

## CURRICULUM VITAE

**Nume și prenume:** Jurca Ciprian Bogdan

**Email:** bjurca@gw-chimie.math.unibuc.ro

**Locul și data nașterii:** Sibiu, 17.08.1974

**Studii:**

- Licență (Chimie Organică): Facultatea de Chimie, Universitatea din București.
- Master (Chimie Fizică-Organică): Universitatea București – Universitatea din Provence (Aix-Marseille I).
- Doctorat (Știința Materialelor): Universitatea Paris Sud (Paris XI).

**Titluri științifice:** doctor

**Poziția actuală:** lector

**Domenii de competență:**

- Chimie Fizică. CINETICĂ Chimică.
- Analiză termică. CINETICĂ neizotermă în sisteme eterogene solid-gaz. Modelarea computerizată a proceselor.
- Sinteză în stare solidă a oxizilor metalici micști.
- Difracție de raze X pe pulberi. Investigații structurale prin afinament Rietveld.
- Măsurători de moment magnetic și temperatură Curie cu ajutorul magnetometrelor SQUID.
- Măsurători de rezistivitate ale oxizilor micști (tehnica standard cu 4 contacte).
- Măsurători de magnetorezistență ale oxizilor micști la temperaturi joase și înalte pentru câmpuri magnetice slabe sau intense.

**Cursuri ținute:**

- Curs la disciplina "*Teoria Cinetico-Moleculară a Materiei și CINETICĂ Chimică*" (anul III-Chimie în limba franceză).
- Curs la disciplina "*Capitole Speciale de Chimie Fizică*" (anul IV-Chimie în limba franceză).
- Curs la disciplina "*Analiză Termică și CINETICĂ Neizotermă*" (anul II-Master "Materiale Moleculare" seria pre-Bologna și anul I-Master "Materiale Moleculare" seria Bologna).
- Curs la disciplina "*Fizico-Chimia Stării Solide*" (anul I-Master "Materiale Moleculare").
- Curs la disciplina "*Medicamente de Sinteză*" (anul I-Master "Chimie Terapeutică").

