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## **DATE PERSONALE**

privind activitatea științifică și didactică în anul 2014

### **Monografii sau cursuri (2):**

1. **I. SANDU**, M. CANACHE, A.V. SANDU, V. VASILACHE, **Aerosolii salini în dezvoltarea copiilor**, Ed. Universității Alexandru Ioan Cuza Iași, 2014, 230p.
2. **I. SANDU**, C. TIRBU, A.V. SANDU, C. TIRBU, **Aerosolii salini în îmbunătățirea performanțelor sportivilor**, Ed. Universității Alexandru Ioan Cuza Iași, 2014, 230p.

### **Volume editate sub coordonare, publicate prin edituri centrale (1):**

1. **I. SANDU** (editor), **Scientific, Technological and Innovative Research in Current European Context** (Euroinvent, International Workshop), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, 318p. FIN = 3.18x0,05/1 = 1.59;

### **Monografii recenzate sau referențiate (0):**

### **Capitole din cri editate în strînsitate (1):**

1. V. VASILACHE, **I. SANDU**, S.C. ENEA, I.G. SANDU, *Determinari ceramografice pe loturi din siturile Costești și Giurghești, Comunitățile cucuteniene din zona Târgul Frumos – Cercetări interdisciplinare în siturile de la Costești și Giurghești*, ISBN 978-6067-140-65-1, Ed. Universității Alexandru Ioan Cuza Iași, 2014, pp. 138-147.

### **Lucrări științifice publicate sau trimise spre publicare (106):**

- a. **Lucrări publicate în reviste de specialitate cu factor de impact ISI (38)**, care însumează pentru 2012 un Factor de Impact de **0,000** și Author Factor de **0,000**:

1. S. PRUTEANU, V. VASILACHE, I.C.A. SANDU, A.M. BUDU, **I. SANDU**, *Assessment of Cleaning Effectiveness for New Ecological Systems on Ancient Tempera Icon by Complementary Microscopy Techniques*, **MICROSCOPY RESEARCH AND TECHNIQUES**, 77, 12, 2014, pp. 1060-1070; **Impact Factor 1.170**, **Author Factor 0,234**;
2. C.G. HRIB, **I. SANDU**, K. EARAR, L.M. BIRSA, *Synthesis of New 1,3-Dithiolium Derivatives from Propiophenones*, **REVISTA DE CHIMIE**, (Bucharest), 65, 12, 1453-1456, 2014, **Impact Factor = 0,677**, **Author Factor = 0,180**;
3. V. POPESCU, I.-G. SANDU, E. VASLUIANU, **I. SANDU**, L.R. MANEA, C. CAMPAGNE, *The effects of chitosan grafting onto cotton fabric pretreated with a tetrool*, **REVISTA DE CHIMIE**, (Bucharest), 65, 12, 1439-1447, 2014, **Impact Factor = 0,677**, **Author Factor = 0,113**;
4. S. PRUTEANU, **I. SANDU**, M.C. TIMAR, M. MUNTEANU, V. VASILACHE, I.C.A. SANDU, *Ecological systems applied for cleaning gilding in old icons*, **REVISTA DE CHIMIE**, (Bucharest), 65, 12, 1467-1472, 2014, **Impact Factor = 0,677**, **Author Factor = 0,113**;
5. V. POPESCU, A. MURESAN, O. CONSTANDACHE, G. LISA, E.I. MURESAN, C. MUNTEANU, **I. SANDU**, *Tinctorial Response of Recycled PET Fibers to Chemical Modifications during Saponification and Aminolysis Reactions*. **INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH**, 53, (43), 2014, pp 16652–16663, **DOI: 10.1021/ie5028974**, (Manuscript ID ie-2014-028974), **Impact Factor = 2,235**, **Author Factor = 0,320**;
6. M.C. TIMAR, I.C.A. SANDU, E. BELDEAN, **I. SANDU**, *FTIR investigation of Paraloid B72 as consolidant for old wooden artefacts - principle and case studies*, **MATERIALE PLASTICE**, Bucharest, 51, 4, 382-387, 2014, **Impact Factor = 0,463**, **Author Factor = 0,116**;
7. L. HRISTIAN, D.L. BORDEIANU, P.IUREA, **I. SANDU**, *Study of the tensile properties of materials destined to manufacture protective clothing for firemen*, **MATERIALE PLASTICE**, Bucharest, 51, 4, 405-409, 2014, **Impact Factor = 0,463**, **Author Factor = 0,116**;

8. BACHVAROVA-NEDELICHEVA, A.D., GEGOVA, R.D., STOYANOVA, A.M., IORDANOVA, R.S., COPCIA, V.E., IVANOVA, N.K., SANDU, I., *Synthesis, characterization and properties of ZnO/TiO<sub>2</sub> powders obtained by combustion gel method*, **BULGARIAN CHEMICAL COMMUNICATIONS** (ISSN 0324-1130), 46, 3, 2014, pp. 585-593 (ISI Factor 0,349/2013), Impact Factor = 0,349, Author Factor = **0,050**;
9. D.-E. BRANISTEANU, G. AGAFITEI, **I. SANDU**, O. PARTENI, V. POPESCU, M. NICHIFOR, C.-D. RADU, *Study on wearing behaviour of a cellulosic matrix to delivering bioactive principles dermatic disorders*, **REVISTA DE CHIMIE**, (Bucharest), 65, 11, 1357-1362, 2014, Impact Factor = 0,677, Author Factor = **0,097**;
10. I. NOVAC, A.V. SANDU, E. VASILESCU, I. SANDU, *Composite Coatings in Copper Matrix with Graphite as Dispersed Phase Obtained by Electrodeposition*, **REVISTA DE CHIMIE**, (Bucharest), 65, 11, 1306-1309, 2014, Impact Factor = 0,677, Author Factor = **0,169**;
11. I.G. SANDU, F.A. TENCARIU, D.M. VORNICU, A.V. SANDU, A. VORNICU, V. VASILACHE, I. SANDU, *Establishing the archaeo-metallurgic ornamentation process of an axe from the bronze age by OM, SEM-EDX and micro-FTIR*, **MICROSCOPY RESEARCH AND TECHNIQUES**, 77, 11, 2014, pp. 918-927;
12. G. ROMANESCU, A. TARNOVAN, I.G. SANDU, G.M. COJOC, D. DASCALITA, **I. SANDU**, *The Quality of Surface Waters in the Suha Hydrographic Basin (Oriental Carpathian Mountains) Calitatea apelor de suprafata din Bazinul hidrografic Suha (Carpatii Orientali)*, **REVISTA DE CHIMIE**, (Bucharest), 65, 10, 1168-1171, 2014, , Impact Factor = 0,677, Author Factor = **0,112**;
13. A. CEREMPEI, E.I. MURESAN, **I. SANDU**, L. CHIRILA, I.G. SANDU, *Textile materials with controlled release of rosemary essential oil*, **REVISTA DE CHIMIE**, (Bucharest), 65, 10, 1154-1157, 2014, , Impact Factor = 0,677, Author Factor = **0,135**;
14. N.F. SHAHEDAN, M.M.A.B. ABDULLAH, K. HUSSIN, I. SANDU, C.M.R. GHAZALI, M. BINHUSSAIN, Z. YAHYA, A.V. SANDU, *Characterization and Design Alkali Activated Binder for Coating Application*, **MATERIALE PLASTICE**, Bucharest, 51, 3, 258-262, 2014, Impact Factor = 0,463, Author Factor = **0,058**;
15. G. BALAN, E.I. MURESAN, V. POPESCU, A. CEREMPEI, A. MURESAN, **I. SANDU**, *Alternative hydrophobic treatments applied on dyed fabrics*, **REVISTA DE CHIMIE**, (Bucharest), 65, 9, 1052-1057 2014, Impact Factor = 0,677, Author Factor = **0,112**;
16. E.I. MURESAN, V. POPESCU, **I. SANDU**, *Synthesis and characterization of hierarchical metallosilicate macrospheres catalysts*, **REVISTA DE CHIMIE**, (Bucharest), 65, 9, 1029-1035, 2014, Impact Factor = 0,677, Author Factor = **0,226**;
17. T. CONSTANDACHE, A. CEREMPEI, E.-I. MURESAN, V. POPESCU, M. DROBOTA, **I. SANDU**, *Modified organic pigments used in polypropylene coloration*, **REVISTA DE CHIMIE**, (Bucharest), 65, 8, 892-896, 2014, Impact Factor = 0,677, Author Factor = **0,112**;
18. L. CHIRILA, **I. SANDU**, A. CEREMPEI, A.I. ECSNER, A. POPESCU, C. POPESCU, C. RIMBU, *Zinc pre-metallised dyes for wool dyeing and bacteriostatic properties*, **REVISTA DE CHIMIE**, (Bucharest), 65, 8, 911-915, 2014, Impact Factor = 0,677, Author Factor = **0,098**;
19. V. POPESCU, **I. SANDU**, *Multifunctional finishing with monochlorotriazinil -cyclodextrine and tetrol*, **REVISTA DE CHIMIE**, (Bucharest), 65, 7, 811-818, 2014, Impact Factor = 0,677, Author Factor = **0,338**;
20. C.-D. RADU, **I. SANDU**, R. DIACONESCU, E. BERCU, H.-A. ALDEA, *Statistic modeling and optimization of the dyeing process of melana fibres with victoria blue b dye in the presence anionic retarders*, **REVISTA DE CHIMIE**, (Bucharest), 65, 7, 797-802, 2014, Impact Factor = 0,677, Author Factor = **0,135**;
21. I. ASAFTEI, N. BILBA, **I. SANDU**, *Conversion of C<sub>4</sub> – C<sub>4</sub><sup>-</sup> Technical Fraction Over Zinc – Copper ZSM-5 Zeolites*, **REVISTA DE CHIMIE**, (Bucharest), 65, 6, 697-702, 2014, Impact Factor = 0,677, Author Factor = **0,226**;
22. V. POPESCU, **I. SANDU**, E.I. MURESAN, B. ISTRATE, G. LISA, *Effects of the Pre-treatment with Atmospheric - Air Plasma Followed by Conventional Finishing*, **REVISTA DE CHIMIE**, (Bucharest), 65, 6, 676-682, 2014, Impact Factor = 0,538, Author Factor = **0,107**;
23. T. CONSTANDACHE, A. CEREMPEI, R. MURESAN, I.C.A. SANDU, A. MURESAN, **I. SANDU**, *Possibilities to improve the colour properties of the yellow 17 pigment by treatment with metallic salts*, **MATERIALE PLASTICE**, Bucharest, 51, 2, 153-156, 2014; Impact Factor = 0.387/2011 (2012 0.379/0.036), Author Factor = 0.0645;
24. C.-D. RADU, O. PARTENI, I.G. SANDU, O. BORHAN, E. VASLUIANU, **I. SANDU**, *Effects of cellulose functionalization with ethylenediamide tetrakis(ethoxylate-block-propoxylate) tetrol*, **REVISTA DE CHIMIE**, (Bucharest), 65, 5, 534-541, 2014, Impact Factor = 0,538, Author Factor = **0,090**;
25. L.G. BAHIRIN, B.F. CRACIUN, **I. SANDU**, M.L. BIRSA, *Synthesis of Novel 1,3-Dithiol-2-ylidene Derivatives from the Corresponding Mesoionic Compound*, **REVISTA DE CHIMIE**, (Bucharest), 65, 5, 525-528, 2014, Impact Factor = 0,538, Author Factor = **0,135**;

