

*Comment*

## CURRICULUM VITAE

### BÎRZESCU MIHAIL (1941 – 2012)



- Date of birth: October 6, 1941.
- Place of birth: Drăgănești (Republic of Moldova).
- Education:
  - Secondary School No. 1 and “Nicolae Bălcescu” High School from Râmnicu Vâlcea (1959);
  - Faculty of Chemistry, University of Bucharest (1959-1964);
  - PhD thesis (1999): “Combi-nații complexe cu etilen glicol și produșii săi de oxidare (Complex combinations with ethylene glycol and its oxidation products)”, Faculty of Chemistry, University of Bucharest, supervisor acad. prof. Maria Brezeanu; he developed an unconventional synthetic method based on the redox reaction between diols and metal nitrates with the formation of homo- and polynuclear coordination compounds; through their thermal degradation he obtained oxidic systems with magnetic, catalytic and electrocatalytic properties.
- Professional positions:
  - 1964-2004: Department of General, Inorganic and Analytical Chemistry, Faculty of Industrial Chemistry and Environmental Engineering, University Politehnica Timișoara.
- Teaching activity: General and Inorganic Chemistry, Analytical Chemistry.
- Research interest: the chemistry of complex compounds.

- Collaborations with West University of Timișoara, “Victor Babeș” University of Medicine and Pharmacy of Timișoara, “Babeș-Bolyai” University of Cluj-Napoca, University Politehnica of Bucharest and University of Bucharest.
- Scientific publications:
  - Books: 8;
  - Primary publications: > 80;
  - Patents: 2;
  - Research contracts: 9;
  - Communications: 37.
- Research articles:
  - Published in dedicated journals: 13 (papers published abroad: 9);
  - Published in volumes of national and international scientific events: 5;
  - Unpublished communications: 15;
  - Communicated works (as PhD student): 35.

### **List of scientific papers (selective)**

#### **A. Treaties, courses, laboratory guides, exercise books:**

1. M. Bîrzescu, A. Ferencz, R. Pomoje-Marcu, “Îndrumător pentru lucrări practice de chimie anorganică”, Ed. IPT, 1976.
2. A. Kuzman, V. Chiriac, M. Bîrzescu, D. Lazăr, M. Mitrănescu, D. Oprescu, M. Pârlea, “Îndrumător pentru lucrări practice de chimie analitică instrumentală”, Ed. IPT, 1976.
3. R. Pomoje-Marcu, A. Ferencz, M. Bîrzescu, “Curs de chimie anorganică. Elemente reprezentative și combinațiile lor”, Ed. IPT, 1979.
4. R. Pomoje, A. Ferencz, M. Bîrzescu, “Curs de chimie anorganică. Elemente tranziționale și combinațiile lor”, Ed. IPT, 1979.
5. M. Bîrzescu, V. Chiriac, A. Ferencz, L. Magyar, D. Oprescu, R. Pomoje-Marcu, “Îndrumător pentru lucrări practice de chimie anorganică”, Ed. IPT, 1980.
6. R. Pomoje-Marcu, A. Ferencz, M. Bîrzescu, “Curs de chimie anorganică. Atomul, legătura chimică”, Ed. IPT, 1982.
7. M. Bîrzescu, V. Chiriac, R. Kuzman, Gh. Mara, M. Ștefănescu, D. Tița, “Îndrumător pentru lucrări practice de chimie analitică instrumentală”, Ed. IPT, 1982.
8. R. Pomoje-Marcu, L. Magyar, M. Bîrzescu, “Exerciții și probleme de chimie anorganică”, Ed. IPT, 1985.

#### **B. Scientific articles (indexed in the ISI Web of Science and Scopus databases):**

1. Title: New methods to obtain carboxylic acids by oxidation reactions of 1,2-ethanediol with metallic nitrates.

Authors: Niculescu, Mircea; Ledeti, Ionut; Bîrzescu, Mihail.

Source: JOURNAL OF ORGANOMETALLIC CHEMISTRY Volume: 767 Pages: 108-111 DOI: 10.1016/j.jorgchem.2014.05.041 Published: SEP 15 2014.

2. Title: SYNTHESIS-STRUCTURE RELATIONSHIP IN THE AQUEOUS ETHYLENE GLYCOL-IRON(III) NITRATE SYSTEM.

Authors: Rosu, Dan; Bîrzescu, Mihail; Milea, Marius-Silviu; Pascariu, Mihai-Cosmin; Sasca, Viorel; Niculescu, Mircea.

Source: REVUE ROUMAINE DE CHIMIE Volume: 59 Issue: 9 Pages: 789-796  
Published: SEP 2014.

3. Title: SYNTHESIS AND THERMAL ANALYSIS OF THE NICKEL(II) OXALATE OBTAINED THROUGH THE REACTION OF ETHYLENE GLYCOL WITH  $\text{Ni}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ .

