



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Cristian Sorin SILVESTRU**
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Nationality Romanian
Date of birth 08.12.1955
Gender M

Desired employment / Occupational field

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Work experience

Dates	October 1 st , 2023 - present
Occupation or position held	Emeritus Professor, Individual employment contract
Main activities and responsibilities	Lectures, seminars, research in inorganic and organometallic chemistry
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	1995 - September 30, 2023
Occupation or position held	Professor
Main activities and responsibilities	Lectures, seminars, research in inorganic and organometallic chemistry
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	1993-1995
Occupation or position held	Associate Professor (reader)
Main activities and responsibilities	Lectures, seminars and practical works, research in inorganic and organometallic chemistry
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	1990-1993
Occupation or position held	Lecturer
Main activities and responsibilities	Lectures, seminars and practical works, research in inorganic and organometallic chemistry
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	1989-1990
Occupation or position held	Scientific researcher in chemistry
Main activities and responsibilities	Research in inorganic and organometallic chemistry
Name and address of employer	Babeş-Bolyai University, M. Kogălniceanu no. 1, Cluj-Napoca, RO-400028
Type of business or sector	Research
Dates	1982-1989
Occupation or position held	Scientific researcher in chemistry
Main activities and responsibilities	Research on basis of contracts with industrial companies
Name and address of employer	Institute for Chemical and Biochemical Chemistry, Cluj-Napoca Branch, Babeş-Bolyai University, M. Kogălniceanu no. 1, Cluj-Napoca, RO-400028
Type of business or sector	Research
Dates	1980-1982
Occupation or position held	Chemist
Main activities and responsibilities	Laboratory analyses
Name and address of employer	“Aghireş” Mining company, Aghireş, Cluj county
Type of business or sector	Refractory sand and kaolin production, laboratory analyses

Education and training

Dates	Oct. 1985 – Apr. 1990
Title of qualification awarded	PhD in Chemistry
Principal subjects/occupational skills covered	Inorganic and organometallic chemistry
Name and type of organization providing education and training	Babeş–Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania
Level in national or international classification	6
Dates	Sept. 1979 – July 1980
Title of qualification awarded	MSc in Inorganic Chemistry
Principal subjects/occupational skills covered	Inorganic and organometallic chemistry
Name and type of organization providing education and training	Babeş–Bolyai University, Faculty of Chemistry and Chemical Engineering, Inorganic Chemistry Department, Cluj-Napoca, Romania
Level in national or international classification	6
Dates	Sept. 1975 – July 1979
Title of qualification awarded	BSc in Chemistry
Principal subjects/occupational skills covered	Chemistry
Name and type of organization providing education and training	Babeş–Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania
Level in national or international classification	5

Personal skills and competences

- Research stays at:
- Bremen Universität (Germany) (visiting professor – 1993, 3 months)
 - Vrije Universiteit Brussel (Belgium) (EC COST grant – 1993, 2 months)
 - Instituto de Quimica, Universidad Nacional Autonoma de Mexico (Mexico) (visiting professor – 1993-1995, 2 years)

- Oxford University (UK) (grant for International Journal Authors, Royal Society of Chemistry – 1999, 2 months)
- Bremen Universität (Germany) (DAAD fellowship – 2000, 2 months)
- Michigan State University (USA) (visiting research associate – 2000, 5 months)
- Universidad de Zaragoza (Spain) (NATO fellowship – 2004, 9 months)

Invited conferences at other Universities:

