

CURRICULUM VITAE

- Name:** Petre IONITA
- Gender:** Male
- Born:** September 20, 1967
- Current position:** *Assoc. Prof.*, University of Bucharest, Faculty of Chemistry, Department of Organic Chemistry, 90 Panduri, 050663 Bucharest, Romania
- Previous position:** *Senior Researcher*, Institute of Physical Chemistry, Splaiul Independentei 202, 060021 Bucharest, Romania
- E-Mail:** p_ionita@yahoo.co.uk; pionita@icf.ro
- Education:** *B.* High School of Industrial Chemistry, Ploiesti, 1983-1986
- M. Sc.* University of Bucharest, Faculty of Chemistry, Department of Organic Chemistry, 1987-1992
- Ph. D.* University «Politehnica» Bucharest, Faculty of Chemistry, Department of Analytical Chemistry, 1993-1997
- Habilitation Thesis*, University of Bucharest, 'Multifunctional organic free radicals', October 2013
- Postdoctoral fellowships:** Royal Society / NATO, 'Chemistry of Short-Lived and Stable Radicals', University of York (UK), 2000
- Unilever Research*, 'Mechanistic Studies on Oxidation of Hydrazines', University of York (UK), 2001
- EPSRC*, 'Spin labeled gold nanoparticles', University of York (UK), 2003-6
- Awards:** *Romanian Academy Award for Chemistry*, 2000
- Researcher ID:** <http://www.researcherid.com/rid/B-5566-2011>
- Skills:** *Organic chemistry. Free radicals chemistry. Synthesis and structural characterization.* Instrumental analysis (UV-Vis, IR, NMR, ESR, CV, HPLC, GC, TLC). Generation of short-lived and of persistent free radicals. Chemistry of hydrazyl, nitroxyl, nitronyl-nitroxide and imino-nitroxide free stable radicals. Supramolecular and nano chemistry. Gold and silica nanoparticles.
- Scientific activity:** Over 80 papers published (ISI). Over 60 Conferences attended. Project leader of several grants, sponsored by CNCSIS, Romanian Academy, UEFISCDI; member of others. Supervisor of over 10 undergraduate and graduate students, for their License or Master Diploma.

List of publications

Articles:

87. Thermal behavior of several stable hydrazyl free radicals and of their parent hydrazines
M. Marinescu, C. Zalaru, M. Florea, P. Ionita
J. Thermal Analysis Calorim., 2014, 116, 259-263.
86. A QSPR Study on Some Hydrazyl Radicals and Congeners
M. Marinescu, C. Zalaru, P. Ionita
Sci. Bull., 2014, 76, 175-184.
85. The influence of redox chemical surface treatments on silver nanoparticles
M. Tudose, C. Munteanu, G. Marinescu, D. Culita, P. Ionita
Digest J. Nanomat. Biostruct., 2013, 4, 1761-1770.
84. A mechanistic glimpse on the oxidation of alcohols using TEMPO/NO_x catalytic systems: towards a greener bifunctional catalyst
P. Ionita
RSC Advances, 2013, 3, 21218-21221.
83. Synthesis and structural characterization of a stable betaine imino-nitroxide free diradical
A. Paun, I. Zarafu, M. T. Caproiu, P. Ionita
Arkivoc, 2013, iv, 144-151.
82. Synthesis and bioevaluation of several new isoniazid derivatives
L. Matei, C. Bleotu, I. Baci, C. Draghici, P. Ionita, A. Paun, C. M. Chifiriuc, A. Sbarcea, I. Zarafu
Bioorganic & Medicinal Chemistry, 2013, 21, 5355-5361.
81. Synthesis and microbiological evaluation of several benzocaine derivatives
A. Paun, I. Zarafu, M. T. Caproiu, C. Draghici, M. Maganu, A. I. Cotar, M. C. Chifiriuc, P. Ionita
Comptes Rendu Chimie, 2013, 16, 665-671.
80. An enhanced colorimetric chemosensor for the detection of various nitro-explosives
P. Ionita
Tetrahedron Let., 2012, 53, 7143-7146.
79. Reversible aggregation between nanoparticles induced by acid-base interactions
G. Ionita, C. Ghica, I. Turcu, P. Ionita
Chem. Phys. Let., 2012, 546, 133-135.
78. EPR spectra of a mono- and a hetero di-radical in nematic and isotropic phases
G. Ionita, I. Zarafu, A. Paun, P. Ionita
Mol. Cryst. Liq. Cryst., 2012, 562, 141-146.
77. Chemical and biological evaluation of some new antipyrine derivatives with particular properties
C. Remes, A. Paun, I. Zarafu, M. Tudose, M. T. Caproiu, G. Ionita, C. Bleotu, L. Matei, and P. Ionita
Bioorganic Chemistry, 2012, 41-42, 6-12.

