente si attesta che Matteo SAVASTANO, nato a Firenze (FI) il giorno 23/07/1988, ha conseguito, all'esito delle procedure di Abilitazione Scientifica Nazionale bandite con decreto direttoriale n. 553/2021 come rettificato con decreto direttoriale n. 589/2021, l'Abilitazione Scientifica Nazionale alle funzioni di professore universitario di seconda fascia nel Settore Concorsuale 03/B1 - FONDAMENTI DELLE SCIENZE CHIMICHE E SISTEMI INORGANICI.

La validità dell'Abilitazione è di nove anni a decorrere dal 01/02/2022 e avrà scadenza il 01/02/2031<sup>1</sup>.

Roma, 01/02/2022

La Dirigente Dott.ssa Maria Giovanna Zilli<sup>2</sup>

'Gli elenchi dei candidati abilitati sono sempre consultabili sul sito https://abilitazione.miur.it, sezione "CANDIDATI E RISULTATI", cliccando sull'anno della tornata di interesse, link Risultati", Pirma autografa sostituita a mezzo stampa ai sensi e per gli effetti dell'art.3, c.2, D.Lgs n.30/93

> Il Responsabile del procedimento: La Dirigente Dott.ssa Maria Giovanna Zilli Ex DGFIS – Ufficio V "Coordinamento dello stato giurdico ed economico del personale universitario Via Michele Carcani, 61 – 00153 Roma – Tel. 06 9772 7057 email: dgfis.ufficio5@mur.gov.it – PEC: dgfis@postacert.istruzione.it

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Appendix 8 ASN SD 03/B1



Appendix 9 ASN SD 03/B2 **Curriculum Vitae** 



SEGRETARIATO GENERALE Direzione generale delle istituzioni della formazione superiore

N: 830

Gent.le Matteo SAVASTANO E-Mail: matteo.savastano@unifi.it

OGGETTO: ASN 2021/2023 - Attestazione di avvenuto conseguimento dell'Abilitazione Scientifica Nazionale alle funzioni di professore universitario di Seconda Fascia nel Settore Concorsuale 03/B2 - FONDAMENTI CHIMICI DELLE TECNOLOGIE.

Con la presente si attesta che Matteo SAVASTANO, nato a Firenze (FI) il giorno 23/07/1988, ha conseguito, all'esito delle procedure di Abilitazione Scientifica Nazionale bandite con decreto direttoriale n. 553/2021 come rettificato con decreto direttoriale n. 589/2021, l'Abilitazione Scientifica Nazionale alle funzioni di professore universitario di seconda fascia nel Settore Concorsuale 03/B2 - FONDAMENTI CHIMICI DELLE TECNOLOGIE.

La validità dell'Abilitazione è di nove anni a decorrere dal 31/01/2022 e avrà scadenza il 31/01/2031<sup>1</sup>.

Roma, 01/02/2022

La Dirigente Dott.ssa Maria Giovanna Zilli²

'Gli elenchi dei candidati abilitati sono sempre consultabili sul sito https://abilitazione.miur.it , sezione 'CANDIDATI E RISULTATI', cliccando sull'anno della tornata di interesse, link 'Risultati'.
'Firma autografia sostivuita a mezzo stampa ai sensi e per gli effetti dell'art.3, c.2, D.Lgs n.39/93

> Il Responsabile del procedimento: La Dirigente Dott.ssa Maria Giovanna Zilli Ex DGFIS – Ufficio V "Coordinamento dello stato giuridico ed economico del personale universitario Via Michele Carcani, 61 – 00158 Roma – Tel. 06 9772 7057 email: dgfis.ufficio5@mur.gov.it – PEC: dgfis@postacert.istruzione.it

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Please, do not hesitate to contact me for further information.

I hereby authorize the use and/or elaboration of my personal data, in accordance with European and Italian regulations.

Sesto Fiorentino, 07/06/2023

Matter Substero