- Universidad Nacional Autonoma de Mexico, Ciudad de Mexico, D.F. (Mexico) (1994), Universidad Automoma de Puebla (Mexico) (1994), Universidad Autonoma Metropolitana, Ciudad de Mexico, D.F. (Mexico) (1994), Centro de Investigacion y de Estudios Avansados, Instituto Politecnico Nacional, Ciudad de Mexico, D.F. (Mexico) (1995), Technische Universität Braunschweig (Germany) (1996), Universidad de Zaragoza (Spain) (2002, 2009), Universidad de la Rioja, Logroño (Spain) (2002), Heidelberg Universität (Germany) (2006), Universtà degli studi di Cagliari (Italy) (2006, 2009, 2022), Bremen Universität (Germany) (2008, 2013), Jacobs University, Bremen (Germany) (2009, 2013, 2016), University of Ioannina (Greece) (2010), Grand Valley State University, Allendale, MI (USA) (2014), Brooklyn College, City University of New York (USA) (2015), Clarkson University, Postdam, NY (USA) (2015), University of Debrecen (Hungary) (2018), Université d'Angers (France) (2018), University of Calgary (Canada) (2018), Université de Rennes 1 (France) (2019), Technische Universität Chemnitz (Germany) (2019), Université de Rennes (France) (2023), Institutul de Chimie și Universitatea de Stat din Moldova, Chișinău (Republica Moldova) (2023), Universidade Federal Fluminense, Niteroi / Rio de Janeiro (Brasilia) (2024).
- Series of invited conferences in Germany (2010): Technische Universität Chemnitz; Ludwig-Maximilians-Universität München; *GAMBRINUS Lecture*, awarded by the Technische Universität Dortmund; Essen-Duisburg Universität.

Invited lectures (selection):

- “*Recent Developments in Organometallic Chemistry of Hypervalent Group 15 (Sb, Bi) Compounds*” – conferință invitată prezentată la Heidelberg Universität (Germany), Universtà degli studi di Cagliari (Italy) (2006).
- “*Organopnicogen Compounds (M = Sb, Bi) as Ligands in Transition Metal Chemistry*” – invited lecture presented at Bremen Universität (Germany) (2008).
- “*Recent Results in the Hypervalent Organometallic Chemistry - Organopnicogen Compounds (M = Sb, Bi) as Ligands in Transition Metal Chemistry*” – invited lecture presented at Universidad de Zaragoza (Spain), Jacobs University, Bremen (Germany), Universtà degli studi di Cagliari (Italy) (2009), University of Ioannina (Greece), Technische Universität Chemnitz, Essen-Duisburg Universität, *GAMBRINUS Lecture* at Technische Universität Dortmund (Germany) (2010).
- “*Hypercoordinated Organopnicogen (M = Sb, Bi) Compounds – Monomeric Species, Oligomers and Supramolecular Networks*” – invited lecture presented at Ludwig-Maximilians-Universität München (Germany) (2010).
- “*Main Group Organometallic Chemistry – Unusual Species and Metalloligands*” – invited lecture presented at Grand Valley State University, Allendale, MI (2014), Brooklyn College, City University of New York (USA) (2015).
- “*Chemistry and Chemical Engineering in Romania - Teaching and Research*” – invited lecture presented at Clarkson University, Postdam, NY (USA) (2015)
- “*Organometallic Compounds as Building Blocks for Supramolecular Architectures*” – invited lecture presented at Jacobs University, Bremen (Germany) (2016)
- “*Main Group Organometallics as Building Blocks for Coordination Polymers*” – invited lecture at Université d'Angers, Angers (France) (2018).
- “*Main Group Organometallics as Building Blocks for Coordination Polymers and Supramolecular Architectures*” – invited lecture at University of Calgary, Calgary (Canada), University of Debrecen, Debrecen (Hungary) (2018), Université de Rennes 1 (France) (2019).
- “*Hypercoordinated organopnicogen(III) (Sb,Bi) compounds - C-H bond activation and reactivity -*” – invited lecture at Universtà degli studi di Cagliari (Italy) (2022).
- *Main Group Organometallics as metalloligands for transition metals - discrete heterometallic species, coordination polymers and supramolecular architectures -* – invited lecture at Institute of Chemistry, Chișinău (Republica Moldova) (2023).
- *Hypercoordinated organopnicogens with Pn-E bonds (Pn = Sb, Bi; E = O, S, Se) – from unusual structures to potential uses -* – invited lecture at Institute of Chemistry Chimie și Universitatea de Stat din Moldova, Chișinău (Republica Moldova) (2023).
- *Main Group heavy metal compounds containing tetraorganoimidodichalcogenodiphosphinato ligands* – invited lecture at Université de Rennes (France) (2023).

- *Organometallic chemistry of heavy pnictogens – from molecular species to extended heterometallic structures* – conferință invitată prezentată la Bremen Universitat, Bremen (Germany) (2024).
- *Coordination and Organometallic Chemistry at the Faculty of Chemistry and Chemical Engineering, Babeș-Bolyai University of Cluj-Napoca* – conferință invitată prezentată la Universidade Federal Fluminense, Niteroi / Rio de Janeiro (Brazil) (2024).
- *Hypercoordinated organopnictogen(III) compounds containing Pn–E bonds (Pn = Sb, Bi; E = O, S, Se) – structures and reactivity -“ – invited lecture* at Universidade Federal Fluminense, Niteroi / Rio de Janeiro (Brasilia) (2024).

