

EMANDI ANA

e-mail: emandi1988@ARtelecom.net ancae@b.astral.ro anaemandi1@yahoo.com

Data nașterii: 11 iunie 1953

Pozitia didactica: Profesor doctor

Domenii competenta/directii de cercetare

- 1) Chimia combinatiilor complexe, combinatii complexe cu azoderivati, combinatii complexe optic neliniare, materiale fotonice.
- 2) Chimia suporturilor, a straturilor de preparatie si a straturilor policrome ale operelor de patrimoniu. Metode chimice implicate in diagnosticarea, autentificare si datarea operelor de patrimoniu.
- 3) Metodologie de consolidare a suporturilor si de curatare a straturilor policrome pe baza de nanosoluri coloidale.

Cursuri predate (actual)

1. Chimia nemetalelor, an I CHIMIA MEDIULUI – Facultatea de Chimie
2. Elemente de chimie pentru restaurare/conservarea operelor de patrimoniu – an I sectie Restaurarea arta sacra – Facultatea de Teologie Ortodoxa

Lucrari publicate

1. D. Negoiu, **A. Emandi**, M. Negoiu, L. Lazar, *Combinaisons complexes du Pd(II), Cu(II), Co(II), et Ni(II) avec 1-(2-benziazolil)-3-méthyle-5-pyrazolone*, Anal. Univ. Bucuresti, **1993**, 19 -22.
2. **A. Emandi**, O. Maior, M. Negoiu, L. Lazar, *Coloranti pe baza de 1-(2- benziazolil)-3-metil-5-pirazolona*, Rev. Chim. (Bucuresti), **1994**, 45, 179 -182.
3. D. Negoiu, **A. Emandi**, L. Paruta, R. Marchidan, M. Calinescu, *Combinatii complexe ale Pd(II) si Pt(II) cu derivati ai arilidelor acidului 3-hidroxi-2-naftoic*, Rev. Chim. (Bucuresti), **1996**, 47, 823 - 830.
4. D. Negoiu, **A. Emandi**, M. Calinescu, T. Rosu, R. Marchidan, L. Paruta, *Combinatii complexe ale Fe(II), Fe(III), Co(II), Co(III) cu derivati ai arilidelor acidului 2-hidroxi-3-naftoic*, Rev. Chim. (Bucuresti), **1996**, 48, 26 - 32.
5. D. Negoiu, **A. Emandi**, M. Calinescu, L. Frunza, L. Paruta, *Some transition metal complexes derived from arylides of 2-hydroxy-3-naftoic acid*, Anal. Univ. Bucuresti, **1996**, 5, 17 - 22.
6. D. Negoiu, M. Calinescu, S. Dumitrache, L. Paruta, **A. Emandi**, *Combinaisons complexes du praséodyme et du samarium avec des bases de Schiff*, Anal. Univ. Bucuresti, **1996**, 5, 9 -16.
7. T. Rosu, L. Paruta, M. Calinescu, **A. Emandi**, *X-ray studies on Tl₂HgI₄, PbHgI₄, CdHgI₄ and Au₂HgI₄ inorganic combinations*, South. Braz. J. Chem., **1997**, 5, 21 - 34.