26. I. ASAFTEI, N. BILBA, **I. SANDU**, *Conversion of butanes and butenes from industrial feedstock over Zn-HZSM-5 (acetate) catalyst*, **REVISTA DE CHIMIE**, (Bucharest), 65, 4, 431-436, 2014, Impact Factor = 0,538, Author Factor = **0,179**;
27. G. ROMANESCU, E. PAUN, **I. SANDU**, I. JORA, E. PANAITESCU, O. MACHIDON, C. STOLERIU, *Quantitative and qualitative assessments of groundwater into the catchment of Vaslui river*, **REVISTA DE CHIMIE**, (Bucharest), 65, 4, 401-410, 2014, Impact Factor = 0,538, Author Factor = **0,077**;
28. L.G. SARBU, C.N. LUNGU, L.G. BAHRAIN, I.V. ASAFTEI, **I. SANDU**, M.L. BIRSA, *New Evidence for the Mesoionic Character of 2-(1,3-Dithiol-2-ylidene)phenolates*, **REVISTA DE CHIMIE**, (Bucharest), 65, 3, 325-327, 2014, Impact Factor = 0,538, Author Factor = **0,090**;
29. G. ROMANESCU, **I. SANDU**, C. STOLERIU, I.G. SANDU, *Water resources in Romania and their quality in the main lacustrine basins*, **REVISTA DE CHIMIE**, (Bucharest), 65, 3, 343-350, 2014, Impact Factor = 0,538, Author Factor = **0,180**;
30. **I. SANDU**, O. MIRCEA, I.G. SANDU, V. VASILACHE, A.V. SANDU, *Liesegang Effect Typology On Ancient Bronzes Discovered In Romania*, **REVISTA DE CHIMIE**, (Bucharest), 65, 3, 311-319, 2014, Impact Factor = 0,538, Author Factor = **0,108**;
31. R. DELIU, I.G. SANDU, R. BUTNARU, D. LUKAS, I. SANDU *Needleless electrospinning. Relaxation time of the aqueous solutions of poly (vinyl alcohol)*, **MATERIALE PLASTICE**, Bucharest, 51, 1, 62-66, (2014);
32. E. BERCU, R. DIACONESCU, A. BALAN, **I. SANDU**, V. POPESCU, D. CIOLOCA, V. TOMA, *Interaction of the anionic polyelectrolytes with crystal violet in the presence of melana fibres. statistic modeling and optimization of the dyeing process*, **MATERIALE PLASTICE**, Bucharest, 51, 1, 22-27, (2014);
33. C.-D. RADU, E. BERCU, **I. SANDU**, L.-G. FOIA, *Influence of maleic polyelectrolytes on the Methylene Blue at dyeing of polyacrylonitrile fibres*, **MATERIALE PLASTICE**, Bucharest, 51, 1, 104-109, (2014);
34. C.N. LUNGU, L.G. BAHRAIN, I.V. ASAFTEI, N.C. FORNA, **I. SANDU**, M.L. BIRSA, *Phenacyl 3-Methylpiperidinyl Carbodithioates as Building Blocks for 1,3-Dithiolium Derivatives 3-Metilpiperidinil Carboditioati de Fenacil ca Precursori pentru Derivati de 1,3-Ditoliu*, **REVISTA DE CHIMIE**, (Bucharest), 65, 2, 181-184, 2014;
35. M.L. BIRSA, **I. SANDU**, L.G. BAHRAIN, *Synthesis of Novel Tricyclic Flavanones Iodine Containing Sinteza de Noi Flavanone Triciclice cu Iod*, **REVISTA DE CHIMIE**, (Bucharest), 65, 2, 174-176, 2014;
36. A.M. TOMOIAG , A. VASILE, M. ALEXANDROAEI, **I. SANDU**, *Ultrasound-Assisted Rapid Growth of Water Compatible Magnetite Nanoparticles*, **JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS**, 16, 1-2, 2014, pp. 221-226,
37. **I. SANDU**, V. VASILACHE, M. ALEXIANU, R.-G. CURC , *Chemical explanation of an original milk curdling ethno-procedure by natural brine*, **REVISTA DE CHIMIE**, (Bucharest), 65, 1, 120-122, 2014;
38. D. BELEI, N.C. FORNA, **I. SANDU**, M.L. BIRSA, *Novel Mesoionic 2-Methyl-4-(1,3-Dithiol-2-ylidene)phenolates*, **REVISTA DE CHIMIE**, (Bucharest), 65, 1, 80-83, 2014;

**b. Articole publicate în reviste interna ionale in BDI, f r factor de impact (12):**

1. A. COSMA, D. BONTAS, O. PINTILIE, M. ZAHARIA, G. DROCHIOIU, **I. SANDU**, *De la teoria biostructurala la determinarea aminoacizilor liberi din plante*, **REVISTA TEHNOCOPIA**, (ISSN 1857-3843), 2(11), 2014, pp. 05-11;
2. M. ZAHARIA, O. PINTILIE, A. COSMA, R. GRADINARU, G. DROCHIOIU, M. MURARIU, **I. SANDU**, *Toxicitatea i utilitate compu ilor dinitrofenolici ca medicament*, **REVISTA TEHNOCOPIA**, (ISSN 1857-3843), 2(11), 2014, pp. 12-17;
3. O. PINTILIE, A. COSMA, M. ZAHARIA, M. MURARIU, G. DROCHIOIU, **I. SANDU**, *conservarea genetic a variet ților vegetale autohtone și modificările biochimice*, **REVISTA TEHNOCOPIA**, (ISSN 1857-3843), 2(11), 2014, pp. 18-23;
4. V. VASILACHE, M.A. CRETU, **I. SANDU**, *Considera ii asupra metodei studiului de caz utilizat în lec iile de chimie*, **REVISTA TEHNOCOPIA**, (ISSN 1857-3843), 2(11), 2014, pp. 60-69;
5. S. PRUTEANU, P. SPIRIDON, V. VASILACHE, **I. SANDU**, *Ecological cleaning systems for old icons painted in tempera*, **Chemistry Journal of Moldova**, (ISSN 1857 – 1727), 9(2), 2014, pp. 26-31.

6. R.A. CRISTACHE, A.M. BUDU, P. SPIRIDON, V. VASILACHE, **I. SANDU**, *The study of some archaeometric characteristics used in panel painting icons authentication*, **Chemistry Journal of Moldova**, (ISSN 1857 – 1727), 9(2), 2014, pp. 14-18.
7. M. MUNTEANU, **I. SANDU**, I. HUTANU, L. NICA, *The study of stages and operation involved in the preservation and restoration of two XIX-the century icons, on wooden support*, **PRESENT ENVIRONMENT AND SUSTAINABLE DEVELOPMENT** (ISSN 1843-5971), 8, 2, 2014, p. 131-150;
8. S. PRUTEANU, A.-M. BUDU, **I. SANDU**, V. VASILACHE, *Critical study on the effects of cleaning of old icons by laser pyrolysis*, **The Annals of “Dunarea de jos” University of Galati, Fascicle IX. Metallurgy and Materials Science**, (ISSN 1453 – 083X), 32(37), Special Issue, 2014, pp. 12-15.
9. M. MUNTEANU, **I. SANDU**, V. VASILACHE, R.A. CRISTACHE, *The study on archeometrical characteristics of an old icon, painted on a wooden panel*, **The Annals of “Dunarea de jos” University of Galati, Fascicle IX. Metallurgy and Materials Science**, (ISSN 1453 – 083X), 32(37), Special Issue, 2014, pp. 114-121.
10. O. PINTILIE, M. ZAHARIA, L. TUDORACHI, S. B. NCILA, G. DROCHIOIU, **I. SANDU**, *Emphasizing the Toxicity of Heavy Metal Ions on Plants: Monitoring with an Amino Acids Assay*, **The Annals of “Dunarea de jos” University of Galati, Fascicle IX. Metallurgy and Materials Science**, (ISSN 1453 – 083X), 32(37) Issue 1, 2014, pp. 51- 56.
11. **I. SANDU**, A. STANILA *Factori de sustinere si dezvoltare a creativitatii tehnice autohtone ca vector activ în relansarea economică . II.*, **INTELLECTUS**, (ISSN 1810-7079), Chi in u, vol. 20, nr. 1, 2014, 75-85;
12. C. CIORTESCU, G.O. IANCU, **I. SANDU**, V. VASILACHE, *Geochemistry of titanium heavy minerals in stream sediments from the Bistrita Aurie river (Romania)*, **Romanian Journal of Mineral Deposits** (ISSN 1220-5648), 87, 2, 2014, p. 97-100.

**c. Articole publicate în volumele simpozioanelor internaționale, cu ISBN sau ISSN, factor de impact (16):**

1. P. SPIRIDON, M. KOSIC, B. TUCI, **I. SANDU**, *Museums: a binder space between migrants’ cultural diversities?*, **Proceedings | Challenges of International Migration II: Migration and Regional Development in Europe through the Eyes of Young Professionals**, 10-12 December 2014, Europe House, Prague, Czech Republic, *in print*.
2. A.-M. BUDU, R. CRISTACHE, A.V. SANDU, V. VASILACHE, M.M. AL BAKRI ABDULLAH, **I. SANDU**, *Study of Coloured Lakes Used for the Covering of Silver Leaf in Ecclesial Art of the First Half of 19th Century*, **3rd International Conference on Advanced Materials Engineering & Technology**, Ho Shi Min, Vietnam, 2014, ICAMET2014-271, p. 115;
3. I. HUȚANU, L. NICA, **I. SANDU**, V. VASILACHE, A.V. SANDU, *Acrylic Binder Used for the Consolidation of Gilded Surfaces*, **3rd International Conference on Advanced Materials Engineering & Technology**, Ho Shi Min, Vietnam, 2014, ICAMET2014-272, p. 115;
4. M. MUNTEANU, **I. SANDU**, V. VASILACHE, A.V. SANDU, M.M. AL BAKRI ABDULLAH, I.C.A. SANDU, *Study of a XVIII-th Century Triptych: Materials And Technologies Used And Conservation State*, **3rd International Conference on Advanced Materials Engineering & Technology**, Ho Shi Min, Vietnam, 2014, ICAMET2014-284, p. 120;
5. R.M. CRISTACHE, A.V. SANDU, V. VASILACHE, **I. SANDU**, *IThermal Degradation of a Wood Painting Support From XIXth Century*, **3rd International Conference on Advanced Materials Engineering & Technology**, Ho Shi Min, Vietnam, 2014, CAMET2014-283, p. 119;
6. **I. SANDU**, M.A. CRETU, T. LUPASCU, J.-M. SIELIECHI, I.K. KOUAME, J.G. KAYEM, A.V. SANDU, V. VASILACHE, I.G. SANDU, V. VASILACHE, *Procedure for Potabilization of Underground and Surface Water*, **3rd International Conference on Advanced Materials Engineering & Technology**, Ho Shi Min, Vietnam, 2014, p. 132; **I. SANDU**, M. BRANZILA, A.V. SANDU, V. PELIN, V. VASILACHE, I.G. SANDU, **BULETINI I SHKENCAVE GJEOLLOGJIKE (Tirana)**, (ISSN 0254-5276, ISSN 2306-9600), Volume 1, Special Sessions, 2014, p. 419, (Proceedings XX Congress of the Carpathian - Balkan Geological Association September 23-26, 2014 Tirana Albania);

7. **I. SANDU**, G. DUMITROAIA, C. PREOTEASA, I. COJOCARU, O. MIRCEA, V. VASILACHE, *Pluridisciplinary Study Related to the Copper Daggers of the Cucuteni Culture, Theme 2: MANAGING ARCHAEOLOGICAL HERITAGE. PAST AND PRESENT*, Istambul, 2014;
8. C. CIORTESCU, G.O. IANCU, **I. SANDU**, V. VASILACHE, G. JIGAU, *Geochemistry of detrital garnets from alluvial sediments of the Bistrita Aurie river, Romania, The Proceedings of the 14th GeoConference on Science and Technologies in Geology Exploration and Mining (International Multidisciplinary Scientific GeoConferences-SGEM)*, (ISBN 978619-7105-07-0 and ISSN 1314-2704), Ed. STEF92 Technology Ltd, Sofia, 2014, pp. 121-128;
9. R.A. CRISTACHE, V. VASILACHE, **I. SANDU**, A. BUDU, *Analysis of the conservation state of a panel painting icon from the XIXth century, 3rd International Congress on Chemistry for Cultural Heritage, ChemCH* (Institute of Science and Technology in Art of the Academy of Fine Arts Vienna), 1-5 July 2014, P.48, pp. 286-290;
10. V. VASILACHE, **I. SANDU**, O. MIRCEA, A.V. SANDU, *A study on a cult object from the 12th – 13th century, 3rd International Congress on Chemistry for Cultural Heritage, ChemCH* (Institute of Science and Technology in Art of the Academy of Fine Arts Vienna), 1-5 July 2014, P68, pp. 336-342;
11. P. SPIRIDON, R.A. CRISTACHE, A.M. BUDU, V. VASILACHE, **I. SANDU**, *Study of the some archaeometric characteristics used in the authentication of icons, The International Conference dedicated to the 55<sup>th</sup> anniversary from the foundation of the Institute of Chemistry of the Academy of Science of Moldova, May 28-30, 2014, Chisinau, Section: Analytical and Ecological Chemistry, P131*, p. 193-194;
12. S. PRUTEANU, P. SPIRIDON, V. VASILACHE, **I. SANDU**, *Ecological systems for cleaning old icons, The International Conference dedicated to the 55<sup>th</sup> anniversary from the foundation of the Institute of Chemistry of the Academy of Science of Moldova, May 28-30, 2014, Chisinau, Section: Analytical and Ecological Chemistry, P125*, p. 177-178;
13. P. SPIRIDON, S. PRUTEANU, V. VASILACHE, **I. SANDU**, I.C.A. SANDU, *Study on cleaning with ecological systems water-based of old gilded wooden artifacts, Proceedings of the Youth in the Conservation of Cultural Heritage, YOCOCU 2014*, Agsu, 28-30 May 2014, Azerbaijan, p. 137-142;
14. A.M. BUDU, R.A. CRISTACHE, V. VASILACHE, **I. SANDU**, *The study of coloured lakes used for covering the silver leaf in iconostasis in the first half of 19th century, Proceedings of the Youth in the Conservation of Cultural Heritage, YOCOCU 2014*, Agsu, 28-30 May 2014, Azerbaijan, p. 47-52;
15. R.A. CRISTACHE, I. HUTANU, L. NICA, V. VASILACHE, **I. SANDU**, *Analysis of the Conservation State of a Panel Painting Icon, Proceedings of the Youth in the Conservation of Cultural Heritage, YOCOCU 2014*, Agsu, 28-30 May 2014, Azerbaijan, p. 63-68;