76. A QSPR study on several new *N*-alkoxy-dinitroanilines
M. Tudose, F. D. Badea, P. Ionita
Scientific Bulletin B (Politehnica Bucharest), 2011, 73(4), 121-128.
75. Chemically modified (nano)silica as sensitive material for arginine and lysine
M. Tudose, D. Culita, G. Marinescu, C. Ghica, P. Ionita
J. Organomet. Polym., 2011, 21, 492-497.
74. New mono- and di-branched derivatives of *Kryptofix K22* with *N*-4-methoxyamino-3,5-dinitrobenzoyl substituents. Synthesis and properties
M. Tudose, M. T. Caproiu, F. D. Badea, G. Nedelcu, P. Ionita, T. Constantinescu, A. T. Balaban
Arkivoc, 2011, ii, 343-354.
73. *N*-Alkoxy-3,5-dinitro-4-aminobenzoic acid derivatives with controlled physico-chemical properties
M. Tudose, F. D. Badea, G. Ionita, M. Maganu, M. T. Caproiu, P. Ionita, T. Constantinescu, A. T. Balaban
Struct. Chem., 2010, 21, 1227-1234.
72. New *N*-aryloxy-phthalimide derivatives. Synthesis, physico-chemical properties, and QSPR studies
M. Tudose, F. D. Badea, M. T. Caproiu, A. Beteringhe, M. Maganu, P. Ionita, T. Constantinescu, A. T. Balaban
C. Eur. J. Chem., 2010, 8, 789-796.
71. New hydrazyl derivatives with multiple properties
M. Tudose, D. Angelescu, G. Ionita, M. T. Caproiu, P. Ionita
Let. Org. Chem., 2010, 7, 182-185.
70. Wurster aza-crown ethers with *N*-*para*-phenylene-phenothiazine or -phenoxazine groups
A. C. Radutiu, I. Baci, M. T. Caproiu, C. Draghici, A. Beteringhe, G. Ionita, P. Ionita, T. Spataru, N. Spataru, R. D. Baratoiu, T. Constantinescu, A. T. Balaban
Arkivoc, 2009, xiii, 342-362.
69. New alternatives for estimating the octanol/water partition coefficient and water solubility for volatile organic compounds using GLC data (Kovats retention indices)
F. Spafiu, A. Mischie, P. Ionita, A. Beteringhe, T. Constantinescu, A. T. Balaban
Arkivoc, 2009, x, 174-194.
68. Functionalized hybrid nanoparticles and their Interaction with spin-labeled cyclodextrin
G. Ionita, M. Maganu, M. T. Caproiu, P. Ionita
J. Inorg. Organomet. Polym., 2009, 19, 228-233.
67. Reaction of 2,2-diphenyl-1-picrylhydrazyl (DPPH) with two syringylic phenols and one aroxide
E. Hristea, I. Covaci, G. Ionita, P. Ionita, C. Draghici, M. T. Caproiu, M. Hillebrand, T. Constantinescu, A. T. Balaban
Eur. J. Org. Chem., 2009, 5, 626-634.
66. Electron spin resonance study of puff-resolved free radical formation in mainstream cigarette smoke
M. Ghosh, C. Liu, P. Ionita
Arkivoc, 2008, xvii, 318-327.