**Organizații profesional – științifice:** membru în Societatea de Chimie din România

## A. Articole în jurnale ISI:

1. - "Carbonic anhydrase inhibitors - Part 49: Synthesis of substituted ureido and thioureido derivatives of aromatic/heterocyclic sulfonamides with increased affinities for isozyme I"  
C. T. SUPURAN, A. SCOZZAFAVA, B. C. JURCA and M. A. ILIEȘ  
*Eur. J. Med. Chem.*, 33 (2), 83-93, (1998), DOI: 10.1016/S0223-5234(98)80033-0
2. - "UV-laser photoisomerization of fumaryl chloride. The first identification of maleoyl chloride: Matrix isolation, infrared and ab initio studies."  
N. PIETRI, B. JURCA, M. MONNIER, M. HILLEBRAND and J.P. AYCARD  
*Spectroch. Acta*, 56 (1), 157-165, (2000), DOI: 10.1016/S1386-1425(99)00129-8
3. - "Thermal and kinetic studies on the stability of some thioureido-sulfonamide derivatives"  
B. JURCA, I. SĂLĂGEANU and E. SEGAL  
*J. Therm. Anal. Cal.*, 62 (3), 845-858, (2000), DOI: 10.1023/A:1026798131113
4. - "Thermal and kinetic studies on the stability of some ureido-sulfonamide derivatives"  
B. JURCA, I. SĂLĂGEANU and E. SEGAL  
*J. Therm. Anal. Cal.*, 62 (1), 859-872, (2000), DOI: 10.1023/A:1026754315183
5. - "Thermal and kinetic studies on the stability of some sulfonamido compounds"  
B. JURCA, I. SĂLĂGEANU and E. SEGAL  
*Rev. Roum. Chim.*, 47 (3-4), 263-271, (2002)
6. - "Electronic self-doping of Mo-states in  $A_2FeMoO_6$  (A=Ca, Sr and Ba) half-metallic ferromagnets: A nuclear magnetic resonance study"  
M. WOJCIK, E. JEDRYKA, S. NADOLSKI, D. RUBI, C. FRONTERA, J. FONTCUBERTA, B. JURCA, N. DRAGOE and P. BERTHET  
*Phys. Rev. B.*, 71, 104410: 1-8 (2005), DOI: 10.1103/PhysRevB.71.104410
7. - "Nanoparticles of zinc compounds obtained by thermooxidative degradation"  
A. DUMBRAVĂ, B. JURCA, V. CIUPINĂ, E. SEGAL and M. BREZEANU  
*J. Thermal. Anal. Cal.*, 79 (3), 509-514, (2005), DOI: 10.1007/s10973-005-0570-4
8. - "Synthesis of cadmium complex sulfides nanoparticles by thermal decomposition"  
A. DUMBRAVĂ, V. CIUPINĂ, B. JURCA, G. PRODAN, E. SEGAL and M. BREZEANU  
*J. Thermal. Anal. Cal.*, 81 (2), 399-405, (2005) DOI: 10.1007/s10973-005-0799-y
9. - "Kinetic study of the thermal decomposition of some aromatic ortho-chlorinated azomonoethers. 1 Decomposition of 4-[(2-chlorobenzyl)oxi]-4'-trifluoromethyl-azobenzene"  
A. ROTARU, B. JURCA, A. MOANTA, I. SĂLĂGEANU and E. SEGAL  
*Rev. Roum. Chim.*, 51 (5), 373-378, (2006)
10. - "Mixed complex sulfides of cadmium and iron with *p*-diaminobenzene as ligand"  
A. DUMBRAVĂ, V. CIUPINĂ, B. JURCA, G. PRODAN and M. BREZEANU  
*Rev. Roum. Chim.*, 51 (9), 871-875, (2006)
11. - "Synthesis of nanosized bismuth ferrite ( $BiFeO_3$ ) by a combustion method starting from  $Fe(NO_3)_3 \cdot 9H_2O$ - $Bi(NO_3)_3 \cdot 9H_2O$ -glycine or urea systems "  
C. PARASCHIV, B. JURCA, A. IANCULESCU and O. CARP  
*J. Thermal. Anal. Cal.*, 94 (2), 411-416, (2008), DOI: 10.1007/s10973-008-9145-5