**d. Articole publicate în volume române ti, cu ISBN sau ISSN, ale simpozionelor interna ionale, f r factor de impact (31):**

1. M. MUNTEANU, **I. SANDU**, V. VASILACHE, I.C.A. SANDU, *The study of stages and operations involved in the preservation and restoration of a xiii century icon, on textile support, 2nd International Conference on Chemical Engineering, Innovative Materials and Processes, ICCE 2014*, “Gheorghe Asachi” Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection, România, Ia i, November 5 - 8, 2014, <http://www.ch.tuiasi.ro/ICCE2014/>, S2-P08, p. 28.
2. L. NICA, I. HUTANU, **I. SANDU**, V. VASILACHE, *Microclimate effects an old wood painted, Second International Conference on Natural and Anthropic Risks* (Book of Abstracts), Vol. 1, Ed. Alma Mater (ISSN 2360-4018), Bacau, 2014, p. 176.
3. M. MUNTEANU, **I. SANDU**, V. VASILACHE, A.M. BUDU, *Study of stoping the xylophagic attack an a XIX-th century icon panel, by modifying the level of oxygen inside the cryptoclimate, Second International Conference on Natural and Anthropic Risks* (Book of Abstracts), Vol. 1, Ed. Alma Mater (ISSN 2360-4018), Bacau, 2014, p. 175.
4. I. HUTANU, L. NICA, **I. SANDU**, V. VASILACHE, *Microclimatic and anthropic influence an painted wood, Second International Conference on Natural and Anthropic Risks* (Book of Abstracts), Vol. 1, Ed. Alma Mater (ISSN 2360-4018), Bacau, 2014, p. 174.
5. R.A. CRISTACHE, A.M. BUDU, V. VASILACHE, **I. SANDU**, *The impact of the environmental factors on the wooden support of a panel painting icon, Second International Conference on Natural and Anthropic Risks* (Book of Abstracts), Vol. 1, Ed. Alma Mater (ISSN 2360-4018), Bacau, 2014, p. 111.

6. A.M. BUDU, V. VASILACHE, **I. SANDU**, *The influence of organic solvents used in restoration of panel paintings upon restorers health*, **Second International Conference on Natural and Anthropic Risks** (Book of Abstracts), Vol. 1, Ed. Alma Mater (ISSN 2360-4018), Bacau, 2014, p. 107.
7. S. PRUTEANU, A.M. BUDU, **I. SANDU**, V. VASILACHE, *Ecological systems utilised in cleaning old polychrome wood*, **Second International Conference on Natural and Anthropic Risks** (Book of Abstracts), Vol. 1, Ed. Alma Mater (ISSN 2360-4018), Bacau, 2014, p. 44.
8. M. MUNTEANU, **I. SANDU**, V. VASILACHE, I. HUTANU, L. NICA, *Study of the stages and the operation involved in the preservation and restoration of two icons on wood suport from the XIX-th century*, **The IX<sup>th</sup> International Symposium Present Environment and Sustainable Development**, 06-08 June, 2014, Iasi, Section II, Part. I. P. 4.
9. S. PRUTEANU, **I. SANDU**, V. VASILACHE, *Modern procedures used in cleaning old icons blacked in time*, **The IX<sup>th</sup> International Symposium Present Environment and Sustainable Development**, 06-08 June, 2014, Iasi, Section II, Part. I. P. 7.
10. A.M. BUDU, **I. SANDU**, *Monitoring of pollutants in museum environment*, **The IX<sup>th</sup> International Symposium Present Environment and Sustainable Development**, 06-08 June, 2014, Iasi, Section II, Part. I. P. 9.
11. R.A. CRISTACHE, **I. SANDU**, V. VASILACHE, I. HUTANU, L. NICA, A. BUDU, *Studiul unor caracteristici arheometrice ale artefactelor de lemn vechi*, **CUCUTENI 5000 – Redivivus**, Ed Universitatii Stefan cel Mare, Suceava, 2014, pp. 54-61.
12. M. MUNTEANU, **I. SANDU**, V. VASILACHE, R.A. CRISTACHE, *Study of archaeometric characteristics of an old icon paintede on a wooden panel*, **International Scientific Conference UGALMAT 2014** (Advanced Materials and Technologies), The 6<sup>th</sup> edition, Ed. University Press GUP (ISSN 1843-5807), Gala i, 2014, **P. 26**;
13. I. HUTANU, L. NICA, **I. SANDU**, *The action of metals on the icons painted on wood*, **International Scientific Conference UGALMAT 2014** (Advanced Materials and Technologies), The 6<sup>th</sup> edition, Ed. University Press GUP (ISSN 1843-5807), Gala i, 2014, **P. 27**;
14. I. HUTANU, L. NICA, **I. SANDU**, *Metal systems used in old wood consolidation*, **International Scientific Conference UGALMAT 2014** (Advanced Materials and Technologies), The 6<sup>th</sup> edition, Ed. University Press GUP (ISSN 1843-5807), Gala i, 2014, **P.28**;
15. O. PINTILIE, M. ZAHARIA, L. TUDORACHI, S. BANCILA, G. DROCHIOIU, **I. SANDU**, *Emphasizing the effects of heavy metals on plants through released amino acids*, **International Scientific Conference UGALMAT 2014** (Advanced Materials and Technologies), The 6<sup>th</sup> edition, Ed. University Press GUP (ISSN 1843-5807), Gala i, 2014, **P. 29**;
16. O. PINTILIE, M. ZAHARIA, L. TUDORACHI, S. BANCILA, G. DROCHIOIU, **I. SANDU**, *Effect of heavy metals on the germination of wheat seeds*, **International Scientific Conference UGALMAT 2014** (Advanced Materials and Technologies), The 6<sup>th</sup> edition, Ed. University Press GUP (ISSN 1843-5807), Gala i, 2014, **P. 30**;
17. S. SPIRIDON, **I. SANDU**, V. VASILACHE, *Critical study on the effects of laser pyrolysis cleaning for old icons*, **International Scientific Conference UGALMAT 2014** (Advanced Materials and Technologies), The 6<sup>th</sup> edition, Ed. University Press GUP (ISSN 1843-5807), Gala i, 2014, **P. 31**;
18. **I. SANDU**, A. STANILA, A.V. SANDU, *Directii si factori de dezvoltare a creativitatii tehnice autohtone*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 333-350;
19. A. STANILA, **I. SANDU**, *Aspecte privind un nou proiect al planului national de dezvoltare economica suplimentara*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 351-360;
20. A. STANILA, **I. SANDU**, *Reinfiintarea scolilor de inventica ca specializari interdisciplinare in invatamantul tehnic superior*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 361-382;
21. O.P. TANASA, **I. SANDU**, M. PADURAIU, *Dispozitivele Optic Variabile (Ovd) – o revolutie in tehnologia de combatere a contrafacerii documentelor*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 485-496;
22. P. SPIRIDON, **I. SANDU**, *Conservarea participativa si voluntariatul cultural*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 497-502;

23. R.A. CRISTACHE, I. SANDU, V. VASILACHE, *Identificarea speciilor lemnoase ale artefactelor de lemn prin microscopie optic*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 503-510;
24. O. PINTILIE, M. ZAHARIA, L. TUDORACHI, A. COSMA, C. CIOBANU, G. DROCHIOIU, I. SANDU, *Sisteme de ap rare ale organismului împotriva otr virii cu metale grele*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 531-542;
25. I. HUTANU, L. NICA, I. SANDU, *Atacul biotic i controlul biodeterior rii i biodegrad rii asupra picturilor pe lemn*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 543-548;
26. M. MUNTEANU, I. SANDU, V. VASILACHE, A.M. BUDU, I.C.A. SANDU, *The study of the conservation state of two icons, on wooden support, from the XIXth century*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 565-582;
27. S. PRUTEANU, I. SANDU, V. VASILACHE, I.C.A. SANDU, *Aspecte privind influen a depunerilor asupra conservabilit Ńii icoanelor vechi*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 583-598;
28. P. MIHOC, I. SANDU, C. HONCERIU, M. CHIRAZI, A.V. SANDU, *Streetball board and a new game twizball*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 599-602;
29. V. PELIN, V. VASILACHE, I. SANDU, O. MIRCEA, I.G. SANDU *Studiul artefactelor ceramice prin tehnici complementare*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 611-617;
30. C. ADOMNITEI, I. SANDU, D. LUCA, D. MARDARE, *Influen a naturii substratului asupra comportamentului hidrof়il al unor straturi sub iri de TiO<sub>2</sub>*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 623-624;
31. M.A. CREŢU, I. SANDU, I.-M. RŢ CA, V. VASILACHE, *Studies on water disinfection using chitosan nanopowder technique*, **Scientific, Technological and Innovative Research in Current European Context** (International Workshop EUROINVENT), Alexandru Ioan Cuza University Publishing House, (ISBN: 978-606-714-037-8), 2014, pp. 635-638.

**e. Articole publicate în reviste na ionale tiin ifice de specialitate, f r factor de impact (1):**

1. A.M. BUDU, R.A. CRISTACHE, I. SANDU, V. VASILACHE, *The icon holy Virgin of Kazan (copy). Case Study*, **Restitutio**, National Village Museum, Bucharest, 8, 2014, pp. 43-47.

**f. Articole publicate în volumele unor manifest ri tiin ifice na ionale, f r factor de impact (8):**

1. R.A. CRISTACHE, I. SANDU, V. VASILACHE, *The Identification of the Materials Used in a Panel Painting Icon*, „Alexandru Ioan Cuza” **Univeristy Daye –Faculty Chemistry Conference**, Session 5, 2014, Iasi, p. 10.
2. M.A. CREŢU, I. SANDU, I.M. RISCA, V. VASILACHE, *A Study about some parameters regarding the quality of water of Suceava River*, „Alexandru Ioan Cuza” **University Days –Faculty of Chemistry Conference**, Posters, 2014, Iasi, P52.
3. M.A. CREŢU, I. SANDU, V. VASILACHE, *Research on the use of ceramics in the process of drinking water*, „Alexandru Ioan Cuza” **University Days –Faculty of Chemistry Conference**, Posters, 2014, Iasi, P53.
4. M. MUNTEANU, I. SANDU, V. VASILACHE, M. MOSNEAGU, *The Study of Microbiological Attacks on a XVIII<sup>th</sup> Century Wooden Icon Panel. Identification and evolution State Conservation*, **Biodiversity**

**Conservation in Context of Sustainable Development – Annual Scientific Meeting**, Faculty of Biology, Alexandru Ioan Cuza University of Iasi, 23-25 October, Iasi, p. 25.

