europass Curriculum Vitae

INFORMAŢII PERSONALE

Andrei-Alunel Patrascu

Bd. Timisoara, nr. 101N, bl. C1, et. 7, ap. 58, Bucuresti

0769282533

andrei_alunel@yahoo.com

Sexul Masculin | Data naşterii 07/05/1989 | Naţionalitatea română

EXPERIENŢA PROFESIONALĂ

03/2012–10/2014

Tehnician chimist

Proiect: PN-II-RU-TE-2011-3-0252 “Metallo-complexes with functionalised tripodal ligands as molecular recognition devices”. Coordonator de proiect: dr. Augustin Madalin Madalan, Facultatea de Chimie, Universitatea din Bucuresti.

06/2013–11/2013

Asistent de cercetare

Proiect: PN-II-RU-TE-2011-3-0126 “Molecular and supramolecular heterotrimetallic systems: towards a new generation of molecular magnetic materials”. Coordonator de proiect: dr. Diana-Beatrice Visinescu, Institutul de Chimie Fizica "Ilie Murgulescu" al Academiei Romane.

06/2015-05/2016

Asistent de cercetare

Proiect: “Síntese, caracterização e estudo de novos materiais magnéticos moleculares heterometálicos contend radicais orgânicos”. Coordonator de proiect: dr. Maria das Graças Fialho Vaz, Faculdade Federal Fluminense, Niteroi, Rio de Janeiro, Brazil

08/2017-01/2020

Asistent de cercetare

Proiect: PN-III-P4-ID-PCE-2016-0308-MOLMAGRAD. Coordonator de proiect: profesor Marius Andruh, Facultatea de Chimie, Universitatea din Bucuresti

01/2020-06/2023

Asistent de cercetare

INFLPR – Institutul National pentru Fizica Laserilor Plasmei si Radiatiei

07/2021-05/2022

Cercetător științific

Sara Pharm Solutions SRL

08/2022-prezent

Asistent de cercetare

Institutul de Chimie Organică și Supramoleculară „C. D. Nenițescu”

EDUCAŢIE ŞI FORMARE

2004–2008

Diploma de Bacalaureat

Liceul teoretic "Alexandru Ioan Cuza", Alexandria (România)

2008–2012

Diploma de Licenta

Facultatea de Chimie din cadrul Universitatii din Bucuresti, Bucuresti (România)

Titlul lucrarii de licenta: "Combinatii complexe heterobinucleare 3d-4f cu liganzi de tip baza Schiff"

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2012–2014

Diploma de Master

Master "Chemistry of Advanced Materials" al Facultatii de Chimie din cadrul Universitatii din Bucuresti, Bucuresti (România)

Titlul lucrarii de master: "Homo- and heteronuclear complexes with Schiff base ligands"

2014–Prezent

Doctorand la Departamentul de Chimie Anorganica al Facultatii de Chimie din cadrul Universitatii din Bucuresti, Bucuresti (România)
Titlul tezei de doctorat: "Combinații complexe heterotrispin"

COMPETENŢE PERSONALE

Limba(i) maternă(e): română

Alte limbi străine cunoscute

	ÎNȚELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversaţie	Discurs oral	
engleză	B2	B2	B2	B2	B2

Niveluri: A1/A2: Utilizator elementar - B1/B2: Utilizator independent - C1/C2: Utilizator experimentat
Cadrul european comun de referinţă pentru limbi străine

Competenţe dobândite la locul de muncă

Tehnici de cristalizare de noi compuși organici și a complecsilor de coordinare ai acestora.

Sinteza de compuși organici, liganzi organici și radicali organici stabili.

Sinteza complecsilor polinucleari (2p-3d, 2p-4f, 3d-4f, 2p-3d-4f și 3d-4f-5d);

Caracterizarea compușilor organici, complecsilor de coordinare prin diverse metode (FTIR, UV-VIS-NIR, XRD monocristal, XRD pulbere, RMN, TG/DSC, DSC).

Rafinarea structurii rezultate in urma difractiei de raze X pe monocristal prin programele WinGX și Olex 2.

Reprezentarea grafică a structurilor de difracție de raze X pe monocristal ale compusilor prin diverse programe (Diamant, Mercur).

Sinteza nanoparticulelor dopate cu lantanide luminiscente.

Caracterizarea nanoparticulelor luminiscente.

Screening-ul de polimorfi și săruri ale substanțelor farmaceutice active (API).

Competenţe informatice: Microsoft Office.

INFORMAŢII SUPLIMENTARE

Publicatii

h-index 7. Număr de citări: 235.

1. Andrei A. Patrascu, Sergiu Calancea, Rafael A. Allão Cassaro, Stéphane Soriano, Augustin M. Madalan, Catalin Maxim, Miguel A. Novak, Maria G. F. Vaz and Marius Andruh, One-dimensional coordination polymers constructed from binuclear 3d–4f nodes and isonicotinato spacer, CrystEngComm, 2016, 18, 4779.