65. Dual behavior of gold nanoparticles, as generators and scavengers for free radicals
P. Ionita, F. Spafiu, C. Ghica
J. Mat. Sci, 2008, 43, 6571-6574.
64. Synthesis and characterisation of several di-, tri-, and tetra-radicals linked by flexible or rigid linkers
M. T. Caproiu, G. Ionita, C. Draghici, P. Ionita
Arkivoc, 2008, xiv, 158-165.
63. A coloured spin-trap which works as a pH sensor
P. Ionita
S. Afr. J. Chem., 2008, 61, 123-126.
62. Hybrid metal (gold)-inorganic (silica) nanoparticles: synthesis, characterization, and spin-labeling
P. Ionita, C. Ghica, M. T. Caproiu, G. Ionita
J. Inorg. Organomet. Polym., 2008, 18, 414-419.
61. Electron paramagnetic resonance of the free radicals in the gas- and particulate-phases of cigarette smoke using spin-trapping
M. Gosh, P. Ionita, J. McAughey, F. Cunningham
Arkivoc, 2008, xii, 74-84.
60. Hydrazyl-nitrones and hydrazyl-nitroxides, multifunctional molecules as sensors and probes
P. Ionita
Let. Org. Chem., 2008, 5, 42-46.
59. Lateral diffusion of thiol ligands on the surface of Au nanoparticles: an EPR study
P. Ionita, A. Volkov, G. Jeschke, V. Chechik
Analytical Chem., 2008, 80, 95-106.
58. Synthesis and electron paramagnetic resonance study of a nitroxide free radical covalently bonded on aminopropyl-silica gel
M. Tudose, T. Constantinescu, A. T. Balaban, P. Ionita
App. Surface Sci., 2008, 254, 1904-1908.
57. Gold nanoparticles-initiated free radical oxidations and halogen abstractions
P. Ionita, M. Conte, B. C. Gilbert, V. Chechik
Org. Biomol. Chem., 2007, 5, 3504-3509.
56. Ligand dynamics in spin-labeled Au nanoparticles
P. Ionita, J. Wolowska, V. Chechik, A. Caragheorgheopol
J. Phys. Chem. C, 2007, 111, 16717-16723
55. Paramagnetic silica-coated gold nanoparticles
C. Ghica, P. Ionita
J. Mat. Sci., 2007, 42, 10058-10064.
54. Probing the cellulose wet-ability by electron paramagnetic resonance
G. Ionita, C. Ghica, P. Ionita
Mat. Sci., 2007, 25, 1011-1017.

53. Synthesis and characterization of some novel homo- and hetero-diradicals of hydrazyl and nitroxide type
P. Ionita, F. Tuna, M. Andruh, T. Constantinescu, A. T. Balaban
Aust. J. Chem., 2007, 60, 173-179.
52. An investigation of oxygen centred radicals in cigarette smoke by electron spin resonance (ESI)
M. Ghosh, F. Cunningham, P. Ionita, J. McAughey
Free Radic. Biol. Medicine, 2006, 41, S64-S65.
51. DeerAnalysis2006 - a comprehensive software package for analyzing pulsed ELDOR data
G. Jeschke, V. Chechik, P. Ionita, A. Godt, H. Zimmermann, J. Bahman, C. R. Timmel, D. Hilger, H. Jung
Applied Mag. Res., 2006, 30, 473-498.
50. Hydrazyl-nitrones, novel hybrid molecules in free radical research
P. Ionita
Free Radic. Res., 2006, 40, 59-65.
49. Mechanistic studies on the free radical decomposition of some oxalic acid arylhydrazides: a source of aryl radicals in aqueous solution
B. C. Gilbert, P. Ionita, J. R. L. Smith, J. Oakes, N. Ouwerkerk
Arkivoc, 2006, iii, 127-147.
48. Synthesis and properties of bis-dinitrophenyl derivatives of 1,7,10,16-tetraoxa-4,13-diazacyclooctadecane (Kryptofix 22)
A. Radutiu, I. Baci, M. T. Caproiu, P. Ionita, I. Covaci, T. Constantinescu.
Rev. Roum. Chim. 2005, 50, 341-347.
47. Synthesis and properties of dinitrobenzamido-TEMPO derivatives
M. Tudose, P. Ionita, F. Dumitrascu, C. Draghici, M. T. Caproiu, I. C. Covaci, T. Constantinescu, M. D. Banciu, A. T. Balaban
Arkivoc, 2005, iv, 225-237.
46. Radical mechanism of a place-exchange reaction of Au nanoparticles
P. Ionita, B. C. Gilbert, V. Chechik
Angew. Chemie Int. Ed., 2005, 44, 3720-3722.
45. Is DPPH free stable radical a good scavenger for oxygen active species?
P. Ionita
Chem. Papers., 2005, 59, 11-16.
44. Dipole-dipole interactions in spin-labeled Au nanoparticles as a measure of interspin distances
P. Ionita, A. Caragheorghopol, B. C. Gilbert, V. Chechik
J. Phys. Chem. B, 2005, 109, 3734-3742.
43. Mechanistic study of a place exchange reaction of Au nanoparticles with spin-labeled disulfides
P. Ionita, A. Caragheorghopol, B. C. Gilbert, V. Chechik
Langmuir, 2004, 20, 11536-11544.
42. Spin-labelled Au nanoparticles
V. Chechik, P. Ionita, B. C. Gilbert, A. Caragheorghopol, H. Caldararu, H. Wellsted, A. Korte
Faraday Discuss., 2004, 125, 279-91.