5. R.A. CRISTACHE, **I. SANDU**, V. VASILACHE, *The authentication of a violin by identifying the wood species*, **Biodiversity Conservation in Context of Sustainable Development – Annual Scientific Meeting**, Faculty of Biology, Alexandru Ioan Cuza University of Iasi, 23-25 October, Iasi, p. 34.
6. V. PELIN, **I. SANDU**, M. BRANZILA, *Studies and Research on Bioreceptivity of Lithic Materials*, **Biodiversity Conservation in Context of Sustainable Development – Annual Scientific Meeting**, Faculty of Biology, Alexandru Ioan Cuza University of Iasi, 23-25 October, Iasi, p. 60.
7. R. CRISTACHE, I.M. CORTEA, **I. SANDU**, *Characterization of historical violin varnished using ATR-FTIR Spectroscopy*, **Conference: Bucharest University, Faculty of Physics, 2014 Meeting**, Section: Optics, Spectroscopy, Plasma and Lasers, 20.06.2014, Bucharest, p. 5.
8. I. SANDU, V. CIOCAN, I.G. SANDU, V. VASILACHE, A.V. SANDU, *Monitorizarea factorilor de mediu i impactul lor asupra bunurilor eclesiale de patrimoniu cultural*, **Conferința Tehnico-Științifică Națională cu participare Internațională, INSTALAȚII PENTRU CONSTRUCȚII ȘI ECONOMIA DE ENERGIE**, Ediția a 24a, Ed. Societății Academice Matei Teiu Botez, (ISSN 2069-1211), Ia i, 2014, p. 118-126.

g. **Inven ii (3) si dosare (2):**

1. L.R. MANEA, V. VLAHIDIS, T. LUPASCU, **I. SANDU**, *Device for administration by diffusion membrane of phytosanitary substances in woody plants*, **Patent MD 4356(B1)/2014-11-30**, AGEPI File Chisinau MD20130000023 20130430, Owner the Institute for Chemistry of the Academy R. Moldova of Kisinev;
2. V. VLAHIDIS, L.R. MANEA, T. LUPASCU, **I. SANDU**, *Device for administration of phytosanitary substances in woody plants*, **Patent MD 4286(B1)/2014-06-30**, AGEPI File Chisinau MD20130000023 20130430, Owner the Institute for Chemistry of the Academy R. Moldova of Kisinev;
3. **I. SANDU**, M.A. CRETU, T. LUPASCU, J.-M. SIELIECHI, I.K. KOUAME, J.G. KAYEM, A.V. SANDU, V. VASILACHE, I.G. SANDU, V. Vasilache, *Process for water treatment of ground and surface waters (Procedeu de potabilizare a apelor subterane i de suprafata )*, **MD 4298(13)B1/ 08.08.2014** Dosar AGEPI A00010/14.02.2013 (Titular: Institutul de Chimie al A.S. al Republicii Moldova);

**Dosare (2):**

1. P. MIHOC, **I. SANDU**, M. CHIRAZI, C. HONCERIU, A>V. SANDU, **Panou dublu pentru Streetball i mod de utilizare**, Dosar OSIM A 2014 00206/17.03.2014, (Titular: Universitatea Alexandru Ioan Cuza Iasi).
2. **I. SANDU**, G. POPA, KISS, A.V. SANDU, V. VASILACHE, V. SIRBU, I.G. SANDU, D. POTOLINCA, **Poligraf in sistem coasistat**, Dosar OSIM A000210/11.08.2013 (Titular: Universitatea Alexandru Ioan Cuza Iasi).

**Lucr ri tiin ifice, inven ii i c r i în care sunt citate lucr rile personale (106):**

1. C. Modrogan, I. Pincovschi, *Depollution of Acid Waste Waters Containing Zinc Ions Using Liquid - liquid Extraction*, **Rev. Chim. (Bucharest)**, 65, No. 11, 2014, p. 1253-1256 (ISI Factor 0.677/2013), cit. ref. no. 11 (*Koname, I.K., Didi, B., Koffi, K., Savaqne, L., Sandu, I., International Journal of Conservation Science, 3, (2010), p.156*);
2. L.K. Adopo, G. Romanescu, A.Y. N'Guessan, C. Stoleriu, *Nature and Dynamic of Sediments at the Mouth of Komoé River (Ivory Coast)*, **Lakes, Reservoirs and Ponds**, 8(1), 2014, pp. 28-41, cit. ref. no. (Romanescu G., Cretu M.A., Sandu I.G., Paun E., Sandu I. 2013, *Chemism of Streams Within the Siret and Prut Drainage Basins: Water Resources and Management*, Rev. Chim. (Bucharest), 64(12), 1416-1421);
3. L.K. Adopo, G. Romanescu, A.Y. N'Guessan, C. Stoleriu, *Nature and Dynamic of Sediments at the Mouth of Komoé River (Ivory Coast)*, **Lakes, Reservoirs and Ponds**, 8(1), 2014, pp. 28-41, cit. ref. no. (Romanescu G., Sandu I., Stoleriu C., Sandu I.G. 2014. *Water Resources in Romania and Their Quality in the Main Lacustrine Basins*, Rev. Chim. (Bucharest), 63(3), 344-349);
4. Z.I. Glavcheva, D.Y. Yancheva, Y.K. Kancheva, E. Velcheva, B.A. Stamboliyska, *Development of FTIR spectra database of reference art and archaeological materials*, **Bulgarian Chemical Communications** (ISSN 0324-1130), Volume 46, Special Issue A (pp. 164 – 169) 2014 (ISI Factor 0.349/2013), cit. ref. no. 9 (*I. C. A. Sandu, S. Bracci, I. Sandu, M. Lobefaro, Microsc. Res. Techniq., 72, 2009, p. 755*);



5. Z.I. Glavcheva, D.Y. Yancheva, Y.K. Kancheva, E. Velcheva, B.A. Stamboliyska, *Development of FTIR spectra database of reference art and archaeological materials*, **Bulgarian Chemical Communications** (ISSN 0324-1130), Volume 46, Special Issue A (pp. 164 – 169) 2014 (ISI Factor 0.349/2013), cit. ref. no. 10 (I. C. A. Sandu, C. Luca, I. Sandu, V. Vasilache, M., Hayashi, **Rev. Chem.** (Bucuresti), 59, 2008, p. 384);
6. R.C. Fierascu, R.M. Ion, I. Fierascu, *Archaeometallurgical characterization of numismatic artifacts*, **Instrumentation Science & Technology** (ISSN), 2014, DOI:10.1080/10739149.2014.961642 (ISI FACTOR 0.800/2013), cit. ref. no. 6 (Sandu, I.; Marutoiu, C.; Sandu, IG; Alexandru, A.; Sandu, AV, *Authentication of Old Bronze Coins I. Study on Archaeological Patina. Acta Universitat. Cibiniensis, F: Chemia*, 2007);
7. O. Çakaj, E. Duka, Z. Tafilica, F. Stamati, N. Civici, *Characterisation of copper alloy antique ornamental accessories found in Northern Albania*, **Open Journal of Archaeometry** (eISSN 2038-1956), 2, 2, 2014, pp. 1-11 (ISI FACTOR 0.000/2013), cit. ref. no. 6, (Mircea O, Sandu I, Vasilache V, Sandu AV, 2012. *Study of the atypical formations in the corrosion bulks of an ancient bronze shield, by optical and electron microscopy. Microsc Res Techniq* 75:1467-74.);
8. L. Damjanovi, O. Marjanovi, M. Mari -Stojanovi, V. Andri, B. Mio Ubavka, *Spectroscopic investigation of two Serbian icons painted on canvas*, **Journal of the Serbian Chemical Society**, 2014 OnLine-First Issue 00, Pages: 99-99, doi:10.2298/JSC140722099D, cit. ref. no. 12 (ICA Sandu, S. Bracci, I. Sandu, M. Loberfaro, *Microscopy Research and Technique*, 72, 2009, p, 755);
9. A. Ramazania, M. Almasi-Kashia, A. Salatib, *Microstructure and magnetic properties of NiZn nanowires with controlled Zn ion concentration and off-time between pulses*, **Journal of Alloys and Compounds**, 615, 5 December 2014, pp. 831–837, DOI: 10.1016/j.jallcom.2014.06.135, cit. ref. no. 32 (T. Vasilache, S. Gutt, I. Sandu, V. Vasilache, G. Gutt, M. Risca, A.V. Sandu, **Recent Pat. Corros. Sci.** 2 (2010) 1.)
10. O. Çakaj, E. Duka, Z. Tafilica, F. Stamati, N. Civici, *Characterisation of copper alloy antique ornamental accessories found in Northern Albania*, **Open Journal of Archaeometry** (eISSN 2038-1956), 2, 2, 2014, pp. 1-11 (ISI FACTOR 0.000/2013), cit. ref. no. 13, (Sandu I, Mircea O, Sandu AV, Vasilache V, Sandu IG, 2014. *Study of chemical effects in antique bronze artefacts during their stay chemical effects in antique bronze artefacts during their stay within an archaeological site. Available from: [http://www.revistadechimie.ro/article\\_eng.asp?ID=3980](http://www.revistadechimie.ro/article_eng.asp?ID=3980)*);
11. L.M. Birsa, A.V. Sandu, A. Balan, *Synthesis of New 1,3-Dithiolium Derivatives from 4-Hydroxyacetophenones*, **Rev. Chim. (Bucharest)**, 65, No. 12, 2014, p. 1435-1438 (ISI Factor 0.677/2013), cit. ref. no. 13 (Bahrin, L.G., Lungu, N.C., Forna, N.C., Sandu, I., Birsa, M.L., **Rev. Chim. (Bucharest)**, 64, no. 11, 2013, p. 1343);
12. L. Aminov, M. Vataman, O. Stamatina, F. Filip, D.C. Maxim, A. Surdu Macovei, L.E. Checherita, *Evaluation of the Alkaline Phosphatase Level After Subcutaneous Implantation of Three Biomaterials Used in Endodontic Treatment in Prosthetics Purpose*, **Materiale Plastice**, 51, No. 4, 2014, pp. 417-420 (ISI Factor 436/2014), cit. ref. no. 9 (Cernat, R.I., Mocanu, R.D., Popa, E., Sandu, I., Olariu, R.I., Arsene, C., **Rev. Chim. (Bucharest)**, 61, no. 11, 2010, p. 1130);
13. L.M. Birsa, A.V. Sandu, A. Balan, *Synthesis of New 1,3-Dithiolium Derivatives from 4-Hydroxyacetophenones*, **Rev. Chim. (Bucharest)**, 65, No. 12, 2014, p. 1435-1438 (ISI Factor 0.677/2013), cit. ref. no. 16 (Lungu, N.C., Bahrin, L.G., Asaftei, I.V., Forna, N.C., Sandu, I., Birsa, M.L., **Rev. Chim. (Bucharest)**, 65, no. 2, 2014, p. 181);
14. L.M. Birsa, A.V. Sandu, A. Balan, *Synthesis of New 1,3-Dithiolium Derivatives from 4-Hydroxyacetophenones*, **Rev. Chim. (Bucharest)**, 65, No. 12, 2014, p. 1435-1438 (ISI Factor 0.677/2013), cit. ref. no. 17 (Sarbu, L.G., Lungu, N.C., Asaftei, I.V., Sandu, I., Birsa, M.L., **Rev. Chim. (Bucharest)**, 65, no. 3, 2014, p. 325);
15. L.M. Birsa, A.V. Sandu, A. Balan, *Synthesis of New 1,3-Dithiolium Derivatives from 4-Hydroxyacetophenones*, **Rev. Chim. (Bucharest)**, 65, No. 12, 2014, p. 1435-1438 (ISI Factor 0.677/2013), cit. ref. no. 20 (Bahrin, L.G., Craciun, B.F., Sandu, I., Birsa, M.L., **Rev. Chim. (Bucharest)**, 65, no. 5, 2014, p. 525);
16. L.M. Birsa, A.V. Sandu, A. Balan, *Synthesis of New 1,3-Dithiolium Derivatives from 4-Hydroxyacetophenones*, **Rev. Chim. (Bucharest)**, 65, No. 12, 2014, p. 1435-1438 (ISI Factor 0.677/2013), cit. ref. no. 30 (Birsa, M.L., Sandu, I., Bahrin, L.G., **Rev. Chim. (Bucharest)**, 65, no. 2, 2014, p. 174);
17. M. Birsa, A.V. Sandu, A. Balan, *Synthesis of New 1,3-Dithiolium Derivatives from 4-Hydroxyacetophenones*, **Rev. Chim. (Bucharest)**, 65, No. 12, 2014, p. 1435-1438 (ISI Factor 0.677/2013), cit. ref. no. 35 (Lungu, N.C., Sandu, I., Chirita, P., Birsa, M.L., **Rev. Chim. (Bucharest)**, 64, no.7, 2013, p. 697);
18. O. Çakaj, E. Duka, Z. Tafilica, F. Stamati, N. Civici, *Characterisation of copper alloy antique ornamental accessories found in Northern Albania*, **Open Journal of Archaeometry** (eISSN 2038-1956), 2, 2, 2014, pp. 1-11 (ISI FACTOR 0.000/2013), cit. ref. no. 14, (Sandu IG, Mircea O, Vasilache V, Sandu I, 2012. *Influence of archaeological environment factors in alteration processes of copper alloy, Microsc Res Techniq* 75:1646-1653);