8. T. Rosu, L. Paruta, **A. Emandi**, *The electrical behaviour of the M_xHgI_4 inorganic combinations and some structural alterations versus the pressure*, South. Braz. J. Chem., **1996**, 4, 45 - 58.
9. D. Negoiu, M. Calinescu, **A. Emandi**, T. Rosu, L. Paruta, *Combinatii complexe ale Cu(II), Ni(II), Co(II) cu 4-metoxibenzaldehid-semicarbazona si 4- metoxibenzaldehid-tiosemicarbazona*, Rev. Chim. (Bucuresti), **1997**, 48, 300 -305.
10. **A. Emandi**, C. Tarabananu-Mihaila, I. Sebe, L. Paruta, *Coloranti azoici derivati ai 1-(2'-benzthiazolil)-3-metil- 5-pirazolona*, Rev. Chim. (Bucuresti), **1997**, 48, 867 - 871.
11. **A. Emandi**, M. Negoiu, M. Calinescu, A. Gulea, *New coordination compounds of lanthanides with 1-(2'-benzthiazolyl)-3-methyl-4-azo-(2''-carboxyphenyl)-5-pyrazolone*, Anal. St. Univ. Chisinau Moldova, **1998**, 20 - 28.
12. **A. Emandi**, C. Tarabasanu, P. Gheorghe, S. Gheorghe, *Coloranti azoici derivati ai tetrafluoroboraturului N-(4'-aminofenilen)-2,4,6 trimetilpiridinium*, Rev. Chim. (Bucuresti), **1998**, 49, 11 - 15.
13. I. Serban, M. Vasilescu, R. Bandula, **A. Emandi**, *Synthesis and characterization of some new complexes of Ru(II) with bipyridine and co-ligands*, Rev. Roum. Chim., **1998**, 43, 89 - 95.
14. **A. Emandi**, M. Calinescu, V. Dumitache, *New mixed- chelates of VO(IV) and Cu(II) with azomethines, azoderivatives and dimethylbiguanidines*, Sci. Bull. U. P. B., **1998**, 60, 39 - 47.
15. **A. Emandi**, M. Calinescu, A. Nicolae, *Studies on VO(IV) and Ni(II) complexes of Schiff bases derived from salicylaldehyde and 3,5-substituted salicylaldehyde and anyline p-sulphonamide*, Sci. Bull. U. P. B., **1998**, 60, 23 - 27.
16. M. Negoiu, **A. Emandi**, T. Rosu, I. Saramet, *Combinatii complexe ale VO(IV) cu derivati de la triazol si tiadiazol*, Farmacia, **1998**, 66, 35 - 40.
17. **A. Emandi**, M. Balasoiu, T. Rosu, *New complexes of Pr(III), Sm(III), Ho(III), La(III) with 1-(2'-benzthiazolyl)-3-methyl-4-azo-(4''-nitrophenyl)-pyrazol-5-one*, South. Braz. J. Chem., **1998**, 6, 53 - 62.
18. **A. Emandi**, *Synthesis and characterization of some new VO(IV) coordination compounds with pyrazol-5-one azoderivatives*, South. Braz. J. Chem., **1998**, 6, 91 - 99.
19. T. Rosu, A. Nicolae, **A. Emandi**, M. Calinescu, *Studiul unor combinatii complexe ale Co(II) si Cu(II) cu derivati ai hidrazinei*, Rev. Chim. (Bucuresti), **1998**, 49, 613 - 617.
20. D. Negoiu, M. Calinescu, **A. Emandi**, N. Carp, *Combinaisons complexes du Fe(II) avec des semicarbazones et thiosémicarbazones*, Rev. Roum. Chim., **1999**, 44, 733 -739.
21. **A. Emandi**, I. Serban, R. Bandula, *Synthesis of some new solvatochromic 1(4)-substituted pyrazol-5-one azo derivatives*, Dyes and Pigments, **1999**, 41, 63 -77.

