

# Ljiljana Damjanović-Vasilić - Curriculum Vitae

## Education:

2004 Ph.D. in Physical Chemistry at the University of Belgrade-Faculty of Physical Chemistry  
2001 M.Sc. in Physical Chemistry at the University of Belgrade-Faculty of Physical Chemistry  
1996 B.Sc. in Physical Chemistry at the University of Belgrade-Faculty of Physical Chemistry

## Professional positions:

2017 Full Professor, University of Belgrade-Faculty of Physical Chemistry  
2010-2017 Associate Professor, University of Belgrade-Faculty of Physical Chemistry  
2009-2015 Vice Dean for Research & Postgraduate Studies, University of Belgrade-Faculty of Physical Chemistry  
2004-2010 Assistant Professor, University of Belgrade-Faculty of Physical Chemistry  
2001-2004 Teaching Assistant, University of Belgrade-Faculty of Physical Chemistry  
1999-2001 Assistant Trainee, University of Belgrade-Faculty of Physical Chemistry  
1996-1999 Scholarship holder of the Serbian Ministry of Science and Technology, University of Belgrade-Faculty of Physical Chemistry

**Research visits:** Durham University-Chemistry Department, Great Britain (five weeks), Institut de recherches sur la catalyse et l'environnement de Lyon UMR 5256, CNRS/Université Lyon1, Villeurbanne, France (eleven months; six visits), University of California at Santa Barbara-Chemistry Department, USA (two and a half years; two visits), Chemistry Department at Moscow State University of M.V. Lomonosov, Russia (summer practice, two months).

**Research interests:** materials science: synthesis and characterization of porous materials in particular functionalization of aluminosilicates, detailed characterization of obtained products and their environmental application for removal of pollutants from water solutions. Alongside, her research is focused on physicochemical investigation of art objects, particularly pottery, in order to obtain information on ancient ceramic technology and create national database based on the retrieved characteristics.

## Participation in national projects:

2011- "Oxide-based environmentally-friendly porous materials for genotoxic substances removal", MSEP 172018, Faculty of Physical Chemistry, University of Belgrade.  
2011- "Urbanization and development processes of medieval society", MSEP 177021, Institute of Archaeology.

## Participation in bilateral projects:

2016-2017 French-Serbian project "Smart eco-friendly nanostructures and nanocomposites".

2016-2017 Croatian-Serbian project "Influence of structure of hierarchical porous zeolites on their adsorption properties".

### Outreach activities:

2010-2015 Coauthor and coordinator of project "Science all around" ("Nauka oko nas").

### Publications and citations:

Number of papers in refereed journals (nov. 2017): 33

Number of citations (nov. 2017): 549 (Google Scholar)

H-index (nov. 2017): 12

### Bibliography

#### 1. Book chapters

1. V. Rakić and Lj. Damjanović, "Temperature programmed desorption (TPD) methods", Chapter 4, In: A. Auroux (ed.), *Calorimetry and Thermal Methods in Catalysis*, Springer Series in Materials Science, Vol. 154, Springer-Verlag Berlin Heidelberg, 131-174, 2013.
2. Lj. Damjanović and A. Auroux, "Determination of acid/base properties by temperature programmed desorption (TPD) and adsorption calorimetry", Chapter 3, In: E.G. Derouane and A.W. Chester (eds.), *Zeolite Characterization and Catalysis: A Tutorial*, Springer Verlag, 107-167, 2009.
3. Lj. Damjanović and A. Auroux, "Heterogeneous catalysis on solids", Chapter 11, In: M. Brown, P. Gallagher (eds.), *The Handbook of Thermal Analysis & Calorimetry, Volume 5, Further advances, techniques and applications*, Elsevier, Amsterdam, 387-438, 2008.

#### 2. Scientific papers

1. M. Milojević-Rakić, V. Dondur, Lj. Damjanović-Vasilić, V. Rac, V. Rakić, "The accessibility of sites active in dissociative adsorption of aromatic hydrocarbons in FeZSM-5 zeolite", *Reaction Kinetics, Mechanisms and Catalysis* (2017) doi: 10.1007/s11144-017-1275-y
2. V. Rac, V. Rakić, Lj. Damjanović-Vasilić, V. Dondur, A. Auroux, "Complementary approach to the adsorption of CO and N<sub>2</sub>O on bimetallic ion exchanged ZMS-5 zeolite: Microcalorimetric and FTIR spectroscopy study", *Applied Surface Science* 423 (2017) 1134-1140.
3. N. Perišić, M. Marić-Stojanović, V. Andrić, U.B. Mioč, Lj. Damjanović, "Physicochemical characterization of pottery from Vinča culture, Serbia, regarding firing temperature and decoration technique", *Journal of the Serbian Chemical Society*, 81(12) (2016) 1415-1426.
4. Lj.E. Mihajlović-Lalić, Lj. Damjanović, M. Šumar-Ristović, A. Savić, T.J. Sabo, V. Dondur, S. Grgurić-Šipka, "Cytotoxic Pt(IV) and Ru(II) complexes containing a biologically relevant edda-type ligand: a comparative study of thermal properties", *Journal of the Serbian Chemical Society*, 81(8) (2016) 897-905.