Authors: Bîrzescu, Mihail; Milea, Marius; Rosu, Dan; Ledeti, Ionut; Rafaila, Madian; Sasca, Viorel; Niculescu, Mircea.

Source: REVUE ROUMAINE DE CHIMIE Volume: 59 Issue: 6-7 Pages: 555-563  
Published: JUN-JUL 2014.

4. Title: SYNTHESIS AND CHARACTERIZATION OF THE POLYNUCLEAR COORDINATION COMPOUND OBTAINED THROUGH THE REACTION OF 1,3-PROPANEDIOL WITH  $\text{Cu}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O}$ .

Authors: Niculescu, Mircea; Budrugaec, Petru; Ledeti, Ionut; Pode, Vasile; Bîrzescu, Mihail.

Source: REVUE ROUMAINE DE CHIMIE Volume: 58 Issue: 4-5 Pages: 387-392  
Published: APR-MAY 2013

5. Title: Co(II)-Ni(II) heteropolynuclear coordination compound obtained through the reaction of 1,2-propanediol with metallic nitrates as precursor for mixed oxide of spinel type  $\text{NiCo}_2\text{O}_4$ .

Authors: Niculescu, M.; Bîrzescu, M.; Dumitru, Raluca; Sisu, E.; Budrugaec, P.

Source: THERMOCHIMICA ACTA Volume: 493 Issue: 1-2 Pages: 1-5 DOI: 10.1016/j.tca.2008.03.011  
Published: SEP 10 2009.

6. Title: Synthesis, structural characterization and thermal analysis of the cobalt(II) oxalate obtained through the reaction of 1,2-ethanediol with  $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ .

Authors: Bîrzescu, M.; Niculescu, M.; Dumitru, Raluca; Carp, Oana; Segal, E.

Source: JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY Volume: 96  
Issue: 3 Pages: 979-986 DOI: 10.1007/s10973-009-0054-z  
Published: JUN 2009.

7. Title: COPPER(II) OXALATE OBTAINED THROUGH THE REACTION OF 1,2-ETHANEDIOL WITH  $\text{Cu}(\text{NO}_3)_2 \cdot 3\text{H}_2\text{O}$  Structural investigations and thermal analysis.

Authors: Bîrzescu, M.; Niculescu, M.; Dumitru, Raluca; Budrugaec, P.; Segal, E.

Source: JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY Volume: 94  
Issue: 1 Pages: 297-303 DOI: 10.1007/s10973-007-8599-1  
Published: OCT 2008.

8. Title: Structural investigations and thermal analysis of the coordination compound obtained through the reaction of 1,3-propanediol with  $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ .

Authors: Niculescu, M.; Vaszilcsin, N.; Davidescu, C.M.; Negrea, P.; Birzescu, M.; Budrugaec, P.

Source: REVUE ROUMAINE DE CHIMIE Volume: 48 Issue: 12 Pages: 997-1006  
Published: DEC 2003.

9. Title: Thermal behaviour of the homopolynuclear glyoxylate complex combinations with Cu(II) and Cr(III).

Authors: Stefanescu, M.; Sasca, V.; Birzescu, M.

Source: JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY Volume: 72  
Issue: 2 Pages: 515-524 DOI: 10.1023/A:1024565313792 Published: 2003.

10. Title: Thermal and structural investigation of the reaction between 1,2-propanediol and  $\text{Co}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ .

Authors: Niculescu, M.; Vaszilcsin, N.; Birzescu, M.; Budrugaec, P.; Segal, E.

Source: JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY Volume: 65  
Issue: 3 Pages: 881-889 DOI: 10.1023/A:1011944603225 Published: 2001.

11. Title: Thermal and structural investigation of the reaction between 1,2-propanediol and  $\text{Ni}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ .

Authors: Niculescu, M.; Vaszilcsin, N.; Birzescu, M.; Budrugaec, P.; Segal, E.

Source: JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY Volume: 63  
Issue: 1 Pages: 181-189 DOI: 10.1023/A:1010100823234 Published: 2001.

12. Title: Studies on the thermal decompositions of heteropolynuclear glyoxylates of Cr(III) and Cu(II).

Authors: Stefanescu, M.; Sasca, V.; Birzescu, M.

Source: JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY Volume: 56  
Issue: 2 Pages: 579-586 DOI: 10.1023/A:1010165030191 Published: 1999.

13. Title: Spinel pigments in the  $\text{ZnO-CoO-Al}_2\text{O}_3\text{-Cr}_2\text{O}_3$  system prepared from organometallic precursors.

Authors: Păcurariu, C., Ștefănescu, M., Lazău, I., Birzescu, M.

Source: KEY ENGINEERING MATERIALS Volumes: 132-136 Pages 113-116 DOI:  
10.4028/www.scientific.net/KEM.132-136.113 Published: 1997.