19. O. Çakaj, E. Duka, Z. Tafilica, F. Stamati, N. Civici, *Characterisation of copper alloy antique ornamental accessories found in Northern Albania*, **Open Journal of Archaeometry** (eISSN 2038-1956), 2, 2, 2014, pp. 1-11 (ISI FACTOR 0.000/2013), **cit. ref. no. 15**, (*Sandu I, Ursulescu N, Sandu IG, Bounegru I, Sandu ICA, Alexandru A, 2008. Pedological stratification effect of corrosion and contamination products on Byzantine bronze artefacts. Corros Eng Sci Techn 43:256-66*);
20. M.G. Minciuna, P. Vizureanu, D.C. Achitei, B. Ghiban, A.V. Sandu, D. Mareci, A. Balan, *Electrochemical Behaviour of CoCrMo and CoCrMoSi5 alloys at Different Simulated Physiological Medium*, **Revista de Chimie (Bucharest)**, (ISSN 0034-7752), 65, 10, 2014, pp. 1138-1141, (ISI Factor 0.677/2013), **cit. ref. no. 18** (*SANDU, A.V., CIOMAGA, A., NEMTOI, G., BEJINARIU, C., SANDU, I. Microscopy Research and Technique, 75, no. 12, 2012, p. 1711.*);
21. M.G. Minciuna, P. Vizureanu, D.C. Achitei, B. Ghiban, A.V. Sandu, D. Mareci, A. Balan, *Electrochemical Behaviour of CoCrMo and CoCrMoSi5 alloys at Different Simulated Physiological Medium*, **Revista de Chimie (Bucharest)**, (ISSN 0034-7752), 65, 10, 2014, pp. 1138-1141, (ISI Factor 0.677/2013), **cit. ref. no. 18** (*MIRCEA, O., SANDU, I., VASILACHE, V., SANDU, A.V., Rev. Chim. (Bucharest) 63, no. 9, 2012, p. 893.*);
22. R.M. Hlihor, M. Diaconu, F. Leon, S. Curteanu, T. Tavares, M. Gavrilescu, *Experimental analysis and mathematical prediction of Cd(II) removal by biosorption using support vector machines and genetic algorithms*, **New Biotechnology** (ISSN 1871-6784), Available online 16 September 2014, DOI: 10.1016/j.nbt.2014.08.003 (ISI Factor 2.106/2013), **cit.ref. no.** (*R.M. Hlihor, M. Diaconu, D. Fertu, C. Chelaru, I. Sandu, T. Tavares, M. Gavrilescu, Bioremediation of Cr(VI) Polluted Wastewaters by Sorption on Heat Inactivated Saccharomyces cerevisiae Biomass. Int. J. Environ. Res., 7(3):581-594, Summer 2013*);
23. A. Garbacz-Klempka, S. Rzadkosz, R. Klempka, W. Ossowski, *Metallographic and corrosion research of copper from archaeological sites*, **Metalurgija** (ISSN 0543-5846), 54, 1, 2015, pp. 217-220, (ISI Factor 0.755/2013), **cit. ref. no. 5** (*L.G. Sandu, O. Mircea, V. Vasilache, I. Sandu, Microscopy Research and Technique 75 (2012) 12, 1646-1652.*);
24. A. Garbacz-Klempka, S. Rzadkosz, R. Klempka, W. Ossowski, *Metallographic and corrosion research of copper from archaeological sites*, **Metalurgija** (ISSN 0543-5846), 54, 1, 2015, pp. 217-220, (ISI Factor 0.755/2013), **cit. ref. no. 7** (*O. Mircea, I. Sandu, I. Sârghie, A.V. Sandu, International Journal of Conservation Science 1 (2010) 1, 27-40.*);
25. B. Munteanu, S. Andrian, G. Iovan, A. Ghiorghe, I. Nica, S. Stoleriu, *Study Regarding the Influence of Different Bleaching Agents on Surface Roughness of Composite Resins Filling*, **Materiale Plastice (Bucharest)**, (ISSN 0025-5289), 51, 3, 2014, 279-281 (ISI Factor 436/2014), **cit. ref. no. 19** (*CERNAT, R.I., MOCANU, R.D., POPA, E., SANDU, I., OLARIU, R.I., ARSENE, C., Revista de Chimie (Bucharest), 61, no. 11, 2010, p. 1130.*);
26. C.A. Ghiorghe, S. Stoleriu, G. Pancu, C. Topoliceanu, A.V. Sandu, S. Andrian, *Changes of the Mineral Structure in the Enamel Adjacent to Three Types of Restorative Materials after Immersion in Hydrochloric Acid*, **Revista de Chimie (Bucharest)**, (ISSN 0034-7752), 65, 9, 2014, pp. 1021-1025, (ISI Factor 0.677/2013), **cit. ref. no. 15** (*CERNAT, R.I., MOCANU, R.D., POPA, E., SANDU, I., OLARIU, R.I., ARSENE, C., Rev. Chim.(Bucharest), 61, no. 11, 2010, p. 1130*);
27. L.G. Bahrin, I.V. Asaftei, I.G. Sandu, L.G. Sarbu, *Synthesis of (4-Methylpiperazin-1-yl)carbodithioates and of their 1,3-Dithiolium Derivatives*, **Revista de Chimie** (ISSN 0034-7752), 65, 9, 2014, pp. 1046-1048, (ISI Factor 0.677/2013), **cit. ref. no. 12** (*BIRSA, M. L., SANDU, I., BAHRIN, L. G., Rev. Chim. (Bucharest), 65, no. 2, 2014, p. 174.*);
28. L.G. Bahrin, I.V. Asaftei, I.G. Sandu, L.G. Sarbu, *Synthesis of (4-Methylpiperazin-1-yl)carbodithioates and of their 1,3-Dithiolium Derivatives*, **Revista de Chimie** (ISSN 0034-7752), 65, 9, 2014, pp. 1046-1048, (ISI Factor 0.677/2013), **cit. ref. no. 27** (*LUNGU, N. C., SANDU, I., CHIRITA, P., BIRSA, M. L., Rev. Chim.(Bucharest), 64, no. 7, 2013, p. 697.*);
29. L.G. Bahrin, I.V. Asaftei, I.G. Sandu, L.G. Sarbu, *Synthesis of (4-Methylpiperazin-1-yl)carbodithioates and of their 1,3-Dithiolium Derivatives*, **Revista de Chimie** (ISSN 0034-7752), 65, 9, 2014, pp. 1046-1048, (ISI Factor 0.677/2013), **cit. ref. no. 35** (*BELEI, D., FORNA, N. C., SANDU, I., BIRSA, M. L., Rev. Chim.(Bucharest), 65, no. 1, 2014, p. 80.*);
30. L.G. Bahrin, I.V. Asaftei, I.G. Sandu, L.G. Sarbu, *Synthesis of (4-Methylpiperazin-1-yl)carbodithioates and of their 1,3-Dithiolium Derivatives*, **Revista de Chimie** (ISSN 0034-7752), 65, 9, 2014, pp. 1046-1048, (ISI Factor 0.677/2013), **cit. ref. no. 36** (*SARBU, L. G., LUNGU, C. N., ASAFTEI, I. V., SANDU, I., BIRSA, M. L., Rev. Chim. (Bucharest), 65, no. 3, 2014, p. 325.*);
31. L.G. Bahrin, I.V. Asaftei, I.G. Sandu, L.G. Sarbu, *Synthesis of (4-Methylpiperazin-1-yl)carbodithioates and of their 1,3-Dithiolium Derivatives*, **Revista de Chimie** (ISSN 0034-7752), 65, 9, 2014, pp. 1046-1048, (ISI

- Factor 0.677/2013), cit. ref. no. 46 (BAHRIN, L. G., LUNGU, N. C., FORNA, N. C., SANDU, I., BIRSA, L.M., Rev. Chim. (Bucharest), 64, no. 11, 2013, p. 1343.);**
32. A.B. Azeez, kK.S. Mohammed, M. al Bakri Abdullah, N.N. Zulkepli, A.V. Sandu, K. Hussin, A. Rahmat, *Design of Flexible Green Anti Radiation Shielding Material against Gamma-ray*, **Materiale Plastice (Bucharest)**, (ISSN 0025-5289), 51, 3, 2014, 300-308 (**ISI Factor 0.436/2013**), **cit. ref. no. 44 (RAZAK, R.A., ABDULLAH, M.M.A., AMARUDIN, H., ISMAIL, K.N., SANDU, I., HARDJITO, D., YAHYA, Z., Rev. Chim. (Bucharest), 64, no. 6, 2013, p. 593.);**
  33. B. Munteanu, S. Andrian, G. Iovan, A. Ghiorghe, I. Nica, S. Stoleriu, *Study Regarding the Influence of Different Bleaching Agents on Surface Roughness of Composite Resins Filling*, **Materiale Plastice (Bucharest)**, (ISSN 0025-5289), 51, 3, 2014, 279-281 (**ISI Factor 436/2014**), **cit. ref. no. 16. (SULITANU, N., PIRGHIE, C., SANDU, I., Rev. Chim. (Bucharest), 58, no. 1, 2007, p. 20.);**
  34. L. Aminov, M. Vataman, D.C. Maxim, M. Salceanu, P. Surlin, L.E. Checherita, *Comparative Biochemical Evaluation of Ca, P and Mg, after Subcutaneous Implantation of Some Biomaterials Used in Endodontic Treatment*, **Materiale Plastice (Bucharest)**, (ISSN 0025-5289), 51, 3, 2014, 246-251, (**Factor 436/2014**), **cit. ref. no. 9 (CERNAT, R.I., MOCANU, R.D., POPA, E., SANDU, I., OLARIU, R.I., ARSENE, C., Revista de Chimie (Bucharest), 61, no. 11, 2010, p. 1130.);**
  35. L. Aminov, M. Vataman, D.C. Maxim, M. Salceanu, P. Surlin, L.E. Checherita, *Comparative Biochemical Evaluation of Ca, P and Mg, after Subcutaneous Implantation of Some Biomaterials Used in Endodontic Treatment*, **Materiale Plastice (Bucharest)**, (ISSN 0025-5289), 51, 3, 2014, 246-251, (**ISI Factor 436/2014**), **cit. ref. no. 18 (CIOBANU, G., CARJA, G., CIOBANU, O., SANDU, I., SANDU, A., Micron, 40, No. 1, 2009, p. 143.);**
  36. L. Aminov, M. Vataman, D.C. Maxim, M. Salceanu, P. Surlin, L.E. Checherita, *Comparative Biochemical Evaluation of Ca, P and Mg, after Subcutaneous Implantation of Some Biomaterials Used in Endodontic Treatment*, **Materiale Plastice (Bucharest)**, (ISSN 0025-5289), 51, 3, 2014, 246-251, (**ISI Factor 436/2014**), **cit. ref. no. 19 (OLARIU, R.I., HUMELNICU, D., SANDU, I., HUMELNICU, I., ARSENE, C., Rev. Chim. (Bucharest), 60, no. 11, 2009, p. 1216.);**
  37. L. Aminov, M. Vataman, D.C. Maxim, M. Salceanu, P. Surlin, L.E. Checherita, *Comparative Biochemical Evaluation of Ca, P and Mg, after Subcutaneous Implantation of Some Biomaterials Used in Endodontic Treatment*, **Materiale Plastice (Bucharest)**, (ISSN 0025-5289), 51, 3, 2014, 246-251, (**ISI Factor 436/2014**), **cit. ref. no. 20 (SANDU, I., VASILACHE, V., ALEXIANU, M., CURCA, R.G., Rev. Chim.(Bucharest), 65, no. 1, 2014, p. 120.);**
  38. M. Purcaru, **Cartea de aur a comunei Pârjol din județul Bacău**, Ed. Magic Print (ISBN 978-606-622-118-4), One ti, 2014, pp. 389-390;
  39. A.A. Kadir, M.M. Al Bakri Abdullah, A.V. Sandu, N.M. Noor, A.L. Abd Latif, K. Hussin, *Usage of Palm Shell Activated Carbon to Treat Landfill Leachate*, **International Journal of Conservation Science** (ISSN 2067-533X), 5(1), 2014, pp. 117-126. (**ISI Factor 0.00/2013, SCOPUS SJR Factor, 0.243/2012, SNIP 0591/2012**), **cit.ref.no. 35 (R.M. Hlihor, M. Diaconu, D. Fertu, C. Chelaru, I. Sandu, T. Tavares, M. Gavrilescu, Bioremediation of Cr(VI) polluted wastewaters by sorption on heat inactivated saccharomyces cerevisiae biomass, International Journal of Environmental Research, 7(3), 2013, pp. 681-694);**
  40. F. Vaja (Dumitru), C. Guran, D. Ficai, A. Ficai, O. Oprea, *Cytotoxic effects of zno nanoparticles incorporated in mesoporous silica*, **U.P.B. Sci. Bull.**, Series B, Vol. 76, Iss. 3, 2014 ISSN 1454 – 2331, **cit. ref. no. 17 (V.A Copcia, R. Gradinaru, G. Dumitruta Mihai, N. Bilba, I.Sandu, Antibacterial Activity of Nanosized ZnO Hosted in Mesoporous Clinoptilolite and Mesoporous Silica SBA-15 Matrices, REV. CHIM. (Bucharest), 63, No. 11, 2012);**
  41. A. Gharib, **Egyptian Journal of Archaeological and Restoration Studies** (ISSN:2090-4932, Online ISSN:2090-4940), 4, 1, 2014, pp. 25-33, *A scientific study of the patina, corrosion morphology, and conservation of egyptian bras object*, . (**ISI Factor 0.00/2013**), **cit. ref. no. 25 (Mircea, O., Sandu, I., Vasilach, V., Sandu, A., (2013). Aplication microscopy and energy-dispersive X- ray spectroscopy in the study of a pendant from the I ND-I I RD century A.C., IJCS, Vol. 4, p. 701- 709)**
  42. A. Gharib, **Egyptian Journal of Archaeological and Restoration Studies** (ISSN:2090-4932, Online ISSN:2090-4940), 4, 1, 2014, pp. 25-33, *A scientific study of the patina, corrosion morphology, and conservation of egyptian bras object*, . (**ISI Factor 0.00/2013**), **cit. ref. no. 2 (Mircea, O., Sandu, I., Vasilach, V. & Sandu, .G., (2012). A study on the deterioration and degradation of metallic archaeological artifacts, IJCS, Vol. 3 (3), p.179-188)**
  43. A. Gharib, **Egyptian Journal of Archaeological and Restoration Studies** (ISSN:2090-4932, Online ISSN:2090-4940), 4, 1, 2014, pp. 25-33, *A scientific study of the patina, corrosion morphology, and*