Mother tongue(s) Romanian

Other language(s) English, Spanish, French

Self-assessment

European level (*)

English

Spanish

French

	Understanding		Speaking		Writing	
	Listening	Reading	Spoken interaction	Spoken production		
English	C1	C2	C2	C1	C1	
Spanish	C1	C2	C2	C2	B2	
French	C1	C2	B2	B2	A2	

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

Social skills and competences

Excellent and very good relationship with the other members of the teaching and 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.

Organisational skills and competences

- PhD adviser in CHEMISTRY from 1999 (24 thesis defended to obtain the PhD degree)
- Co-director (with Prof. Dr. Ion Grosu) of the SUPRAMOLECULAR ORGANIC AND ORGANOMETALLIC CHEMISTRY CENTRE – SOOMCC (see WEB page: <https://www.chem.ubbcluj.ro/~ccsoom/>)
- Coordinator of the program dedicated to the foundation of the NATIONAL CENTRE FOR X-RAY DIFFRACTOMETRY (Faculty of Chemistry and Chemical Engineering, Babeș-Bolyai University, Cluj-Napoca), based on a MURC (Multi-User Research Centre - 1998-2001) grant offered by the World Bank through the Romanian Minister of Education and Research
- Coordinator of the activity on the basis of which 4 research labs were fully equipped to allow researches in organometallic synthesis, including works with air- and moisture-sensitive compounds, as well as other 3 teaching labs designed for inorganic, coordination and organometallic chemistry (see WEB page: <https://www.chem.ubbcluj.ro/~ccsoom/organometallic/index.html>)

Management Experience:

- Co-director of the project „*Hypervalenz*” (with Prof. Dr. Hans J. Breunig, Bremen Universitat, Germany), financed by Deutsches Forschungsgemeinschaft (2001 – 2003)
- Director of several multi-annual research projects obtained by competition through the National University Research Council, including World Bank grants, Romanian Academy, National Authority for Scientific Research, in the period 1995 – present
- Representative (together with Prof. Dr. Vasile Parvulescu) of Romania for Action CA15106 - „*CHAOS – C-H Activation in Organic Synthesis*” (2016-2019) within European Cooperation Program for Scientific and Technical Research (COST)
- Director and coordinator of the project “*Specific Techniques in the Investigation of Organometallic Compounds. Professional education and implementation strategies*” (RO/2004/PL93192/S), within the LEONARDO DA VINCI program of EU (2005-2006)
- Director of the NATIONAL CENTRE FOR X-RAY DIFFRACTOMETRY (Faculty of Chemistry and Chemical Engineering, Babeș-Bolyai University, Cluj-Napoca) (2001 – present)
- Vice-Dean of the Faculty of Chemistry and Chemical Engineering, Babeș-Bolyai University (1996 - 2000)
- Director of the Inorganic Chemistry Department, Faculty of Chemistry and Chemical Engineering (2011 - 2012)
- Director of the Chemistry Department, Faculty of Chemistry and Chemical Engineering (2012 - 2023)
- Member of the Working Group "University Administration and Finance" - UNIVERSITY PROJECT (March 10-14, 1997), at SALZBURG SEMINAR (Austria)

Technical skills and competences

- Member of the *National Committee of the National Olympiad for Chemistry* (2013 - present)
- Member of the *Committee for Mathematics and Life Sciences – The National University Research Council of Romania* (2006 - 2010)
- President of the *National Committee for Chemistry and Chemical Engineering / Panel 1 – Mathematics and Natural Sciences - CNATDCU* (2011 – 2012)
- Member of the *National Committee for Chemistry / Panel 1 – Mathematics and Natural Sciences - CNATDCU* (2016 - 2024)
- President of the *National Committee for Chemistry* (2020 - 2024) and member of the Panel 1 – Mathematics and Natural Sciences - CNATDCU (2020 - 2024)
- **Representative of Romanian Chemical Society in the Division of Organometallic Chemistry of European Chemical Sciences - EuCheMS** (2016 - present)