22. D. Negoiu, M. Calinescu, **A. Emandi**, E. Badau, *Synthesis and structural characterization of Cr(III), Co(II), Ni(II) and Cu(II) complexes with salicylaldehydes-N-[4-(4'-chlorophenylene sulfonyl)-benzoyl]-hydrazone*, J. Russ. Coord. Chem., **1999**, 25, 40 - 46.
23. D. Negoiu, M. Calinescu, **A. Emandi**, N. Carp, *Four and five metal complexes of bis N,N'-(2-hydroxy-1-naphthalenmethyn)-- phenylendiamine*, Sci. Bull. U. P. B., **1999**, 61, 101 - 106.
24. M. Calinescu, **A. Emandi**, A. Nicolae, L. Paruta, *Magnetic and spectral studies on Cr(III), Ni(II), Cu(II) complexes of 4-hydroxy-5-methoxy isophthalaldehyde bis-dimethylhydrazone*, South. Braz. J. Chem., **2000**, 8, 71 - 84.
25. D. Negoiu, M. Calinescu, **A. Emandi**, T. Rosu, *Synthesis and structural characterization of N-(2'-hydroxy-1'-naphthalenmethyn)-2-amino aniline complexes*, South. Braz. J. Chem., **2000**, 8, 57 - 69.
26. **A. Emandi**, M. Calinescu, S. Ioachim, R. Georgescu, I. Serban, *Synthesis and characteristics of the 2:1 copper(II) complexes with 4-aryloxy-pyrazol-5-one derivatives*, Multiphoton and Light Driven Multielectron Processes in Organic New Phenomena, Materials and Applications, **2000**, 489 - 502.
27. **A. Emandi**, M. Negoiu, M. Calinescu, S. Constantinescu, A. Gulea, *The new Fe(III) complexes with azo dyes (ONO) ligands*, Anal. St. Univ. Chisinau Moldova, **2001**, 256 - 266.
28. E. Ion, M. Calinescu, I. Serban, D. Donescu, E. Barna, T. Ionescu, A. Meghea, **A. Emandi**, *Synthesis and fluorescent properties of Eu(III), Tb(III), Gd(III), Sm(III), Dy(III), Ho(III) azo-polymer complexes containing 1,10-phenantroline, allylacetoacetate as ligands*, Nonlinear Optics, **2001**, 27, 423 - 437.
29. I. Serban, **A. Emandi**, M. Calinescu, *New Ru(III) dicarbonyl compounds series*, Rev. Roum. Chim., **2001**, 46, 1121 - 1125.
30. M. Calinescu, E. Ion, **A. Emandi**, I. Serban, D. Negoiu, R. Georgescu, *Synthesis, characterisation and ligand field parametrization in complex compounds of Ni(II) and Cu(II) with hydrazone Schiff bases*, The 12th Romanian International Conference of Chemistry and Chemical Engineering, **2001**, 368-372.
31. M. Calinescu, E. Ion, **A. Emandi**, D. Negoiu, I. Serban, A. Nicolae, *Études spectrales et magnétiques sur les combinaisons complexes du Co(II) et Cu(II) avec 2-hydroxy-1-naphthalaldéhyde diméthyle hydrazone*, Anal. Univ. Bucuresti, **2002**, 2, 15 - 20.
32. D. Negoiu, M. Calinescu, E. Ion, **A. Emandi**, *Nouvelles combinaisons complexes du Co(II), Fe(II), Fe(III), et Cr(III) avec p-diméthyleamino-benzaldéhyde- benzthiazolil hydrazone*, Sci. Bull. U. P. B., **2002**, 64, 19 - 26.
33. M. Calinescu, **A. Emandi**, V. Pop, E. Ion, *Paramétrisation du champ des ligands dans les combinaisons complexes du Ni(II) avec p-diméthyleamino-benzaldéhyde-benzthiazolil hydrazone*, J. Univ. Chem. Tech. Met. Sofia, **2002**, 37, 101 -106.