- conservation of egyptian bras object, . (ISI Factor 0.00/2013), cit. ref. no. 5 (Sandu, I., Ursulescu, N., Sandu, I.G., Bounegru, O., Sandu, I.C.A. & Alexandru, A., (2008). Stratification effect of corrosion and contamination products on Byzantine bronze artifacts, *Corrosion Engineering Science and Technology*, Vol. 43 (3), p. 256-266);
44. A. Gharib, **Egyptian Journal of Archaeological and Restoration Studies** (ISSN:2090-4932, Online ISSN:2090-4940), 4, 1, 2014, pp. 25-33, *A scientific study of the patina, corrosion morphology, and conservation of egyptian bras object*, . (ISI Factor 0.00/2013), cit. ref. no. 6 (Sandu, I.G., Stoleriu, S., Sandu, I., Brebu, M. & Sandu, A.V., (20 5). Authentication of ancient bronze coins by the study of the archaeological patina. I. Composit on and structure, *Revista de Chimie (Bucharest)*, Vol. 56 (10), p. 981-994);
  45. A.-C. Aluculesei, P. Nistoreanu, *Exhaustive Analysis of the Way in which were Promoted Romanian Spas/Water Thermal Villages at the November 2013 Edition of the Romanian Tourism Fair*, **International Journal of Economic Practices and Theories** (e-ISSN 2247-7225) Vol. 4, No. 3, 2014, pp. 349-354, cit. ref. No. p. 354 (Sandu, I., Poruciuc, A., Alexianu, M., Curc , R. & Weller, O. ( 2010). *Salt and Human Health: Science, Archaeology, Ancient Texts and Traditional Practices of Eastern Romania*, **Mankind Quarterly**, 50 (3), 225-256.), (There are also known benefits of salt water and saline aerosols - knowing locals use these waters for centuries to treat certain diseases without having ever received medical advice (Sandu et al, 2010).)
  46. B. Dibi, A.B. Konan-Waidhet, F. Koffi Konan, C. Sagne Yao, A. Kouadio Zilé, I. Savané, D. Gnakri *Characterization of the Origin of Pollutants in Groundwater from Biostatistical Tests: The Case of Catchment Ehania, South-Eastern Côte d'Ivoire*, **Journal of Water Resource and Protection**, Vol.5 No.12(2013), Article ID:40727,8 pages DOI:10.4236/jwarp.2013.512125, cit.ref.no. ( );
  47. A. Gharib, *A scientific study of the patina, corrosion morphology, and conservation of egyptian brass object*, **Egyptian Journal of Archaeological & Restoration** (ISSN:2090-4932), 4, 1, 2014 (ISI Factor 0.00/2013), cit. ref. no. (O Mircea, I Sandu, V Vasilache, IG Sandu, *A study on the deterioration and degradation of metallic archaeological artifacts*, **International Journal of Conservation Science**, 3(3), 2012, pp. 179-188);
  48. A.S. Aruomero, O. Afolabi, *Comparative assessment of trace metals in soils associated with casket burials: Towards implementing green burials*, **Eurasian Journal of Soil Science**, (ISSN: 2147-4249), 3, 2014, pp. 65-76, (ISI Factor 2013), cit ref. no. p. 75 (Kouame, I.K., Dibi, B., Koffi, K., Savane, I., Sandu, I., *Statistical Approach of Assessing Horizontal Mobility of Heavy Metals in the Soil of Akouedo Landfill Nearby Ebrie Lagoon (Abidjan-Cote d'Ivoire)*, **International Journal of Conservation Science**, 1(3), 2010, pp. 149-160);
  49. M. Grecu, M. Prodan, A. Cîmpean, D. Ioni , *Enhancing the performance of titanium surface via elaboration of a nanostructure and a bioactive coating*, **U.P.B. Sci. Bull., Series B**, (ISSN 1454-2331), Vol. 74, Iss. 2, 2012, cit. ref. no. 17 (G. Ciobanu, G. Carja, O. Ciobanu, I. Sandu, A. Sandu., **Micron**, vol. 40, 2009, pp 143-146);
  50. V. Pitschmann, Z. .K. Kobliha, I. Tušarová, L. Bártoová, D. Vetchý, P. Bobál, *A new detection tube to detect hydrogen cyanide in the air*, **Chemical Industry and Chemical Engineering Quarterly** (ISSN 1451-9372 (Print)ISSN 2217-7434 (Online)), 20(2) , pp. 155–161 (2014) (ISI Factor 0.659 /2013), cit ref. no. 6 (G. Drochioiu, I. Sandu, R. Gradinaru, G. Zbancioc, I. Mangalagiu, **Int. J. Crim. Invest.** 1, (2011), pp. 213-226);
  51. V.A. Arus, C. Jinescu, I.D. Nistor, G. Isopencu, *Ultrasound Intensification of Lactic Fermentation Process in the Presence of Anionic Clays*, **Revista de Chimie** (ISSN 0034-7752), 65, 8, 2014, pp. 942-947, (ISI Factor 0.538/2012), cit.ref.no. 22 (Sulitanu, N., Pirghie, C., Sandu, I., *Rev. Chim. (Bucharest)*, 58,no. 1, 2007, p.20);
  52. C.M. Simonescu, A.C. Szekely, D. Perniu, C. Capatina, *Characterization and Antimicrobial Activity of Chitosan/ZnO/Ag System*, **Revista de Chimie** (ISSN 0034-7752), 65, 8, 2014, pp. 871-875, (ISI Factor 0.538/2012), cit. ref. no. 9 (V.E. Copcia, C.M. Hristodor, S. Dunca, R. Iordanova, A. Bachvarova-Nedelcheva, N.C. Forna, I. Sandu, *Rev.Chim. (Bucharest)*, 64, no. 9, 2013, p. 978)
  53. I.V. Asaftei, M. Alexandroaei, M.L. Birsa, A.C. Luca, R. Gradinaru, N.C. Lungu, *The Action of a Penicillinase with Attenuated Activity on a Penicillin G Substrate*, **Revista de Chimie** (ISSN 0034-7752), 65, 8, 2014, pp. 903-906, (ISI Factor 0.538/2012), cit.ref.no. 7 (Sandu, I., Cecal, A., Petrescu, S., Sunel, V., *Rev. Rom. Biochim.(Bucharest)*, 21, 1984, p. 207);
  54. I.V. Asaftei, M. Alexandroaei, M.L. Birsa, A.C. Luca, R. Gradinaru, N.C. Lungu, *The Action of a Penicillinase with Attenuated Activity on a Penicillin G Substrate*, **Revista de Chimie** (ISSN 0034-7752), 65, 8, 2014, pp. 903-906, (ISI Factor 0.538/2012), cit.ref.no. 15. (Lungu, N.C., Alexandroaei, M., Sandu, I., *Rev. Chim. (Bucharest)*, 62, no. 8, 2011, p. 787);
  55. A. Ramazani, M. Almasi-Kashi, A. Salati, *Microstructure and magnetic properties of NiZn nanowires with controlled Zn ion concentration and off-time between pulses*, **Journal of Alloys and Compounds** (ISSN: 0925-8388),615, 2014, pp. XXX-XXX, DOI: 10.1016/j.jallcom.2014.06.135, (ISI Factor 2.390/2012; SNIP

- 0.910/2013), **cit.ref.no. 32** (*T. Vasilache, S. Gutt, I. Sandu, V. Vasilache, G. Gutt, M. Risca, A.V. Sandu, Recent Patents on Corrosion Science, 2 (2010), p. 1*);
56. M. Kashif, N. Ahmad, S. Ahmad, *Electrochemical corrosion resistance performance of sustainable resource-based nanoconducting polymer composites in alkaline medium*, **Journal of Solid State Electrochemistry** (ISSN1432-8488), 18, 7, 2014, pp. 1855-1867 (ISI Factor 2.279/2012; SJR 0.777/2013; SNIP 0.910/2013), **cit.ref. no. 50** (*Sandu, A.V., Ciomaga, A., Nemtoi, G., Bejinariu, C., Sandu, I., Study on the chemical deposition on steel of zinc phosphate with other metallic cations and hexamethilen tetramine. II. Evaluation of corrosion resistance, (2012) Journal of Optoelectronics and Advanced Materials, 14 (7-8), pp. 704-708*);
  57. M.-Y. Li, B.-S. Fang, Y. Zhao, T. Tong, X.-H. Hou, H. Tong, *Investigation into the deterioration process of archaeological bamboo strips of China from four different periods by chemical and anatomical analysis*, **Polymer Degradation and Stability**, 2014, DOI: 10.1016/j.polymdegradstab.2014.06.022, (**ISI Factor 2.770/2012**), **cit.ref.no. 5** (*I.C.A. Sandu, M. Brebu, C. Luca, I. Sandu, C. Vasile, Thermogravimetric study on the ageing of lime wood supports of old paintings, Polym Degrad and Stab, 80 (2003), pp. 83–91*);
  58. S.R. Stojanovi, M.D. Gaji -Kvaš ev, L.S. Damjanovi, *Spectroscopic study of an icon painted on wooden panel*, **Hemijaska Industrija** (ISSN ISSN:0367-598X), 60, 5-6, 2014, doi:10.2298/HEMIND140430053S, (**ISI Factor 0.137/2010**), **cit.ref.no. 7** (*I.C.A. Sandu, S. Bracci, I. Sandu, M. Lobefaro, Integrated Analytical Study for the Authentication of Five Russian Icons (XVI–XVII centuries), Micros. Res. and Tech. 72 (2009, 755-765)*) (i konzervatori su pretpostavili da je re o levkasu (ruski naziv za gips koji je esto u upotrebi [7]) u koji je urezan pripremnii crteži koji se na pojedinim mestima vidi. Uo eno je da je bojeni sloj ošte en i da ima na sebi naslage priljavštine. Na pojedinim mestima bojeni sloj je još uvek prekriven slojem laka za koji su konzervatori imali dve pretpostavke: žuti šelak (njime su premazivane ikone u 19. veku, a esto je koriš en u kombinaciji sa srebrom jer daje vizuelni efekat zlata) ili gold – lak ( ilibar ili šafran nanesen na srebro). Na osnovu izgleda drveta na kome je ikona ra ena procenjeno je da poti e iz 19. veka.);
  59. A.M. Mocanu, C. Luca, *Thermal Behaviour of Some New Hydrazine Complexes with Potential Biological Importance*, **Revista de Chimie** (ISSN 0034-7752), 65, 5, 2014, pp. 529-533, (**ISI Factor 0.538/2012**), **cit.ref.no. 14** (*CALU, N., BALANESCU, E., BERDAN, I., SANDU, I., Rev. Roum.Chim., 31, no. 1, 1986, p. 71*);
  60. V. Trunova, V. Zvereva, N. Polosmak, D. Kochubey, V. Kriventsov, K. Kuper, *Investigation of Organic materials From the 'Royal' Burials of Xiongnu (Noin-Ula, Mongolia) by Srxrf and XAFS Methods*. **Archaeometry** (ISSN 0003-813X), 2014, doi: 10.1111/arc.12109, (**ISI Factor 1.287/2012**), **cit. ref. no. 68** (*Quaranta, M., and Sandu, I., 2008, Micro-stratigraphy of copper-based archaeological objects: description of degradation mechanisms by means of an integrated approach, 9th International Conference on NDT of Art, Jerusalem, Israel, 1–8*), (Cited - Degradation of copper objects in the burial environment - There are some main mineral species of copper that can form in these cases (Quaranta and Sandu 2008): nantokite CuCl, disposed below a layer of cuprite Cu<sub>2</sub>O (Pourbaix 1966; Bernard and Joiret 2009); copper (II) oxide CuO (Fu et al. 2012); covellite CuS (when there is excess sulphide in the medium) (Quaranta and Sandu 2008; Jin et al. 2010; Xu et al. 2010), malachite Cu<sub>2</sub>(CO<sub>3</sub>)(OH)<sub>2</sub> (Pourbaix 1966; McCann et al. 1999; Quaranta and Sandu 2008), and atacamite Cu<sub>2</sub>Cl(OH)<sub>3</sub> (Pourbaix 1966; Quaranta and Sandu 2008). An increase in the pH leads to the formation of azurite Cu<sub>3</sub>(CO<sub>3</sub>)<sub>2</sub>(OH)<sub>2</sub> (thermodynamically less stable than malachite) or malachite (Quaranta and Sandu 2008).
  61. A.M. Mocanu, C. Luca, *Thermal Behaviour of Some New Hydrazine Complexes with Potential Biological Importance*, **Revista de Chimie** (ISSN 0034-7752), 65, 5, 2014, pp. 529-533, (**ISI Factor 0.538/2012**), **cit.ref.no. 15** (*CALU, N., SANDU, I., BERDAN, I., Rev. Roum. Chim., 31, 2, 1986, p. 217*);
  62. Adam Kujawa, *Plazmchemical Reduction of Corrosion Layers nn Copper Samples*, **Ph.D. Thesis**, Faculty of Chemistry, Institute of Physical and Applied Chemistry, Brno University of Technology, 2013, **cit. ref. no. 3** (*IOAN GABRIEL SANDU, OTILIA MIRCEA, VIORICAVASILACHE, ION SANDU, Influence of Archaeological Environment Factors in Alteration Processes of Copper Alloy Artifacts, Microscopy Researchant Techniques, 2012*);
  63. A.M. Mocanu, C. Luca, *Thermal Behaviour of Some New Hydrazine Complexes with Potential Biological Importance*, **Revista de Chimie** (ISSN 0034-7752), 65, 5, 2014, pp. 529-533, (**ISI Factor 0.538/2012**), **cit.ref.no. 18** (*SANDU, I., CALU, N., POPESCU-CIOCARLIE, I., SANDU, I.C.A., Rev.Chim. (Bucharest), 49, no. 6, 1998, p. 401*);
  64. **C. Soffritti, E. Fabbri, M. Merlin, G.L. Garagnani, C. Monticelli**, *On the degradation factors of an archaeological bronze bowl belonging to a private collection*, **Applied Surface Science** (ISSN), 2014, DOI: 10.1016/j.apsusc.2014.06.067, (**ISI Factor 0.538/2012**), **cirt.ref.no. 6** (*I. Sandu, N. Ursulescu, I.G. Sandu, O. Bounegru, I.C.A. Sandu, A. Alexandru Pedological stratification effect of corrosion and contamination products*