41. Generation of oxygen-, sulfur, nitrogen- and phosphorus-centred short-lived radicals *via* one-electron oxidation with stable hydrazyl radicals
P. Ionita, B. C. Gilbert, A. C. Whitwood
Lett. Org. Chem., 2004, 1, 70-4.
40. Hydrazyl, nitronyl-, and imino-nitroxides: synthesis, partition properties and reaction with nitric oxides
T. Constantinescu, P. Ionita, I. Chiorescu, G. Ionita
C. Eur. J. Chem., 2003, 1, 465-76.
39. 1,3-Bis(2,4,6- trinitrophenylaminoxy)propane and its 4-cyano-2,6-Dinitrophenyl congener: Synthesis and Properties
I. C. Covaci, P. Ionita, M. T. Caproiu, R. Socoteanu, T. Constantinescu, A. T. Balaban
C. Eur. J. Chem., 2003, 1, 57-68.
38. A new crown compound with multifunctional capabilities
G. Ionita, P. Ionita
J. Inclusion Phen., 2003, 45, 79-82.
37. EPR study of a place exchange reaction on gold nanoparticles: two branches of a disulphide molecule do not adsorb adjacent to each other
P. Ionita, A. Caragheorgheopol, V. Chechik, B. C. Gilbert
J. Am Chem. Soc., 2002, 124, 9048-9.
36. Synthesis and characterisation of some novel hetero-diradicals containing linked hydrazyl and nitroxide moieties
P. Ionita, B. C. Gilbert, A. C. Whitwood
Perkin Trans. II, 2001, 1453-62.
35. New congeners of some betaines whose picramido groups are replaced by 4-cyano-2,6-dinitrophenyl analogs
I.C. Covaci, T. Constantinescu, M.T. Caproiu, H. Caldararu, P. Ionita, A.T. Balaban
Polish J. Chem., 2001, 75, 1427-40.
34. Influence of cyclodextrins on the kinetics of oxidation of amino acids and bsa by hydrazyl radicals
G. Ionita, V. Em. Sahini, C. Luca, P. Ionita
J. Inclusion Phen., 2001, 39, 269-71.
33. Synthesis of new hydrazyl free radicals. Supramolecular complexes with crown ether and cyclodextrins
P. Ionita, M.T. Caproiu, H. Caldararu, G. Ionita
Rev. Roum. Chim., 2001, 46, 363-9.
32. Direct amination of 2,2-diphenyl-1-picrylhydrazine through a Meisenheimer complex
P. Ionita, M. T. Caproiu, C. Draghici
Rev. Roum. Chim., 2001, 46, 803-6.
31. Synthesis of a new macrocyclic ligand containing two sulphonamide groups and a preliminary study of cation transport by this ligand
O. Popescu, P. Ionita, R. Socoteanu, M.T. Caproiu
Rev. Roum. Chim., 2000, 45, 357-60.