34. I. Serban, M. Calinescu, **A. Emandi**, C. Boscornea, N. Stanica, *Synthesis and spectral characterisation of Cu(II), Ni(II), Co(II) and Cr(III) complexes of cinnamoyl methane derivatives as ligands*, Rev. Roum. Chim., **2003**, 48, 381 -386.
35. M. Calinescu, **A. Emandi**, I. Serban, V. Pop, *Synthesis and spectroscopic studies of Cu(II) and Co(II) complex compounds with 4-metoxybenzaldehyde-N- [4-(4`-chlorophenylenesulfonyl)-benzoyl] hydrazone*, Synth. React. Inorg. Met. Org. Chem., **2003**, 33, 1927 – 1941.
36. **A. Emandi**, M. Calinescu, N. Iftimie, *Complexes with mixed (OO) and (ONO) donor groups. Part I. Synthesis and characterization of Ni(II), Pt(IV), Cu(II), VO(IV) new complexes with 1-phenyl-3-methyl-4-azo-(2`-carboxy-phenyl)-pyrazol-5-one and allylacetate as ligands*, Rev. Chim. (Bucuresti), **2003**, 54, 569 - 572.
37. **A. Emandi**, M. Calinescu, N. Iftimie, *Complexes with mixed (OO) and (ONO) donor groups. Part II. Synthesis and characterization of VO(IV), Fe(III), Co(II), Ni(II), Cu(II), Zn(II) new complexes with 1-phenyl-3-methyl-4-azo-(2`-carboxy-phenyl)-pyrazol-5-one, 1-(2`-benzthiazolyl)-3-methyl-4-azo-(4`-nitro-phenyl)- pyrazol-5-one and allylacetate as ligands*, Rev. Chim. (Bucuresti), **2003**, 54, 661 - 665.
38. N. Iftimie, A. Meghea, M. Giurginca, **A. Emandi**, *Testarea prin chemiluminiscenta a capacitatii de protectie a unor vitamine prezente in extracte naturale*, Editura Printech, ISBN-973-652-803-3, **2003**, 24 - 27.
39. E. Cristurean, D. Marinescu, R. Olar, M. Badea, N. Stanica, **A. Emandi**, *Magnetic and morphologic characterisation of some substituted ferrites synthesized by a non-conventional method*, Organic Nanophotonics, **2003**, 163 -168.
40. M. Badea, **A. Emandi**, D. Marinescu, E. Cristurean, R. Olar, A. Braileanu, P. Budrugaec, E. Segal, *Thermal stability of some azo-derivatives and their complexes*, J. Therm. Anal. Cal., **2003**, 72, 525 - 531.
41. M. Badea, R. Olar, E. Cristurean, D. Marinescu, **A. Emandi**, M. Calinescu, E. Segal, *Thermal behaviour and non-isothermal kinetic study of some new azoderivative pigments and their Cu(II) complexes*, J. Therm. Anal. Cal., **2003**, 75, 672 - 681.
42. M. Calinescu, E. Ion, D. Negoiu, **A. Emandi**, *Combinaisons complexes du Tb(III) et Eu(III) avec des hydrazones dérivées de 2-hydrazino-benzothiazole. synthèse, caractérisation et propriétés luminescentes*, Anal. Univ. Bucuresti, **2003**, 1-2, 89 - 96.
43. M. Calinescu, **A. Emandi**, *Complexes dimères du cuivre(II) avec N-benzoyle-N-p-tolile thiourée*, Sci. Bull. U. P. B., **2003**, 65, 11 - 18.
44. **A. Emandi**, M. Calinescu, C. Nichita, *Synthesis and characterization of some new lanthanide hybride conjugated monomers*, J. Mol. Cryst. & Liq. Cryst., **2004**, 416, 31-38.