- on Byzantine bronze artefacts Corros. Eng. Sci. Techn., 43 (2008), pp. 256–266*) (Corrosion of bronze artefacts in soil depends on multiple factors that can be classified as endogenous (nature of alloy, method of manufacture, shape and dimension) and exogenous (soil composition, porosity, humidity, conductivity, depth of burial) [6] and [7].);
65. C. Soffritti, E. Fabbri, M. Merlin, G.L. Garagnani, C. Monticelli, *On the degradation factors of an archaeological bronze bowl belonging to a private collection*, [Applied Surface Science](#) (ISSN), 2014, DOI: 10.1016/j.apsusc.2014.06.067, (ISI Factor 0.538/2012), cit.ref.no. 6 (*M. Quaranta, I. Sandu, Micro-stratigraphy of copper-based archaeological objects: description of degradation mechanisms by means of an integrated approach, Proceedings of 9th International Conference on NDT of Art, Jerusalem, Israel (2008) 25-30 May*) (Corrosion of bronze artefacts in soil depends on multiple factors that can be classified as endogenous (nature of alloy, method of manufacture, shape and dimension) and exogenous (soil composition, porosity, humidity, conductivity, depth of burial) [6] and [7]/ They are remnant of the alloy corrosion and permit to evidence the corrosion product volume taking the place of the original corroded metal, which was comprised within the two dotted lines reported in the Figure. The elemental maps well evidence the banded structure of the patina, where a cuprite film (indicated by letter B, in analogy with Fig. 6) lies between two tin oxide-enriched layers, (indicated by letter A and C). Alternated SnO<sub>2</sub>/Cu<sub>2</sub>O layers have already been detected in tin bronzes [7]. According to some authors [7] these structures are connected to interdiffusion of metal ions and soil components partially dissolved in groundwater and are referred as Liesegang phenomena [38], while according to others [39] they may be also connected to environmental changes in burial conditions such as seasonal temperature fluctuations, rainfall fluctuations and change in soil corrosivity);
  66. A.M. Mocanu, C. Luca, *Thermal Behaviour of Some New Hydrazine Complexes with Potential Biological Importance*, *Revista de Chimie* (ISSN 0034-7752), 65, 5, 2014, pp. 529-533, (ISI Factor 0.538/2012), cit.ref.no. 19 (*SANDU, I., CALU, N., POPESCU-CIOCARLIE, I., SANDU, I.C.A., Rev.Chim. (Bucharest), 49, no. 4, 1998, p. 249*);
  67. M. Demlie, E. Hingston, Z. Mnisic, *A study of the sources, human health implications and low cost treatment options of iron rich groundwater in the northeastern coastal areas of KwaZulu-Natal, South Africa*, *Journal of Geochemical Exploration* (ISSN ISSN: 0375-6742), 144, 2014, pp. xxx-xxx, DOI: 10.1016/j.gexplo.2014.05.011, (ISI Factor 1.952/2013, SCOPUS SJR Factor, 0.649/2012, SNIP 1.618/2012), ref.no. 14 (*Sieliechi, J.M., Kayem, G.J., Sandu, I., 2010. Effect of water treatment residuals (aluminum and iron ions) on human health and drinking water distribution systems. Int. J. Conserv. Sci. 1 (3), 175–182.*)(The excessive ingestion of iron may lead to high levels in the blood which can damage cells of the gastrointestinal tract, thereby preventing the regulation of iron absorption into the body (Sieliechi et al., 2010) / The most important mechanism in the interaction of iron with cholesterol in promoting oxidative damage thereby causing atherosclerosis and neuro degeneration which can lead to Alzheimer's disease (Sieliechi et al., 2010));
  68. V.V. Cotea, C.E. Luchian, D. Dumitriu, C. Zamfir, C. Colibaba, A. Patra, *Mesoporous Material KIT-6 Influence on the Content of Phenolic Compounds in Feteasc Neagr Wine*, *Bulletin UASVM, Horticulture, Cluj-Napoca* (Print ISSN 1843-5254, Electronic ISSN 1843-5394), 71(1), 2014, pp. 1-5, cit.ref.no. 7 (*Luchian, C., V. V. Cotea, I. Sandu, V. Copcia, N. Bilba (2011). Removal of Mn(II), Ni(II) and Cu(II) ions from white wine through ion exchange in microporous mordenite and mesoporous Al-MCM-41. Revista de Chimie. 62(8):782-786*);
  69. K. Pramod, U.K. Ilyas, M. Singh, Y.T. Kamal, S. Ahmad, S.H. Ansari, J. Ali, *High-Performance Thin-Layer Chromatographic Analysis of Eugenol in Developed Nanoemulsion Gel and Nanoparticles: Validation of a Stability-Indicating Method*, *Acta Chromatographica* (1233-2356 - Print, 2083-5736 - Online), 26, 3, 2014, pp. XXX-XXX, DOI: 10.1556/AChrom.27.2015.3.12, (ISI Factor 0.644/2012), cit.ref.no. 11 (*M.L. Rusu, C. Marutoiu, I. Sandu, D. Tita, I. Gogoasa, C. Barbu, and A. Popescu, J. Planar Chromatogr., 20, 139–140 (2007)*);
  70. V. Popescu, E. Vasluianu, G. Popescu, *Quantitative analysis of the multifunctional finishing of cotton fabric with non-formaldehyde agents*, [Carbohydrate Polymers](#), Elsevier (ISSN 0144-8617), xxx-xxx, 2014, Doi: 10.1016/j.carbpol.2014.05.052, (ISI Factor 3,167/2009), cit.ref.no. 30 (*V. Popescu, E. Vasluianu, N.C. Forna, I. Sandu, E. Bercu, Comparative study of the FTIR analysis and the performances of N,N-trimethyl chitosan as wrinkle-proofing agent, Revista de Chimie (Bucharest), 64 (2013), pp. 1284–1294*);
  71. F. Hesami, B. Bina, A. Ebrahimi, *The effectiveness of chitosan as coagulant aid in turbidity removal from water*, *International Journal of Environmental Health Engineering* (Print Online - 2277-9183), 2014, 3:8, DOI: 10.4103/2277-9183.131814, (ISI Factor 0.00/2013, SCOPUS SJR Factor, 0.000/2012, SNIP 0000/2012), cit.ref.no. 6 (*Siliechie Joseph Marie, Kayem Joseph G, Sandu Ion. Effect on water tretment residuals (aluminum and irons) on human health and drnking water distribution systems. Int. J. Conserv Sci, 1,*

2010; pp. 175-82.) (The flocculation permits by the slant of slow mixture, the contact between the destabilized particles. These particles gather to form a floc easily eliminated by decantation. However these chemicals, particularly aluminum, generate secondary products, which can be harmful and associated to human health and environment problems. High concentrations of aluminum in water may have human health implications such as Alzheimer and disease other carcinogenic properties [6].);

