



Școala Doctorală de Chimie

TEMATICĂ ADMITERE DOCTORAT sesiunea septembrie 2017

Prof. univ. dr. habil. Cecilia ARSENE

1. Compuși organici volatili în troposfera urbană Iași. Metode, monitorizare, implicații atmosferice.

(Volatile organic compounds in Iasi urban troposphere. Methods, monitoring, atmospheric implications.)

Bibliografie/ Bibliography:

1. Seinfeld, J.H., Pandis, S.N., Atmospheric Chemistry and Physics, From Air Pollution to Climate Change, 3rd Edition, John Wiley, New York, 1998.
2. Barbara Finlayson-Pitts, James Pitts, Jr., Chemistry of the Upper and Lower Atmosphere, Theory, Experiments, and Applications, Academic Press, 1999.

Prof. univ. dr. Elena BÎCU

1. Sinteza și caracterizarea unor noi compuși ce conțin heterocicluri cu azot.

Bibliografie

1. Nenitescu D. Costin, "Chimie organica", vol. 2, Ed. Didactica si pedagogica Bucuresti, 1980.
2. Zugrăvescu, I., Petrovanu, M., "Cicloaditii 3+2 dipolare", Ed. Academiei, Bucuresti, 1987.
3. Zugrăvescu, I., Petrovanu, M., "N-Ylide Chemistry", McGraw Hill: New York, 1976.
4. Sandeep, C., Katharigatta N. V., and all, "Review on Chemistry of Natural and Synthetic Indolizines with their Chemical and Pharmacological Properties", J. Basic. Clin. Pharma 8, 49-60, 2017.
5. Tufariello J. J., 1,3-Dipolar Cycloaddition Chemistry, A. Padwa, Ed., Wiley: New York, 1984; vol. 2, p. 83.

Prof. univ. dr. habil. Romeo-Iulian OLARIU

1. Studiul consumului chimic al unor compuși organici volatili în condiții de atmosferă simulată. Abordări teoretice și practice. (Study of chemical consumption of some volatile organic compounds under simulated atmosphere conditions. Theoretical and practical approaches.)

**Bibliografie/ Bibliography:**

1. Atmospheric Chemistry and Physics, Seinfeld, J.H. and S.N. Pandis, From Air Pollution to Climate Change, 3rd Edition, John Wiley, New York, 1998.
2. Modeling of Atmospheric Chemistry, Guy P. Brasseur and Daniel J. Jacob Cambridge University Press, 2017.
3. Atmospheric Reaction Chemistry, Akimoto, Hajime, Springer Atmospheric Sciences, 2016
4. Chemistry of the Upper and Lower Atmosphere, Theory, Experiments, and Applications, Barbara Finlayson-Pitts James Pitts, Jr., Academic Press, 1999

2. Aplicarea tehnicilor spectrale optice și electronice la identificarea și cuantificarea unor elemente rare și refractare din mediu. (Applying optical and electronic spectral techniques to the identification and quantification of rare and refractory elements in the environment.)

Bibliografie/ Bibliography:

1. High-Resolution Continuum Source AAS: The Better Way to Do Atomic Absorption Spectrometry, Bernhard Welz, Helmut Becker-Ross, Stefan Florek, Uwe Heitmann John Wiley & Sons, 2006
2. Fundamentals of Environmental Sampling and Analysis, Chunlong Zhang, John Wiley and Sons, New Jersey, 2007.
3. Environmental Chemistry. A Global Perspective. Garry W. Van Loon and Stephen J. Duffy, Oxford University Press Inc., New York, 2000.

Prof. univ. dr. Aurel PUI

1. Materiale nanostructurate cu aplicații în nanomedicină.
2. Compuși coordinațivi și nanomateriale.

Bibliografie:

1. Schubert U. New materials by sol-gel processing: design at the molecular level, J Chem Soc Dalton Trans 1996; 45: 3343-3348.
2. D.F. Williams, The relationship between biomaterials and nanotechnology Biomaterials 2008, 29, 1737-1738.
3. F. Watari, Nanobiomedicine 1,2, pp 2-8, 2010.
4. Silvia Marchesan, and Maurizio Prato, Nanomaterials for (Nano)medicine, ACS Med.Chem.Lett. 2013, 4, 147-149.
5. Amaeva, V.; Sahlgren, C.; Lindén, M. Mesoporous silica nanoparticles in medicine, Recent advances. Adv. Drug Delivery Rev. 2012.