



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) Raffaele Fontana
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Nationality Italian
Date of birth 28.02.1997
Gender M

Work experience

Dates	04/2023- 12/2023
Occupation or position held	Research assistant
Main activities and responsibilities	Synthesis and analysis of the catalytic activity of organonpictogen(III) alkoxides and aryloxides
Name and address of employer	Babeş-Bolyai University, M. Kogălniceanu no. 1, Cluj-Napoca, RO-400028
Type of business or sector	Teaching and research
Dates	04/2021- 06/2021
Occupation or position held	Trainee
Main activities and responsibilities	Synthesis and purification and antimicrobial evaluation of furanamides
Name and address of employer	Università degli Studi di Napoli 'Federico II' , Via Cintia, 21 - NAPOLI (NA) Italy
Type of business or sector	Teaching and research
Dates	11/2020- 5/2021
Occupation or position held	Organic chemistry tutor
Main activities and responsibilities	Lectures, seminars of organic chemistry
Name and address of employer	Università degli Studi di Napoli 'Federico II' , Via Cintia, 21 - NAPOLI (NA) Italy
Type of business or sector	Teaching and research
Dates	11/2017- 11/2018
Occupation or position held	Laboratory technician
Main activities and responsibilities	Didactic laboratory of organic chemistry for students
Name and address of employer	Università degli Studi di Napoli 'Federico II' , Via Cintia, 21 - NAPOLI (NA) Italy
Type of business or sector	Research

Education and training

Dates	10/2022 - present
Title of qualification awarded	PhD in organometallic chemistry (ongoing)
Principal subjects/occupational skills covered	Organobismuth(I) compounds- ligand for transition metal and application in catalysis
Name and type of organization providing education and training	Babeş-Bolyai University, M. Kogălniceanu no. 1, Cluj-Napoca, RO-400028
Level in national or international classification	8
Dates	09/2019 - 10/2021
Title of qualification awarded	MSc in Inorganic Chemistry
Principal subjects/occupational skills covered	Synthesis of ruthenium(II) complexes for mesoporous silica nanovectors Principal subjects/occupational skills covered
Name and type of organization providing education and training	Università degli Studi di Napoli 'Federico II' , Via Cintia, 21 - NAPOLI (NA) Italy
Level in national or international classification	7
Dates	10/2015 - 03/2019
Title of qualification awarded	BSc in Chemistry
Principal subjects/occupational skills covered	Phosphorescent iridium(III) complexes with Nature-inspired -diketone ligands: synthesis, structural characterization and optical properties
Name and type of organization providing education and training	Università degli Studi di Napoli 'Federico II' , Via Cintia, 21 - NAPOLI (NA) Italy
Level in national or international classification	6

Personal skills and competences

Research stays at:

- Technische universität Chemnitz (Germany) (2023, 3 months)
- Babeş-Bolyai University (Romania) (2022, 6 months)

Attended conferences and workshops

- Conferinta nationala de chimie 2022 editia XXXVI, Caciulata, Romania
- 4th Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE IV), Debrecen, Hungary
- XIV International school of organometallic chemistry, ISOC 2023, Camerino, Italy
- CoFRO - A workshop on organometallic, inorganic and coordination chemistry between France and Romania 2024, Rennes, France
- 11 Workshop of the Selenium and Sulfur Redox and Catalysis Network (WSeS-11), 2024, Torun, Poland
- Conferinta nationala de chimie 2024 editia XXXVII, Targoviste, Romania
- 5th Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE V), Cluj-Napoca, Romania
- 14th international symposium of the Romanian catalysis society (RomCat2025), 2025, Cluj-Napoca, Romania
- 12th Workshop of the Selenium and Sulfur Redox and Catalysis Network (WSeS-12), 2025, Jena, Germany
- XV International school of organometallic chemistry, ISOC 2025, Camerino, Italy

Awards

- **Best oral presentation** (4th Young Researchers' International Conference on Chemistry and Chemical Engineering (YRICCCE IV), Debrecen, Hungary). Title of the presented work: **Synthesis, characterization and evaluation of the catalytic properties of phosphine- and stibine-ligated cyclometalated palladium complexes**
- **Best oral presentation** (CoFRO - A workshop on organometallic, inorganic and coordination

chemistry between France and Romania 2024, Rennes, France) title of the presented work:
Study on the reactivity of an N,C-chelated cyclobismuthane in comparison with monomeric bismuthinidenes

Mother tongue(s)	Italian
Other language(s)	English, Romanian

Self-assessment <i>European level</i> (*)	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Romanian	C2	C2	C1	C1	B2

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences

Excellent and very good relationship with the other members of research staff of the Faculty and University, with colleagues from other research groups I collaborated abroad or with the members (undergraduate students, MSc and PhD students, or researchers) of my research group.

Technical skills and competences

Research interests:

Coordination and Organometallic Chemistry of Main Group Metals

- (i) Synthesis and characterization of low-valent main-group metal compounds
- (ii) Design and synthesis and catalytic activity of organic and organometallic compounds
- (iii) Design and synthesis of luminescent complexes for different applications (OLED, bio-imaging, cancer therapy)
- (iv) Organopnictogen compounds as ligands for transition metals
- (v) Synthesis and reactivity studies on main group compounds bearing metal-metal bonds

Computer skills and competences

MS Office, Graphics software (to a certain extent), Chemistry related software (software for various spectroscopic methods, drawing and editing software)