Research interests:

Coordination and Organometallic Chemistry of Main Group Metals and Metalloids - synthesis and structural characterization in solution and solid state as well as investigation of biological properties and potential applications (catalysis, CO₂ activation, material precursors):

- (i) antitumor activity of Main Group organometallic compounds (e.g. tin, antimony);
- (ii) organophosphorus(V) compounds as ligands in coordination chemistry of Main Group and transition metals;
- (iii) hypervalent [hypercoordinated] organometallic Main Group compounds containing organic groups with one or two pendant arms;
- (iv) supramolecular coordination and organometallic chemistry.

Publications:

- 2 books (co-author Prof. Dr. Ionel Haiduc)
- 9 book chapters
- 258 (Web of Science core Collection) of 263 publications indexed in Web of Science (more than 250 papers in ISI journals)

Hirsch index = 37

Sum of the Times Cited > 4900

Sum of the Times Cited without self-citations > 3980
(Web of Science – Clarivate Analytics – October, 2025)

<http://www.researcherid.com/rid/A-3832-2010>

Member of Romanian Society of Chemistry

Editorial activity:

- member of the Editorial Board of *Inorganics* (<https://www.mdpi.com/journal/inorganics/editors>)
- member of the Editorial Board of *Metal-Centered Chemistry* (<https://www.sciltp.com/journals/mcc/editorial-board>)
- Regional editor for Organometallic Chemistry at *Open Chemistry* (formerly *Central European Journal of Chemistry*) (2003-2014)
- member of the Editorial Board of *Revue Roumaine de Chimie* (<http://revroum.getion.ro/editorial-board>)
- member of the Editorial Board of *Studia Universitatis Babeș-Bolyai, Seria Chimia* (<http://chem.ubbcluj.ro/~studiachemia/>)

Referee for *Coordination Chemistry Reviews; Chemical Communications; Inorganic Chemistry; European Journal of Medicinal Chemistry; Dalton Transactions; Organometallics; Applied Organometallic Chemistry; Journal of Inorganic Biochemistry; RSC Advances; European Journal of Inorganic Chemistry; CrystEngComm; Chemistry (MDPI); Inorganics (MDPI); Inorganica Chimica Acta; Journal of Organometallic Chemistry; Polyhedron; Inorganic Chemistry Communications; Main Group Metal Chemistry, etc.*

Experience in thesis/projects for undergraduate/PhD/postdocs (including foreign) students:

- Coordinator of the research activity of four postdocs (one of them from abroad - Dr. Sevil Irisli, Turcia, with a NATO fellowship - 2004)
- Coordinator of the research activity of several foreign PhD students (Germany, Spain, Greece) within research stays financed through the project „**Homo and Hetero Metal-Metal Bond-Containing Organometallic Compounds - HOHEORGMET**” [Contract nr. 19 / 2006] (2006-2007)

