



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

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|--------------------------------------|--|
| Dates | 1995-present |
| 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

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|--|--|
| 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), Centro de Investigacion y de Estudios Avansados, Instituto Politécnico Nacional, Ciudad de Mexico, D.F. (Mexico) (1995), Technische Universität Braunschweig (Germania) (1996), Universidad de Zaragoza (Spania) (2002, 2009), Universidad de la Rioja, Logroño (Spania) (2002), Heidelberg Universität (Germania) (2006), Universtà degli studi di Cagliari (Italia) (2006, 2009), Bremen Universität (Germania) (2008, 2013), Jacobs University, Bremen (Germania) (2009, 2013, 2016), University of Ioannina (Grecia) (2010), Grand Valley State University, Allendale, MI (SUA) (2014), Brooklyn College, City University of New York (SUA) (2015), Clarkson University, Postdam, NY (SUA) (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 (Germania) (2019).
- 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” – invited lecture presented at Heidelberg Universität (Germany), Università 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 (Germany), Università 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 (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).

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 | |
| C1 | C2 | C2 | C1 | C1 |
| C1 | C2 | C2 | C2 | B2 |
| 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 from 1999 (20 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 pages: <http://www.chem.ubbcluj.ro/~ccsoom/index.html>);
- Coordinator of the program dedicated to the foundation of the NATIONAL CENTRE FOR X-RAY DIFFRACTOMETRY (Faculty of Chemistry and Chemical Engineering, Babeş-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 3 research labs were fully equipped to allow researches in organometallic synthesis, including works with air- and moisture-sensitive compounds, as well as other 2 teaching labs designed for inorganic, coordination and organometallic chemistry (see WEB page: <http://www.chem.ubbcluj.ro/~ccsoom/organometallic/index.html>)

Management Experience:

- Co-director of the project „**Hypervalenz**” (with Prof. Dr. Hans J. Breunig, Bremen Universität, 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 – 2021
- Representative (together with Prof. Dr. Vasile Părvulescu) 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, Babeş-Bolyai University, Cluj-Napoca) (2001 – present)
- Vice-Dean of the Faculty of Chemistry and Chemical Engineering, Babeş-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 - present)
- Member of the Working Group "University Administration and Finance" - UNIVERSITY PROJECT (March 10-14, 1997), at SALZBURG SEMINAR (Austria)
- 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 - present)
- President of the *National Committee for Chemistry* (2020 - present) and member of the Panel 1 – Mathematics and Natural Sciences - CNATDCU (2020 - present)
- **Representative of Romanian Chemical Society in the Division of Organometallic Chemistry of European Chemical Sciences - EuCheMS (2016 - present)**

Technical skills and competences

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 applications (catalysis, CO₂ activation, material precursors):

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

Technical skills and competences

Publications:

- 2 books (co-author Prof. Dr. Ionel Haiduc)
 - 9 book chapters
 - 256 scientific articles (214 in foreign specialized journals, 42 in national journals – more than 246 papers in ISI journals)
- Hirsch index = 36
- Sum of the Times Cited = 4401
Sum of the Times Cited without self-citations = 3525
(Web of Science – Clarivate Analytics – October 27, 2022)

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

Technical skills and competences

Member of Romanian Society of Chemistry

Editorial activity:

- member of the Editorial Board of *Inorganics* (<https://www.mdpi.com/journal/inorganics/editors>)
- Regional editor for Organometallic Chemistry at *Open Chemistry* (formerly *Central European Journal of Chemistry*) (<http://www.degruyter.com/view/j/chem?rskey=AVIqGn&result=2>)
- member of the Editorial Board of *Revue Roumaine de Chimie* (<http://revroum.getion.ro/editorial-board>)
- member of the Editorial Board of *Studia Universitatis Babeş-Bolyai, Seria Chemia* (<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); 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)
- Coordinator of the activity of several foreign undergraduate and PhD students as well as postdocs during research stays financed through research projects, ERASMUS or Fullbright 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 (Fullbright fellowship - 2013) - Grand Valley State University, Allendale (USA)
- referee for the PhD theses defended by Manuel MONTIEL ARGAIZ (2006 - PhD advisors: Prof. Eduardo FERNANDEZ, Prof. José María LOPEZ de LUZURIAGA), Maria 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).

Computer skills and competences

- external evaluator of the PhD theses submitted for "Doctor Europeo" title by the PhD students 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) - Universtà 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

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

- Corresponding Member of the Romanian Academy (from 2009)
- **Member of the Romanian Academy** (from November 24th, 2017)
- **Member of the European Academy of Sciences and Arts, Salzburg, Austria** (from October 11th, 2019)
- **Member of the European Academy of Sciences, A.I.S.B.L (EurASc), Brussels, Belgium** (from 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)
- "Gh. Spacu" Award of the Romanian Society of Chemistry, for the whole activity in the field of chemical sciences (2011 – International Year of Chemistry)
- "Senior al Cetății" distinction, Cluj-Napoca, 2009
- *Grant for International Journal Authors*, Royal Society of Chemistry (1999) provided for a visit at the Chemistry Department, Oxford University (UK) (Malcolm L. H. Green's research group)
- *Gambrinus Fellowship*, Technische Universität Dortmund (Germany) (2010)

Additional information

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Annexes

Full List of publications – on request

Cluj Napoca

December 27, 2022

Acad. Cristian SILVESTRU