45. **A. Emandi**, M. Calinescu, C. Ciomaga, *Electronic studies of the some new 2:1 Cu(II) complexes of 4-aryloxy-pyrazol-5-one dyes*, J. Mol. Cryst. & Liq. Cryst., **2004**, 416, 13-30.
46. M. Călinescu, **A. Emandi**, *Metal complex monomers of Cu(II) and Ni(II) with allylacetoacetate and 2-hydrazin-benzothiazole*, J. Mol. Cryst. & Liq. Cryst., **2004**, 415, 247-255.
47. M. Badea, R. Olar, D. Marinescu, **A. Emandi**, V. Pop, G. Vasile, *Complexes with acrylate ion as ligand. Part I. Polynuclear Cr(III) complexes*, Nonlinear Optics, Quantum Optics, **2004**, 32, 1-3, 127-134.
48. **A. Emandi**, M. Calinescu, N. Iftimie, *Composition and characterization of some new metal complexes of 3-nitrozo-4-hydroxy-coumarine and antranilic acid*, Anal. Univ. Bucuresti, **2004**, I-II, 167-172.
49. **A. Emandi**, M. Calinescu, A. Nicolae, *Synthesis and characterization of some new complexes of Ni(II), Cu(II), Zn(II), Cd(II), Hg(II), Pb(II) with mixed ligands (ON) donor groups*, Anal. Univ. Bucuresti, **2004**, I-II, 161-166.
50. M. Badea, R. Olar, D. Marinescu, E. Cristurean, L. Ivan, **A. Emandi**, *Complexes with triazole derivatives. Part II. Mononuclear complexes of Co(II) with 1-[methylamino-N-(O-tolyl)]-1H-benzotriazole*, Anal. Univ. Bucuresti, **2004**, I-II, 139-145.
51. R. Olar, M. Badea, N. Stanica, E. Cristurean, D. Marinescu, **A. Emandi**, *Synthesis, spectroscopic and magnetic characterisation of some Ni(II) complexes with 2-amino-1,3,4-thiadiazole-5-thiol*, Anal. Univ. Bucuresti, **2004**, I-II, 185-190.
52. **A. Emandi**, M. Calinescu, A. Meghea, *Effects of added metal ions on the behaviour of the azo chromophore in heterocyclic copolymers*, Nonlinear Optics, Quantum Optics, **2005**, 32, 4, 269-284.
53. Mihaela Badea, Rodica Olar, Gina Vasile, **Ana Emandi**, Veronica Pop, Dana Marinescu, *Thermal behavior of some new chromium complexes with potential biological importance*, J. Therm. Anal. Cal., **2005**, 81, 273 - 276.
54. Mihaela Badea, Rodica Olar, **Ana Emandi**, *The Effect Of Er(III) On The Thermal Behavior Of Azo (-N=N-) and Azomethinic (-CH=N-) Chromophores*, J. Therm. Anal. Cal., **2006**, 84, 601 – 605.
55. Mirela Calinescu, **Ana Emandi**, Emilia Ion, Rodica Georgescu, *Magnetic and spectral studies on copper(II) complexes with 2-benzothiazolyl hydrazones. Part I*, Rev. Chem. **2006**, 57, 11, 1258-1261.
56. **Ana Emandi**, Cristina Vasiliu, Rodica Georgescu, Iulian Ioniță and Mircea Bulinski, *Spectral studies of some Ni(II), Pd(II), Cu(II) azo-dye complexes in a polymeric matrix of poly vinyl alcohol*, Rev. Chem. **2006**, 57, 11, 1098-1104.