12. - "Influence of successive sintering treatments on high ordered  $\text{Sr}_2\text{FeMoO}_6$  double perovskite properties"  
B. JURCA, J. BERTHON, N. DRAGOE and P. BERTHET  
*J. Alloys Compd.*, 474 (1-2), 416-423, (2009), DOI: 10.1016/j.jallcom.2008.06.100
13. - "Constructing robust channel structures by packing metallacalixarenes: reversible single-crystal-to-single-crystal dehydration"  
C. D. ENE, A. M. MADALAN, C. MAXIM, B. JURCA, N. AVARVARI and M. ANDRUH  
*J. Am. Chem. Soc.*, 131 (13), 4586-4587, (2009), DOI: 10.1021/ja900416e
14. - "A Michael-type reaction between acrylate ions and ethylenediamine coordinated to Ni(II). Synthesis, crystal structure and magnetic properties of  $[\text{Ni}_2(\text{EDDP})_2(\text{H}_2\text{O})_2] \cdot 2\text{H}_2\text{O}$  ( $\text{H}_2\text{EDDP}$  = ethylenediamine-N,N-dipropionic acid)"  
M. BADEA, R. OLAR, D. MARINESCU, G. VASILE, B. JURCA, A. M. MADALAN and M. ANDRUH  
*Inorg. Chem. Commun.*, 12, 555-557, (2009), DOI: 10.1016/j.inoche.2009.04.019
15. - "Thermal behaviour of the system  $\text{Fe}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$ – $\text{Bi}_5\text{O}(\text{OH})_9(\text{NO}_3)_4 \cdot 9\text{H}_2\text{O}$ –glycine/urea and of their generated oxides ( $\text{BiFeO}_3$ )"  
B. JURCA, C. PARASCHIV, A. IANCULESCU and O. CARP  
*J. Thermal. Anal. Cal.*, 97 (1), 91-98, (2009), DOI: 10.1007/s10973-009-0080-x
16. - "The environmentally benign synthesis of nanosized  $\text{Co}_x\text{Zn}_{1-x}\text{Al}_2\text{O}_4$  blue pigments"  
D. VISINESCU, C. PARASCHIV, A. IANCULESCU, B. JURCA, B. VASILE and O. CARP  
*Dyes Pigm.*, 87 (2), 125-131, (2010), DOI: 10.1016/j.dyepig.2010.03.006
17. - "A new cyanido-bridged  $[\{\text{Cu}^{\text{II}}\text{L}\}_2(\mu\text{-NC})_2\text{Mo}^{\text{IV}}(\text{CN})_6]$  pentanuclear complex ( $\text{L}^{2-}$  = bicompartamental macrocyclic ligand): synthesis, spectral, and structural characterization"  
D. VISINESCU, J.-P. SUTTER, C. DUHAYON, A. M. MADALAN, B. JURCA and M. ANDRUH  
*J. Coord. Chem.*, 64 (1), 93-104, (2011), DOI: 10.1080/00958972.2010.536914
18. - "Study of the luminescent and magnetic properties of a series of heterodinuclear  $[\text{Zn}^{\text{II}}\text{Ln}^{\text{III}}]$  complexes"  
T. D. PASATOIU, C. TISEANU, A. M. MADALAN, B. JURCA, C. DUHAYON, J. P. SUTTER and M. ANDRUH  
*Inorg. Chem.*, 50 (13), 5879-5889, (2011), DOI: 10.1021/ic200426w
19. - "Starch - A suitable fuel in new low-temperature combustion-based synthesis of zinc aluminate oxides"  
D. VISINESCU, B. JURCA, A. IANCULESCU and O. CARP  
*Polyhedron*, 30 (17), 2824-2831, (2011), DOI: 10.1016/j.poly.2011.08.006
20. - "Eco-friendly combustion-based synthesis of metal aluminates  $\text{MAl}_2\text{O}_4$  ( $\text{M} = \text{Ni}, \text{Co}$ )"  
A. TIRSOAGA, D. VISINESCU, B. JURCA, A. IANCULESCU and O. CARP  
*J. Nanopart. Res.*, 13(12), 6397-6408, (2011), DOI: 10.1007/s11051-011-0392-1
21. - "Self-assembly of  $[\text{Cu}^{\text{II}}\text{Tb}^{\text{III}}]^{3+}$  and  $[\text{W}(\text{CN})_8]^{3-}$  tectons: a case study of a mixture containing two complexes showing slow-relaxation of the magnetization"  
D. VISINESCU, I. R. JEON, A. M. MADALAN, M. G. ALEXANDRU, B. JURCA, C. MATHONIERE, R. CLERAC and M. ANDRUH  
*Dalton Trans.*, 41, 13578-13581, (2012), DOI: 10.1039/c2dt32081a