5. Lj. Damjanović, U. Mioč, D. Bajuk-Bogdanović, N. Cerović, M. Marić-Stojanović, V. Andrić, I. Holclajtner-Antunović, “*Archaeometric investigation of medieval pottery from excavations at Novo Brdo, Serbia*”, *Archaeometry*, 58(3) (2016) 380-400.
6. Lj. Rožić, B. Grbić, S. Petrović, N. Radić, Lj. Damjanović, Z. Vuković, “*The tungsten heteropolyacid supported on activated bentonites as catalyst for selective oxidation of 2-propanol*”, *Materials Chemistry and Physics*, 167 (2015) 42-48.
7. Lj. Damjanović, M. Gajić-Kvašček, J. Đurđević, V. Andrić, M. Marić-Stojanović, T. Lazić, S. Nikolić, “*The characterization of canvas painting by the Serbian artist Milo Milunović using X-Ray fluorescence, micro-Raman and FTIR Spectroscopy*”, *Radiation Physics and Chemistry*, 115 (2015) 135-142.
8. Lj. Damjanović, O. Marjanović, M. Marić-Stojanović, V. Andrić, U.B. Mioč, “*Spectroscopic investigation of icons painted on canvas*”, *Journal of the Serbian Chemical Society*, 80(6) (2015) 805-817.
9. S. Stojanović, M. Gajić-Kvašček, Lj. Damjanović, “*Spektroskopsko ispitivanje ikone slikane na drvenom nosiocu*”, *Hemijska Industrija*, 69(4) (2015) 387-393.
10. Lj. Damjanović, V. Bikić, K. Šarić, S. Erić, I. Holclajtner-Antunović, “*Characterization of the Early Byzantine Pottery from Caričin Grad (South Serbia) in Terms of Composition and Firing Temperature*”, *Journal of Archaeological Science*, 46 (2014) 156-172.
11. M. Anić, N. Radić, B. Grbić, V. Dondur, Lj. Damjanović, D. Stoychev, P. Stefanov, “*Catalytic activity of Pt catalysts promoted by MnO<sub>x</sub> for n-hexane oxidation*”, *Applied Catalysis B: Environmental*, 107(3-4) (2011) 327-332.
12. Lj. Damjanović, M. Majchrzak, S. Bennici, A. Auroux, “*Determination of the heat evolved during sodium borohydride hydrolysis catalyzed by Co<sub>3</sub>O<sub>4</sub>*”, *International Journal of Hydrogen Energy*, 36 (2011) 1991-1997.
13. Lj. Damjanović, I. Holclajtner-Antunović, U. B. Mioč, V. Bikić, D. Milovanović, I. Radosavljević Evans, “*Archaeometric study of medieval pottery at Stari (Old) Ras, Serbia*”, *Journal of Archaeological Science*, 38 (2011) 818-828.
14. Lj. Damjanović, V. Rakić, V. Rac, D. Stošić, A. Auroux, “*The investigation of phenol removal from aqueous solution by zeolites as solid adsorbents*”, *Journal of Hazardous Materials*, 184 (2010) 477-484.
15. V. Rakić, Lj. Damjanović, V. Rac, D. Stošić, V. Dondur, A. Auroux, “*The adsorption of nicotine from aqueous solutions on different zeolite structures*”, *Water Research*, 44 (2010) 2047-2057.
16. Lj. Damjanović, S. Bennici, A. Auroux, “*A direct measurement of the heat evolved during the sodium and potassium borohydrides catalytic hydrolysis*”, *Journal of Power Sources*, 195 (2010) 3284-3292.
17. V. Dondur, R. Dimitrijević, A. Kremenović, Lj. Damjanović, N. Romčević, S. Macura, “*The lithium- and sodium-enhanced transformation of Ba-exchanged zeolite LTA into celsian phase*”, *Journal of Physics and Chemistry of Solids* 69(11) (2008) 2827-2832.
18. S. Čugalj, Lj. Damjanović, I. Holclajtner-Antunović, U. Mioč, “*Fizičko-hemijsko ispitivanje srednjeevokvne keramike sa lokaliteta Novo Brdo*”, *Hemijska Industrija*, 62(3) (2008) 143-147.
19. N. Zindović, Lj. Damjanović, I. Holclajtner-Antunović, U. Mioč, D. Bajuk-Bogdanović, “*Ispitivanje srednjeevokvne keramike Ras fizičko-hemijskim metodama*”, *Hemijska Industrija*, 62(3) (2008) 138-142.
20. D. Stošić, Lj. Damjanović, R. Hercigonja, V. Dondur, V. Rac, V. Rakić, “*Ugradnja Me-histidin kompleksa u strukturu FAU zeolita - karakterizacija dobijenih materijala*”, *Hemijska Industrija*, 62(3) (2008) 125-130.
21. M. Milojević, V. Dondur, Lj. Damjanović, V. Rakić, N. Rajić, A. Ristić, “*The activity of iron-containing zeolitic materials for the catalytic oxidation in aqueous solutions*”, *Materials Science Forum*, 555 (2007) 213-218.