57. **Ana Emandi**, Cristina Vasiliu, Marilena Vasilescu, Mariana Voicescu, Rodica Bandula, *Multifunction coordinative compounds of Er (III) based on azo derivatives and Schiff bases ligands as chromophores in nonlinear optic*, Journal of Optoelectronics and Advanced Materials, J. of Optoelectronics and Advanced Materials., **2007**, vol.9, nr. 5, 1347-1357.
58. C. Ciobanu, E. Stoica, C. N. Cascaval, D. Rosu, L. Rosu, M. Stamate, **A. Emandi**, I. Nemes, F. Petrescu, *Polyurethane low concentration erbium-doped*, Journal of Applied Polymer Science., **2007**, 103, 659-669.
59. Ana Emandi^{1*}, N. Jula, Cristina Vasiliu, Maria Dinescu, C. Constantinescu, Mirela Calinescu, Marilena Vasilescu, *Some aspects about the properties of nanostructured organotranzitional Cu(II) complex on a polymeric matrix as optical sensor*, PROCEEDING – Chisinau International Conference on Microelectronics and Computer Science, ICMCS-September 19-21, 2007, Chişinău, Republic of MOLDOVA, 2007, p.
60. N. V. Kamanina, A. Emandi, F. Kajzar, Andre´-Jean Attias, *Laser-Induced Change in the Refractive Index in the Systems Based on Nanostructured Polyimide: Comparative Study with Other Photosensitive Structures*, Mol. Cryst. Liq. Cryst., **2008**, vol. 486, 1043-1053.
61. Ana Emandi, *C. Constantinescu, Ruxandra Birjega, C.Vasiliu, C. Negrila, C. Logofatu, M. Lazarescu, Maria Dinescu, *Thin films of Cu(II)-o,o`-dihydroxy azobenzene nanoparticle-embedded polyacrylic acid (PAA) for nonlinear optical applications developed by Matrix Assisted Pulsed Laser Evaporation (MAPLE)* , Journal of Applied Surface Science, 2008, 225, 10, p. 5480-5485
62. *C. Constantinescu, A. Rotaru, P. Rotaru, Ana Emandi, Mirela Calinescu, Marilena Vasilescu, Ruxandra Birjega, Maria Dinescu, *Thermal analysis and thin films deposition by matrix assisted pulsed laser evaporation of cu(iii) o,o``-dihydroxy azobenzene*, Jurnal of Applied Surface Science, 2009, accepted for publication
63. Ana Emandi, Ioan Stamatina, Petru Budrugaec, Adriana Andronie, *Integrated thermal and spectroscopic methods in structural characterization of early and old woods*, Journal of Cultural Heritage, 2009, accepted for publication
64. Ana Emandi, Ioan Stamatina, Adriana Androni, Nicoleta Buruntia, *Studies of early and biodegraded woods similar with artifacts species by thermomechanical, Raman and FT-IR, mass-spectrometry*, Journal of Cultural Heritage, 2009, accepted for publication
65. Ana Emandi, Ioan Stamatina, Petru Budrugaec, Adriana Andronie, *Investigation of different species of archaeological woods by Raman, FTIR, mass-spectroscopy and thermomechanical behavior*, Journal of Cultural Heritage, 2009, accepted for publication
-

66. Catalin Constantinescu, Ana Emandi , Ioan Stamatina, Ruxandra Birjega, Ileana Cristina Vasiliu, *Push – pull molecular devices based on poly acrylic host and matalated 1-phenyl-3-methyl-4-(1'-azo-2'-sodium carboxilate)-pyrazole-5-one as guest*, Jurnal of Applied Surface Science, 2009, accepted for publication
67. Catalin Constantinescu, Ana Emandi , Ioan Stamatina, Ruxandra Birjega, Ileana Cristina Vasiliu, *Variation of charge transfer energy of Er(III) complex of azo dyes and Schiff bases in different solvents and embedded in polymeric thin films*, Jurnal of Applied Surface Science, 2009, accepted for publication
68. Catalin Constantinescu, Ana Emandi , Ioan Stamatina, Ruxandra Birjega, Ileana Cristina Vasiliu, *Nonlinear optical behavior of functionalized poly acrylic acid thin films with a series of pyrazol-5-one azo dyes complexes of Er(III)*, Jurnal of Applied Surface Science, 2009, accepted for publication
69. Ana Emandi, Monica Enculescu, Silviu Polosan, Ioan Stamatina, *Structure and luminescence of azo dyes coordinative compounds*, Jurnal of Applied Surface Science, 2009, accepted for publication
70. Adriana Andronie, Ana Emandi, Ioan Stamatina, *Study of conduction mechanisms in Poly-perfluorosulphonated membranes impregnated with intrinsic semiconducting polymers*, Jurnal of Applied Surface Science, 2009, accepted for publication
71. Adriana Andronie , Ana Cucu , Stefan Iordache , Serban Stamatina, Liliana Pasare, Ana Emandi, Ioan Stamatina , *A comparative study of polysilicic acid insertion in fuel cells membranes*, Jurnal of Applied Surface Science, 2009, accepted for publication