Technical skills and competences

- Coordinator of the activity of several foreign undergraduate and PhD students as well as postdocs during research stays financed through research projects, ERASMUS or Fulbright fellowships:
 - Erik MICHAEL (2011) - Technische Universität Chemnitz (GERMANY); Frederic DUX (2015), Lucien BLANCHARD (2016), Virginie ROCHAT (2017), Alain HIRSCHI (2018), Sylvain ROSSET (2021) – University Fribourg (SWITZERLAND); Radu ANTON (2015) - Jacobs University, Bremen (GERMANY); Ho Anh TAI, Ngo Viet CUONG (2016) - Hanoi University of Science and Technology (VIETNAM); Andrea FARRIS, Laura MARONGIU (2017) - Università degli studi di Cagliari (ITALY), Louise ROGÉ – Université de Rouen (FRANCE), etc.
 - Drd. Ralf KATHER (2014) - Bremen Universität (GERMANY); Drds. Felix DANNENBERG, Lutz MERTENS (2015) - Technische Universität Chemnitz (GERMANY); Drd. Peng YANG (2015) - Jacobs University, Bremen (GERMANY)
 - Dr. John BENDER (Fulbright fellowship - 2013) - Grand Valley State University, Allendale (USA)
- Referee for the PhD theses defended by Carmen LARRAZ DUASO (2006 - PhD advisors: Prof. Dr. Antonio LAGUNA, Dr. M. Concepcion GIMENO) - Universidad de Zaragoza (SPAIN), Manuel MONTIEL ARGAIZ (2006 - PhD advisors: Prof. Eduardo FERNANDEZ, Prof. José María LOPEZ de LUZURIAGA), María RODRIGUEZ CASTILLO (2009 - PhD advisors: Prof. José María LOPEZ de LUZURIAGA, Prof. Miguel MONGE), Raquel C. PUELLES GONZALES (2009 - PhD advisors: Prof. José María LOPEZ de LUZURIAGA, Prof. Elena OLMOS) - Universidad de la Rioja, Logroño (SPAIN), Lourdes ORTEGO CANAVERAS (2011 - PhD advisors: Prof. Antonio LAGUNA, Prof. Dolores VILLACAMPA), Sara MONTANEL PEREZ (2014 - PhD advisors: Prof. Dolores VILLACAMPA, Prof. Antonio LAGUNA) - Universidad de Zaragoza (SPAIN), Peng YANG, Kai-Yao WANG (2016 - PhD advisor: Prof. Ulrich KORTZ) - Jacobs University, Bremen (GERMANY), Paranthaman VIJAYAN (2016 - PhD advisor: Prof. Periasamy VISWANATHAMURTHI) - Periyar University, Salem (INDIA).
- External evaluator of the PhD theses submitted for "Doctor Europeo" title by the PhD students Maria RODRIGUEZ CASTILLO (2009 - PhD advisors: Prof. Dr. José María LOPEZ de LUZURIAGA, Prof. Dr. Miguel MONGE), Raquel C. PUELLES GONZALES (2009 - PhD advisors: Prof. Dr. José María LOPEZ de LUZURIAGA, Prof. Dr. Elena OLMOS) - Universidad de la Rioja, Logroño (SPAIN); Jessica CAMARA CHUECA (2011 - PhD advisor: Prof. Antonio LAGUNA, Prof. Carmen BLANCO), Helen GOITIA SEMECO (2011 - PhD advisors: Dr. M. Concepcion GIMENO, Prof. Antonio LAGUNA), Renso Raul VISBAL ACEVEDO (2015 - PhD advisors: Dr. M. Concepcion GIMENO, Prof. Antonio LAGUNA), Alice JOHNSON (2017 - PhD advisor: Dr. M. Concepcion GIMENO) - Universidad de Zaragoza (SPAIN); Romina LAI (2016 - PhD advisor: Prof. Carla ARAGONI) - Università degli studi di Cagliari (ITALY); Rocio Donamaria SAEZ (2018 - PhD advisors: Prof. José María LOPEZ de LUZURIAGA, Prof. Elena OLMOS), Sonia Moreno INFANTES (2021 - PhD advisors: Prof. José María LOPEZ de LUZURIAGA, Prof. Elena OLMOS) - Universidad de La Rioja, Logroño (SPAIN).

Other skills and competences

- Corresponding Member of the Romanian Academy (2009)
- **Member of the Romanian Academy** (November 24th, 2017)
- **Member of the European Academy of Sciences and Arts, Salzburg, Austria** (October 11th, 2019)
- **Member of the European Academy of Sciences, A.I.S.B.L (EurASc), Brussels, Belgium** (July 13rd, 2021)
- "*Gh. Spacu*" Award of the Romanian Academy for studies on the antitumor properties of organometallic compounds (1992 - co-authors: Dr. Carmen Socaciu and Dr. Adela Bara)
- "*Grant for International Journal Authors*" from Royal Society of Chemistry (1999), provided for a visit at the Chemistry Department, Oxford University (UK) (Malcolm L. H. Green's research group)
- "*Senior al Cetății*" distinction, Cluj-Napoca, 2009
- "*Gambrinus Fellowship*" from Technische Universität Dortmund (Germany) (2010)
- "*Gh. Spacu*" Award of the Romanian Society of Chemistry, for the whole activity in the field of chemical sciences (2011 – International Year of Chemistry)
- "*Costin Nenitzescu – Rudolf Criegee Lecture*" awarded by German Chemical Society, GDCh (2025)

Annexes

Full List of publications – on request

Cluj Napoca
March 12, 2026

Acad. Cristian SILVESTRU