22. - "Influence of the synthesis parameters on the thermal behavior of some ZnO–starch composites"  
B. JURCA, A. TIRSOAGA, A. IANCULESCU and O. CARP  
*J. Thermal. Anal. Cal.*, 115, 495-501, (2014), DOI: 10.1007/s10973-013-3290-1
23. - "Synthesis and characterization of new luminescent complex compounds of Sm(III) with acetylhydrazones and heterocyclic bases"  
M. CALINESCU, D. MANEA and B. JURCA  
*Rev. Chim. Bucharest*, 65 (9), 993-997, (2014)
24. - "Low-field magnetoresistance up to 400 K in double perovskite Sr<sub>2</sub>FeMoO<sub>6</sub> synthesized by a citrate route"  
L. HARNAGEA, B. JURCA and P. BERTHET  
*J. Solid State Chem.*, 211, 219-226, (2014), DOI: 10.1016/j.jssc.2014.01.001
25. - "Biopolymer starch mediated synthetic route of multi-spheres and donut ZnO structures"  
O. CARP, A. TIRSOAGA, B. JURCA, R. ENE, S. SOMACESCU and A. IANCULESCU  
*Carbohydr. Polym.*, 115, 285-293, (2015), DOI: 10.1016/j.carbpol.2014.08.061
26. - "NbF<sub>5</sub>-AlF<sub>3</sub> catalysts: Design, synthesis, and application in lactic acid synthesis from cellulose"  
S. COMAN, M. VERZIU, A. TIRSOAGA, B. JURCA, C. TEODORESCU, V. KUNCSEK, V. I. PARVULESCU, G. SCHOLZ and E. KEMNITZ  
*ACS Catal.*, 5, 3013-3026, (2015), DOI: 10.1021/acscatal.5b00282
27. - "Impact of deactivation phenomena on kinetics of the C–N coupling reaction over supported Cu<sub>2</sub>O catalysts in continuous-flow conditions"  
B. JURCA, A. TIRSOAGA, P. GRANGER and V. I. PARVULESCU  
*J. Phys. Chem. C*, 119 (32), 18422-18433, (2015), DOI: 10.1021/acs.jpcc.5b05556
28. - "Impact of structured catalysts in amine oxydation under mild conditions"  
J. L. SANTOS, P. NAVARRO, J. A. ODRIOZOLA, M. A. CENTENO, O. D. PAVEL, B. JURCA and V. I. PARVULESCU  
*Catal. Today*, 273, 266-272, (2016), DOI: 10.1016/j.cattod.2016.05.001
29. - "Mesoporous Tantalum oxide photocatalyst: Structure and activity evaluation"  
G. A. SEISENBAEVA, B. COJOCARU, B. JURCA, C. TISEANU, J.-M. NEDELEC, V. G. KESSLER and V. I. PARVULESCU  
*ChemistrySelect*, 2, 421-427, (2017), DOI: 10.1002/slct.201601695 (Ed. Wiley-VCH)
30. - "Thermal decomposition of some sol-gel precursors for mesoporous TiO<sub>2</sub>-based thin films for chemoresistive environmental sensors"  
V. DEDIU, V. MUSAT, B. JURCA and N. I. CRISTEA  
*Rev. Chim. Bucharest*, 68 (8), 1703-1707, (2017)
31. - "Catalytic features of Nb-based nanoscopic inorganic fluorides for an efficient one-pot conversion of cellulose to lactic acid"  
M. VERZIU, M. SERANO, B. JURCA, V. I. PARVULESCU, S. M. COMAN, G. SCHOLZ and E. KEMNITZ  
*Catal. Today*, 306, 102-110, (2018), DOI: 10.1016/j.cattod.2017.02.051

32. - "Thermal behaviour of some precursors of zinc aluminate spinels used in a green combustion method"  
D. VISINESCU, B. JURCA and O. CARP  
*Rev. Roum. Chim.*, 63 (5-6), 437-446, (2018)
33. - "Efficient glucose dehydration to HMF onto Nb-BEA catalysts"  
N. CANDU, M. EL FERGANI, M. VERZIU, B. COJOCARU, B. JURCA, N. APOSTOL, C. TEODORESCU, V. I. PARVULESCU and S. M. COMAN  
*Catal. Today*, 325, 109-116, (2019), DOI: 10.1016/j.cattod.2018.08.004
34. - "CO<sub>2</sub> methanation catalyzed by oriented MoS<sub>2</sub> nanoplatelets supported on few layers graphene"  
A. PRIMO, J. HE, B. JURCA, B. COJOCARU, C. BUCUR, V. I. PARVULESCU and H. GARCIA  
*Appl. Catal., B*, 245, 351-359, (2019), DOI: 10.1016/j.apcatb.2018.12.034
35. - "Synthesis, characterization, electrochemical behavior and antioxidant activity of new copper(II) coordination compounds with curcumin derivatives"  
M. CĂLINESCU, M. FIASTRU, D. BALA, C. MIHAILCIUC, T. NEGREANU-PÎRJOL and B. JURCA  
*J. Saudi Chem. Soc.*, 23 (7), 817-827, (2019), DOI: 10.1016/j.jscs.2019.02.006
36. - "N-doped defective graphene from biomass as catalyst for CO<sub>2</sub> hydrogenation to methane"  
B. JURCA, C. BUCUR, A. PRIMO, P. CONCEPCION, V. I. PARVULESCU and H. GARCIA  
*ChemCatChem*, 11 (3), 985-990, (2019), DOI: 10.1002/cctc.201801984

#### B. Articole în jurnale non-ISI:

- 1 - "Synthesis of complex sulfides nanoparticles from complexes of cadmium and iron"  
A. DUMBRAVĂ, V. CIUPINĂ, B. JURCA and G. PRODAN  
*Advances in Micro- and Nanoengineering*, 6, 80-88, (2004), (Romanian Academy Publishing House)