2. Andrei A. Patrascu, Sergiu Calancea, Matteo Briganti, Stéphane Soriano, Augustin M. Madalan, Rafael A. Allao Cassaro, Andrea Caneschi, Federico Totti, Maria G. F. Vaz and Marius Andruh, A chimeric design of heterospin 2p–3d, 2p–4f, and 2p–3d–4f complexes using a novel family of paramagnetic dissymmetric compartmental ligands, Chem. Commun., 2017, 53, 6504.

3. Mihaela I. Mocanu, Andrei A. Patrascu, Augustin M. Madalan and Marius Andruh, New mixed ligand complexes resulting from the reaction of β-diketonato derivatives with Mannich base, Rev. Roum. Chim., 2018, 63, 545.

4. Andreea Valentina Țopîrlan, Andrei A. Patrascu, Alexandru Sava, Delia-Laura Popescu, Cristian Silvestru, Ionel Haiduc and Marius Andruh, Coordination polymers constructed from triorganotin(IV) nodes and fumarato spacers, J. Organomet. Chem., 2019, 882, 58.

5. Andrei A. Patrascu, Matteo Briganti, Stéphane Soriano, Sergiu Calancea, Rafael A. Allão Cassaro, Federico Totti, Maria G. F. Vaz and Marius Andruh, SMM behavior tuned by an exchange coupling LEGO® approach for chimeric compounds: First 2p-3d-4f hetero-tri-spin complexes with different metal ions bridged by one aminoxyl group, Inorg. Chem., 2019, 58, 19, 13090.

6. Mihaela I. Mocanu, Andrei A. Patrascu, Mihaela Hillebrand, Sergiu Shova, Francesc Lloret, Miguel Julve and Marius Andruh, Trinuclear Nickel(II) and Cobalt(II) Complexes Constructed from Mannich–Schiff-Base Ligands: Synthesis, Crystal Structures, and Magnetic Properties, Eur. J. Inorg. Chem. 2019, 4773.

7. Mihaela I. Mocanu, Andrei A. Patrascu, Sorana Ionescu and Marius Andruh, Heterometallic metallacyclophanes constructed from side-off bicompartmental ligands, Journal of Coordination Chemistry, 2020, 1-13.

8. Andrei A. Patrascu, Catalin Maxim, Marius Andruh, Construction of polynuclear copper(ii) complexes from mono- and binuclear modules, Revue Roumaine de Chimie, 2020, 65(6), 553–558.

9. Daniel Avram, Andrei A. Patrascu, Marian C. Istrate, Bogdan Cojocaru and Carmen Tiseanu, Lanthanide doped TiO2: Coexistence of discrete and continuous dopant distribution in anatase phase, Journal of Alloys and Compounds, 2021, 156849.

10. Mihaela Carnuta, Andrei A. Patrascu, Maria Anghelache, Catalin Maxim, Ileana Manduteanu, Manuela Calin, Delia L. Popescu, Synthesis, Characterization, and In Vitro Insulin-Mimetic Activity Evaluation of Valine Schiff Base Coordination Compounds of Oxidovanadium (V), Biomedicines, 2021, 9(5), 562.

11. Daniel Avram, Andrei A. Patrascu, Ioana Porosnicu, Carmen Tiseanu, Emission colour tuning of Mn, Yb, Er-NaGdF4 upconverting nanoparticles by energy density variation and pulse modulation, Optical Materials Express, 2022, 12(5), 1894.

12. Mihaela Turtoi, Maria Anghelache, Andrei A. Patrascu, Mariana Deleanu, Geanina Voicu, Mihai Raduca, Florentina Safciuc, Ileana Manduteanu, Manuela Calin, Delia L. Popescu, Antitumor Properties of a New Macrocyclic Tetranuclear Oxidovanadium (V) Complex with 3-Methoxysalicylidenvaline Ligand, Biomedicines, 2022, 10, 1217.

13. Daniel Avram, Ioana Porosnicu, Andrei A. Patrascu, Carmen Tiseanu, Real‐Time Thermal Imaging based on the Simultaneous Rise and Decay Luminescence Lifetime Thermometry, Adv. Photon. Res., 2022, 3, 2100208.

14. Daniel Avram, Andrei A. Patrascu, Marian C. Istrate, Carmen Tiseanu, Gd–Er interaction promotes NaGdF 4: Yb, Er as a new candidate for high-power density applications, J. Mat. Chem. C, 2023, 11, 10409.

15. Daniel Avram, Claudiu Colbea, Andrei A. Patrascu, Marian C. Istrate, Valentin Teodorescu, Carmen Tiseanu, Up-conversion emission in transition metal and lanthanide co-doped systems: dimer sensitization revisited, Sci. Rep., 2023, 13, 2165.

16. Andrei A. Patrascu, Cristina Tablet, Sorana Ionescu, Vlad Andrei Neacșu, Mihaela Hillebrand, Marius Andruh, Luminescent Mannich bases: Synthesis, crystal structures, and photophysical properties, J. Mol. Struct., 2025, 1322, 140370.