22. V. Dondur, V. Rakić, Lj. Damjanović, R. Hercigonja, A. Auroux, "Temperature-programmed desorption of the n-hexane from hydrated HZSM-5 and NH<sub>4</sub>ZSM-5 zeolites", *Journal of Thermal Analysis and Calorimetry*, 84(1) (2006) 233-238.
23. V. Jovanović, V.T. Dondur, Lj. Damjanović, J. Zakrzewska, M. Tomašević-Čanović, "Improved materials for environmental application: surfactant-modified zeolites", *Materials Science Forum*, 518 (2006) 223-228.
24. V. Dondur, V. Rakić, Lj. Damjanović, A. Auroux, "Comparative study of the active sites in zeolites by different probe molecules", *Journal of the Serbian Chemical Society*, 70(3) (2005) 457-474.
25. Lj. Damjanović, V. Rakić, U.B. Mioč, A. Auroux, "Influence of cations on active sites of the alkaline earth salts of 12-tungstophosphoric acid: microcalorimetric study", *Thermochimica Acta*, 434(1-2) (2005) 81-87.
26. V. Dondur, R. Dimitrijević, A. Kremenović, Lj. Damjanović, M. Kićanović, H.M. Cheong, S. Macura, "Phase transformations of hexacelsians doped with Li, Na i Ca", *Materials Science Forum*, 494 (2005) 107-112.
27. K. Mizoguchi, T. Yamabe, H. Sakamoto, Lj. Damjanović, V.I. Srdanov, "Pressure tuning of the exchange interactions between s-electrons in a bcc lattice of sodalite cages", *Physica B: Condensed Matter* 329-333 (2003) 1255-1256.
28. K. Mizoguchi, T. Yamabe, H. Sakamoto, Lj. Damjanović, V.I. Srdanov, "Electronic states of alkali-electro-sodalite under pressure", *Synthetic Metals* 137 (2003) 909-910.
29. H. Tou, Y. Maniwa, K. Mizoguchi, Lj. Damjanović, V.I. Srdanov, "NMR studies on antiferromagnetism in alkali-electro-sodalite", *Journal of Magnetism and Magnetic Materials* 226 (2001) 1098-1100.
30. K. Mizoguchi, T. Takanashi, H. Sakamoto, Lj. Damjanović, V.I. Srdanov, "Effect of Pressure on Antiferromagnetic Transition in Alkali-Electro-Sodalite", *Molecular Crystals and Liquid Crystals* A, 341 (2000) 467-472.
31. Lj. Damjanović, G.D. Stucky and V.I. Srdanov, "Magnetism of F Centers; indication of an Antiferromagnetic Phase Transition in Potassium-Electro-Sodalite", *Journal of the Serbian Chemical Society* 65 (5-6) (2000) 311-314.
32. K. Mizoguchi, K. Ichikawa, H. Sakamoto, Lj. Damjanović, V.I. Srdanov, "Phase transition in alkali-electro-sodalite studied by ESR", *Synthetic Metals* 103 (1999) 1877.
33. G.K. Madsen, C. Gatti, B.B. Iversen, Lj. Damjanović, G.D. Stucky and V.I. Srdanov, "F center in sodium electrosodalite as a physical manifestation of a non-nuclear attractor in the electron density", *Physical Review B* 59(19) (1999) 12359-12369.