30. The reaction of 2,2-diphenyl-1-picrylhydrazyl free stable radical with sodium borohydride in the presence of 18-C-6
E. Hristea, C. Radutiu, T. Constantinescu, P. Ionita, M.T. Caproiu, M. Hillebrand, A.T. Balaban
Rev. Roum. Chim., 2000, 45, 1089-96.
29. New sulfonyl derivatives of 2,2-diphenyl-1-picrylhydrazyl and their supramolecular complexes with crown ethers or kryptands
P. Ionita, M. T. Caproiu, A. T. Balaban
Rev. Roum. Chim., 2000, 45, 935-41.
28. Authentic versus alternative mechanisms in spin trapping. formation of azide spin-adducts in biphasic and non-aqueous systems by the oxidation of azide anion with a variety of hydrazyl radicals
P. Ionita, B. C. Gilbert, A. C. Whitwood
Perkin Trans. II, 2000, 2436-40.
27. Kinetics of oxidation of amino acids by some free stable hydrazyl radicals
V. Em. Sahini, G. Ionita, G. Semenescu, P. Ionita
Acta Chem. Slovenica, 2000, 47, 111-9.
26. A new nitration process with sodium nitrite in the presence of crown ethers
I. C. Covaci, T. Constantinescu, P. Ionita, C. Luca, A.T. Balaban
Rev. Roum. Chim., 1999, 44, 823-9.
25. Synthesis based on 9-amino-n-picrylcarbazyll
P. Ionita, M. T. Caproiu, A. Meghea, O. Maior, M. Rovinaru, G. Ionita
Polish J. Chem., 1999, 73, 1177-83.
24. Host-guest complexes of some stable free radicals
P. Ionita
J. Incl. Phen. Molec. Rec., 1999, 34, 253-8.
23. ¹⁵N Regioselectively [¹⁵NO₂]-labelled N-methoxypicramide and DPPH prepared by using a crown ether and solid sodium [¹⁵N]nitrite
M. T. Caproiu, I. C. Covaci, P. Ionita, C. Luca, T. Constantinescu, A. T. Balaban
J. Nuclear Radioanalytical Chem., 1999, 242, 773-6.
22. The reaction between the DPPH free radical and potassium cyanide in the presence of crown ether 18-C-6 - a correction.
P. Ionita, T. Constantinescu, C. Luca, H. Caldaru, M. T. Caproiu, F. Dumitrascu, I. Silberg, A. T. Balaban
Rev. Roum. Chim., 1999, 44, 393-6.
21. Nitration of some di-and tri- nitrohalobenzenes with solid sodium nitrite in the presence of 18-C-6
A. Stoica, P. Ionita, M. T. Caproiu, T. Constantinescu, F. Badea
Rev. Roum. Chim., 1999, 44, 351-6.
20. 3,5-Dinitro-4-methoxyaminobenzoic acid and its derivatives
I. Covaci, T. Constantinescu, M. T. Caproiu, C. Draghici, P. Ionita, C. Luca, G. Stanciuc, M. Maganu, A. T. Balaban
Rev. Roum. Chim., 1999, 44, 333-40.

19. The active transport of potassium, arginine, protons and electrons through bulk liquid membranes
C. Luca, P. Ionita, T. Constantinescu
Rev. Roum. Chim., 1999, 44, 39-44.
18. The reaction of DPPH free stable radical with sodium *tetraphenylborate* in presence of 18-C-6 crown ether
P. Ionita, F. Spafiu, T. Constantinescu, H. Caldararu
Rev. Roum. Chim., 1999, 44, 497-500.
17. The preparation and some reaction of 2,2-diphenyl-1-(3,6-dinitro-4-coumarinyl) hydrazyl free radical
P. Ionita, M. Rovinaru, O. Maior
South. Braz. J. Chem., 1998, 6, 59-66.
16. The reaction between DPPH free stable radical and N-bromosuccinimide
P. Ionita
South. Braz. J. Chem., 1998, 6, 101-6.
15. Hydrazyl and aminyl analogs, liquid membranes and stationary phases for gas chromatography
D. O. Popescu, P. Ionita, N. Zarna, I. Covaci, A. Stoica, A. Zarna, D. Nourescu, F. Spafiu, A.T. Balaban, and T. Constantinescu
Roum. Quat. Rev., 1998, 6, 271-82.
14. Normal and reversed phase TLC of some hydrazine derivatives
G. Ionita, T. Constantinescu, P. Ionita
J. Planar Chromatogr. Modern TLC, 1998, 11, 141-4.
13. Selective (¹⁵N) nitration of 2,2-diphenyl-1-(2,4- or 2,6-dinitrophenyl)-hydrazines or -hydrazyls
P. Ionita, M. T. Caproiu, C. Luca, T. Constantinescu, H. Caldararu, A. T. Balaban
J. Label. Cpd. Radiopharm., 1998, XLI, 791-9.
12. Supramolecular complexes of l-alanyl-nitroanilide cation with crown ethers, involving tetraphenylborate as anion pair
C. Luca, I. C. Covaci, M. T. Caproiu, P. Ionita, M. Maganu, T. Constantinescu
Rev. Roum. Chim., 1998, 43, 469-72.
11. Gas-chromatographic studies using glass capillary columns with crown-ether type stationary phases. i. Naphtyl azocrown ethers and related compounds: synthesis and properties.
C. Luca, F. Spafiu, M. T. Caproiu, E. Tudor, P. Ionita, T. Constantinescu, M. Danescu, A. Stanciuc
Rev. Roum. Chim., 1998, 43, 287-93.
10. The influence of anion pair upon the extraction of some cations and of arginine by means of crown ethers
C. Luca, P. Ionita, D. O. Popescu, T. Constantinescu
Rev. Roum. Chim., 1998, 43, 541-4.
9. Transfer of alkali cations by means of crown ethers and some hydrazine derivatives.
C. Luca, P. Ionita, E. Popa, T. Constantinescu
Rev. Roum. Chim, 1998, 43, 753-6.