17. Halogen-bonded co-crystals of azulene-1-carboxaldehyde with perfluorinated diiodobenzenes Andreea Dogaru, Adrian. E. Ion, Aandrei A. Patrascu, Mihai Raduca, Gheorghe Duca, Marius Andruh, Simona Nica, Revue Roumaine de Chimie, 70(5-6), 279-286.

Conferinţe

1. Student Scientific Session, Bucharest 2012. Oral presentation: “Synthesis and Characterization of new CoII-LnIII heterodinuclear complexes” - Andrei A. Patrascu, Augustin M. Madalan and Marius Andruh.

2. 32th National Conference of Chemistry, Caciulata 2012. Poster session: “Heterodinuclear CoII-LnIII complexes with Schiff base ligands” - Andrei A. Patrascu, Augustin M. Madalan and Marius Andruh.

3. SBPMat XIV Brazilian MRS Meeting, Rio de Janeiro, Brazil, 27 September – 1 October 2015. Poster session: “Cobalt(II)-Lanthanide(III) Heterobinuclear Complexes: Synthesis, Crystal Structures and Magnetic Properties” - Andrei A. Patrascu, Mathieu Rouzières, Rodolphe Clérac, Catalin Maxim, Augustin M. Madalan, and Marius Andruh.

4. 42nd International Conference on Coordination Chemistry (ICCC 2016), Brest, France, 3-8 July 2016. Poster session: “Heterospin 3d-4f and 2p-3d-4f complexes. Synthesis, crystal structures and magnetic properties” - Andrei A. Patrascu, Sergiu Calancea, Rafael A. Allão Cassaro, Stéphane Soriano, Augustin M. Madalan, Catalin Maxim, Miguel A. Novak, Narcis Avarvari, Maria G. F. Vaz, and Marius Andruh.

5. Student Scientific Session, Bucharest, 26 May 2017. Oral presentation: “Chimeric design of heterospin 2p-3d, 2p-4f, and 2p-3d-4f complexes using a novel family of paramagnetic dissymmetric compartmental ligands” - Andrei A. Patrascu and Marius Andruh.

6. 6th Europen Conference on Molecular Magnetism (ECMM 2017), Bucharest, Romania, 27-31 August 2017. Oral session: “Rational design of heterospin 2p-3d, 2p-4f, and 2p-3d-4f complexes using a novel family of paramagnetic dissymmetric compartmental ligands” - Andrei A. Patrascu, Sergiu Calancea, Matteo Briganti, Stéphane Soriano, Augustin M. Madalan, Rafael A. Allão Cassaro, Andrea Caneschi, Federico Totti, Maria G. F. Vaz, and Marius Andruh.

7. Student Scientific Session, Bucharest, 25 May 2018. Oral presentation: “An original synthetic strategy leading to 2p-3d-4f heterotrispin complexes” - Andrei A. Patrascu and Marius Andruh.

8. 16th International Conference on Molecule-based Magnets – ICMM 2018, 1-5 September 2018. Poster session: “Heterotrimetallic Rhenium(IV)-3d-4f complexes” - Andrei A. Patrascu, Rafael A. Allão Cassaro, Stéphane Soriano, Ricardo González, Miguel A. Novak, Maria G. F. Vaz, Marius Andruh.

9. 35th National Conference of Chemistry, Caciulata 2018. Oral presentation: “Novel Heterotrispin Complexes” - Andrei A. Patrascu and Marius Andruh.

10. “Conferinta Nationala a Scolilor Doctorale din Consortiul Universitaria, Editia 1”, 31 October - 3 November, Iasi. Oral presentation: "Noi complecsi Hetero-trispin" - Andrei A. Patrascu, Marius Andruh.

11. 21st Romanian International Conference on Chemistry and Chemical Engeneering, Constanta, Mamaia, Romania, 4 - 7 September 2019 – “2p-3d-4f heterotrispin complexes with different metal ions bridged by one aminoxyl group” - Andrei A. Patrascu, Stéphane Soriano, Maria G. F. Vaz, Marius Andruh.

12. Simpozion – sesiune comemorativă Gheorghe Spacu – 140 de ani de la naștere, București, 2023, prezentare orală „Combinații complexe heterotrispin 2p-3d-4f cu radicali organici de tip nitronil nitroxid”, Andrei A. Patrascu, Marius Andruh,

13. Conferința tinerilor cercetători din şcolile de chimie bucureştene, București, 2024, prezentare orală „Combinații complexe heterotrispin 2p-3d-4f cu radicali organici de tip nitronil nitroxid”, Andrei A. Patrascu, Marius Andruh.

14. CoFRO 2024, Rennes, 2024, poster „Heterotrispin 2p-3d-4f complexes with nitronyl-nitroxide radicals”, Andrei A. Patrascu, Marius Andruh.