8. The reaction of DPPH with H_2O and H_2O_2 in presence of cryptands.
C. Luca, P. Ionita, T. Constantinescu
Rev. Roum. Chim, 1998, 43, 129-31.
7. The syntheses of 2-(p-nitrophenyl)-2-phenyl-1-picrylhydrazine, 2,2-bis(p-nitrophenyl)-1-picrylhydrazine and their ^{15}N labelled congeners.
C. Luca, P. Ionita, M. T. Caproiu, H. Caldararu, T. Constantinescu
Rev. Roum. Chim, 1998, 43, 221-4.
6. The preparation of solid supramolecular complexes between crown ethers, potassium and 2,2-diphenyl-1-picrylhydrazyl anion.
C. Luca, P. Ionita, M. T. Caproiu, T. Constantinescu
Rev. Roum. Chim, 1998, 43, 25-30.
5. The reaction between the DPPH free radical and potassium cyanide in the presence of crown ether 18-C-6.
P. Ionita, T. Constantinescu, C. Luca, H. Caldararu, M. T. Caproiu, A. T. Balaban
New. J. Chem., 1997, 21, 511-5.
4. The reaction of free stable 2,2-diphenyl-1-picrylhydrazyl radical with KOH in presence of polyethylene glycols.
C. Luca, P. Ionita, T. Constantinescu
Rev. Roum. Chim., 1997, 42, 683-5.
3. The reaction of 2,2-diphenyl-1-picrylhydrazyl with HO^- anion in the presence of crown ethers.
C. Luca, P. Ionita, T. Constantinescu, H. Caldararu, A. Caragheorgheopol, M. T. Caproiu
Rev. Roum. Chim., 1997, 42, 985-92.
2. Formation of the supramolecular complex with crown ethers, alkali hydroxides and 2,2-diphenyl-1-picrylhydrazine as partners in liquid-liquid and solid-liquid diphasic system.
C. Luca, P. Ionita, T. Constantinescu, H. Caldararu, A. Caragheorgheopol, M. T. Caproiu
Rev. Roum. Chem., 1997, 42, 105-9.
1. 1,1-Diphenyl-2-picrylhydrazine pair anion in interphase transfer alkali cations and arginine as supramolecular complexes in water -methylene chloride system
C. Luca, P. Ionita, T. Constantinescu
Rev. Roum. Chim., 1994, 39, 1141-9.

Books:

P. Ionita

Determinarea structurii compusilor organici

2011, Editura Universitatii Bucuresti, 95 pages, format 288/205 mm

ISBN 978-973-737-948-1

P. Ionita

Radicali liberi persistenti in exemple si aplicatii

2010, Editura Ars Docendi, 191 pages, format 250/176 mm

ISBN 978-973-558-467-2

Supervisor of the following BA or MSc

11. Sinteza si determinarea colorimetrica a nitroglicerinei si hexogenului
10. Radicali liberi in fumul de tigara
9. Nanoparticule cu proprietati speciale
8. Sinteza, caracterizarea si evaluarea activitatii biologice a unor noi derivati de antipirina
7. Sinteza si caracterizarea unui derivat mixt eter coroana- radical liber stabil
6. Sinteza si caracterizarea unor poliradicali stabili
5. Reactia DPPH cu N-hidroxiftalimida
4. Sinteza si aplicatii ale unor derivati de Kriptofix K22
3. Imobilizarea unor compusi de interes pe nanoparticule
2. Sinteza si caracterizarea unor N-alcoxiftalimide
1. Sinteza si caracterizarea unor noi radicali liberi persistenti de tip hidrazil