72. C.E Luchian, V.V. Cotea, M. Niculaua, A. Patra, *Influence of Natural and Synthesized Nanomaterials on Cabernet Sauvignon Chemical Composition*, **Bulletin UASVM, Horticulture, Cluj-Napoca** (Print ISSN 1843-5254, Electronic ISSN 1843-5394), **71**(1), 2014, pp. 59-66, **cit.ref.no. 13** (*Luchian, C., V. V. Cotea, I. Sandu, V. Copcia, N. Bilba (2011). Removal of Mn(II), Ni(II) and Cu(II) ions from white wine through ion exchange in microporous mordenite and mesoporous Al-MCM-41. Revista de Chimie. 62(8):782-786*);
73. V. Popescu, E. Vasluianu, G. Popescu, *Quantitative analysis of the multifunctional finishing of cotton fabric with non-formaldehyde agents*, **Carbohydrate Polymers**, Elsevier (ISSN 0144-8617), **xxx-xxx**, 2014, **Doi: 10.1016/j.carbpol.2014.05.052**, (ISI Factor **3,167/2009**), **cit.ref.no. 33** (*E. Vasluianu, V. Popescu, A. Grigoriu, N.C. Fornu, I. Sandu, Comparative study concerning the FTIR analysis and the performances of chitosan-based wrinkle-proofing agents. Revista de Chimie (Bucharest), 64 (2013), pp. 1104–1115*);
74. C.S. Mahajan, D.B. Sarode, R.N. Jadhav, S.B. Attarde, S.T. Ingle, *Removal of heavy metals from winery wastewater by using natural adsorbents*, **International Journal of Conservation Science** (ISSN 2067-533X), **5**(1), 2014, pp. 69-78 (ISI Factor **0.00/2013**, SCOPUS SJR Factor, **0.243/2012**, SNIP **0591/2012**), **cit.ref.no. 10** (*C.E. Luchian, V.V. Cotea, I. Sandu, V.E. Copcia, N. Bilba, Removal of Mn(II), Ni(II) and Cu(II) ions from white wine through ion exchange in microporous mordenite and mesoporous Al-MCM-41, Revista de Chimie, 62(8), 2011, pp. 782-786*);
75. C.S. Mahajan, D.B. Sarode, R.N. Jadhav, S.B. Attarde, S.T. Ingle, *Removal of heavy metals from winery wastewater by using natural adsorbents*, **International Journal of Conservation Science** (ISSN 2067-533X), **5**(1), 2014, pp. 69-78 (ISI Factor **0.00/2013**, SCOPUS SJR Factor, **0.243/2012**, SNIP **0591/2012**), **cit.ref.no. 13** (*C. Bejinariu, A.V. Sandu, C. Baciuc, I. Sandu, S.L. Toma, I.G. Sandu, Water treatment and detoxification of the by-products resulted from lubricating phosphatation of iron-based metal parts, Revista de Chimie, 61(10), 2010, pp. 961-964*);
76. C.S. Mahajan, D.B. Sarode, R.N. Jadhav, S.B. Attarde, S.T. Ingle, *Removal of heavy metals from winery wastewater by using natural adsorbents*, **International Journal of Conservation Science** (ISSN 2067-533X), **5**(1), 2014, pp. 69-78 (ISI Factor **0.00/2013**, SCOPUS SJR Factor, **0.243/2012**, SNIP **0591/2012**), **cit.ref.no. 17** (*R.M. Hlihor, M. Diaconu, D. Fertu, C. Chelaru, I. Sandu, T. Tavares, M. Gavrilescu, Bioremediation of Cr(VI) polluted wastewaters by sorption on heat inactivated saccharomyces cerevisiae biomass, International Journal of Environmental Research, 7(3), 2013, pp. 681-694*);
77. C.S. Mahajan, D.B. Sarode, R.N. Jadhav, S.B. Attarde, S.T. Ingle, *Removal of heavy metals from winery wastewater by using natural adsorbents*, **International Journal of Conservation Science** (ISSN 2067-533X), **5**(1), 2014, pp. 69-78 (ISI Factor **0.00/2013**, SCOPUS SJR Factor, **0.243/2012**, SNIP **0591/2012**), **cit.ref.no. 18** (*V. Copcia, C. Hristodor, C. Luchian, N. Bilba, I. Sandu, Ammonium nitrogen removal from aqueous solution by natural clay, Revista de Chimie, 61(12), 2010, pp. 1192-1196*);
78. C.S. Mahajan, D.B. Sarode, R.N. Jadhav, S.B. Attarde, S.T. Ingle, *Removal of heavy metals from winery wastewater by using natural adsorbents*, **International Journal of Conservation Science** (ISSN 2067-533X), **5**(1), 2014, pp. 69-78 (ISI Factor **0.00/2013**, SCOPUS SJR Factor, **0.243/2012**, SNIP **0591/2012**), **cit.ref.no. 19** (*J.M. Sieliechi, G. J. Kayem, I. Sandu, Effect of Water Treatment Residuals (Aluminum and Iron Ions) on Human Health and Drinking Water Distribution Systems, International Journal of Conservation Science, 1(3), 2010, pp. 175-182*);
79. C.S. Mahajan, D.B. Sarode, R.N. Jadhav, S.B. Attarde, S.T. Ingle, *Removal of heavy metals from winery wastewater by using natural adsorbents*, **International Journal of Conservation Science** (ISSN 2067-533X), **5**(1), 2014, pp. 69-78 (ISI Factor **0.00/2013**, SCOPUS SJR Factor, **0.243/2012**, SNIP **0591/2012**), **cit.ref.no. 21** (*R.A. Razak, M.M.A. Abdullah, H. Kamarudin, K.N. Ismail, I. Sandu, D. Hardjito, Z. Yahya, Study on radioactivity components, water quality and microstructure characteristic of volcano ash as geopolymer artificial aggregate, Revista de Chimie, 64(6), 2013, pp. 593-598*);
80. C.S. Mahajan, D.B. Sarode, R.N. Jadhav, S.B. Attarde, S.T. Ingle, *Removal of heavy metals from winery wastewater by using natural adsorbents*, **International Journal of Conservation Science** (ISSN 2067-533X), **5**(1), 2014, pp. 69-78 (ISI Factor **0.00/2013**, SCOPUS SJR Factor, **0.243/2012**, SNIP **0591/2012**), **cit.ref.no. 22** (*D. Bociort, C. Gherasimescu, R. Berariu, R. Butnaru, M. Branzila, I. Sandu, Comparative studies on making*

- the underground raw water drinkable, by coagulation-flocculation and adsorption on granular ferric hydroxide processes, **Revista de Chimie**, 63(12), 2012, pp. 1243-1248);*
81. C.S. Mahajan, D.B. Sarode, R.N. Jadhav, S.B. Attarde, S.T. Ingle, *Removal of heavy metals from winery wastewater by using natural adsorbents, **International Journal of Conservation Science** (ISSN 2067-533X), 5(1), 2014, pp. 69-78 (ISI Factor 0.00/2013, SCOPUS SJR Factor, 0.243/2012, SNIP 0591/2012), cit.ref.no. 23 (D. Bociort, C. Gherasimescu, R. Berariu, R. Butnaru, M. Branzila, I. Sandu, *Research on the degree of contamination of surface and groundwater used as sources for drinking water, **Revista de Chimie**, 63(11), 2012, pp. 1152-1157);**
  82. V.B. Miškovic-Stankovic, ***Electrophoretic Deposition of Ceramic Coatings on Metal Surfaces, Modern Aspects of Electrochemistry**, 57 (Electrodeposition and Surface Finishing. Fundamentals and Applications – Springer, Editors: Stojan S. Djoki , ISBN: 978-1-4939-0288-0 (Print) 978-1-4939-0289-7 (Online), 2014, pp. 133-216, cit.ref.no. (G Ciobanu, G Carja, O Ciobanu, I Sandu, A Sandu, *SEM and EDX studies of bioactive hydroxyapatite coatings on titanium implants, **Micron**, 2009);**
  83. D. Panavait , *Technological research of lukišk s mother of god icon, **Acta Academiae Artium Vilnensis** (ISSN 1392-0316), 69, 2013, pp. 95-116, cit.ref.no. (Irina Crina Anca Sandu, Susanna Bracci, Ion Sandu and Mariella Lobefaro, *Integrated analytical study for the authentication of five Russian icons (XVI–XVII centuries, **Microscopy Research and Technique**, 72, 10, 2009, pp. 755–765);**
  84. L.G. Sarbu, E. Bicu, H. Hopf, M.L. Birsă, [2.2]Paracyclophane Substituted Indolizines, **Revista de Chimie** (ISSN 0034-7752), 65, 4, 2014, pp. 199-201, (ISI Factor 0.538/2012), cit.ref.no. 6 (Lungu, N.C., Sandu, I., Chirita, P., Birsă, M. L., *Rev. Chim.(Bucharest)*, 64, no. 7, 2013, p. 697);
  85. I. Zajac, I. Bojar, J. Helbin, E. Kolarzyk, A. Owoc, *Salt caves as simulation of natural environment and significance of halotherapy, **Annals of Agricultural and Environmental Medicine** (ISSN 1232-1966), 21, 1, 2014, pp. 124-127 (ISI Factor 3.060/2012), cit.ref.no. 21 (Sandu, I.; Canache, M.; Vasilache, V.; et al., *The Effects of Salt Solions on the Health of Human Subjects, **Present Environ. Sustainable Dev.**, 5, 2011, pp. 67-88);**
  86. I. Zajac, I. Bojar, J. Helbin, E. Kolarzyk, A. Owoc, *Salt caves as simulation of natural environment and significance of halotherapy, **Annals of Agricultural and Environmental Medicine** (ISSN 1232-1966), 21, 1, 2014, pp. 124-127 (ISI Factor 3.060/2012), cit.ref.no. 24 (Stribu, C; Stribu, C; Sandu, I., *Impact assessment of saline aerosols on exercise capacity of athletes, **Procedia Soc Behav Sci.**, 46, 2012, pp. 4141-4145);**
  87. M.C. Timar, A. M. Varodi, E. Beldean, I. Muscum, “12 For a War – A Peace Mission” - *Outcomes of a Voluntary Action for Cultural Heritage Conservation, **Bulletin of Transilvania University of Brasov**, Series II, 2014, cit.ref.no. 7 (Sandu, I.C.A., Sandu, I., *Aspecte metodologice privind conservarea stiintifica a patrimoniului cultural, (Methodological aspects regarding scientific conservation of cultural heritage) Editura Corson, Iasi, 2001);**
  88. A. Ghoniem, *A bronze Osiris statuette from the egyptian museum in Cairo: microstructural characterization and conservation, **Mediterranean Archaeology and Archaeometry**, Vol. 14, No. 1, 2014, pp. 37-49 (ISI Factor 0.00/2013), cit. ref. no. (Mircea, O., Sârghie, I., Sandu, I., Quaranta, M., Sandu, A.V., (2009) *The Study of Textile Impressions from Corrosion Products of Some Old Iron Artefacts, **Revista de Chemie**, Bucuresti, 60: 201-207);**
  89. M. Marinescu, A. Emandi, O.G. Dului, I. Stanculescu, V. Bercu, I. Eamandi, *FT-IR, EPR and SEM-EDAX Investigation of Some Accelerated Aged Painting Binders, **Vibrational Spectroscopy** (ISSN 0924-2031), 2014, doi.org/10.1016/j.vibspec.2014.04.006, (ISI Factor 1.747/2012), cit. ref. no. 13. (I.C.A. Sandu, C. Luca, I. Sandu, V. Vasilache, M. Hayashi, *Rev. Chim., (Bucharest)*, 59, 2008, p. 384-395);*
  90. S. Ristic, S. Polic, B. Radojkovic, J. Striber, *Analysis of ceramics surface modification induced by pulsed laser treatment, **Processing and Application of Ceramics** (ISSN 1820-6131), 8, 1, 2014, pp.15–23, DOI: 10.2298/PAC1401015R, (ISI Factor 0.000/2012), cit. ref. no. 2 (I. Sandu, V. Cotiuga, A. Sandu, A. Ciocan, G. Olteanu, V. Vasilache, *New archaeometric characteristics for ancient pottery identification, **Int. J. Conservation Sci.**, 1, 2, 2010, pp. 75-82);**
  91. P.P. Jasnamol, P. Neenu Lekshmi, R.V. Manoj, K. Nandakumar, *Structural and magnetoelectric studies on  $Sr_2Fe_{1-x}Mn_xMoO_6$  ( $x=0.0,0.25,0.50$ ), **International Journal of Scientific & Engineering Research** (ISSN 2229-5518), Volume 5, Issue 3, 2014, p. 209, (ISI Factor 0.00/2012), cit. ref.no. 16 (Perianu, E.A., Gorodea, I.A., Gheorghiu, F., Sandu, A.V., Ianculescu, A.C., Sandu, I., Iordan, A.R., Palamaru, M. N., *Preparation and dielectric spectroscopy characterization of  $A_2MnMoO_6$  (A=Ca, Sr and Ba) double perovskites, **Revista de Chimie** (Bucharest), 62(1), pp. 17-20, 2011);**



92. O. Papadopoulou, M. Delagrammatikas, P. Vassiliou, S. Grassini, E. Angelini, V. Gouda, *Surface and interface investigation of electrochemically induced corrosion on a quaternary bronze*, **Surface and Interface Analysis**, (ISSN 0142-2421), Article first published online: 2 APR 2014, DOI: 10.1002/sia.5502, **(ISI Factor 1.22/2012)**, **cit ref. no.** (O. Mircea, I. Sandu, V. Vasilache, A.V. Sandu, *Study of the Atypical Formations in the Corrosion Bulks of an Ancient Bronze Shield, by Optical and Electron Microscopy*, **Microscopy Research and Technique**, 75, 11, 2012, p. 1467-1474);
93. R.T. O ulata, H.I. Iço lu, *Interaction between effects of ambient parameters and those of other important parameters on electrospinning of PEI/NMP solution*, **The Journal of the Textile Institut** (ISSN: 0040-5000), 2014, DOI: 10.1080/00405000.2014.902561, **(ISI Factor 0.725/2012)**, **cit.ref.no. 20** (Scarlet, R., Manea, L.R., Sandu, I, Martinova, L., Cramariuc, O., Sandu, I.G., *Study on the solubility of polyetherimide for nanostructural electrospinning*, **Revista de Chimie**, 63 (7), 2012, pp. 688-692);
94. D. Hardjito, Antoni, *Potentials of LUSI Volcanic Mud as Construction Materials*, **Asian Bulletin of Engineering Science and Technology** (ISSN 2339-1421), 1, 1, 2014, pp. 1-6, **(ISI Factor 0.00/2012)**, **cit ref. no.** (A.R. Rafiza, A.M. Mustafa Al Bakri, H. Kamarudin, I. Khairul Nizar, I. Sandu, D. Hardjito, Y. Zarina, *Study on Radioactivity Components, Water Quality and Microstructure Characteristics of Volcano Ash as Geopolymer Artificial Aggregate*, **Revista de Chimie**, vol. 64, no. 6, 2013, pp. 593-598.);
95. O. Oprea, E. Andronescu, D. Ficai, A. Ficai, F.N. Oktar, M. Yetmez, *ZnO applications and challenges (Review)*, **Current Organic Chemistry** (ISSN 1385-2728), 18, 2, 2014, pp. 192-203, **(ISI Factor 3.39/2012)**, **cit ref. no.** (Copia, V.-E., Gradinaru, R., Mihai, G.-D., Bilba, N., Sandu, I., *Antibacterial activity of nanosized ZnO hosted in microporous clinoptilolite and mesoporous silica SBA-15 matrices*, **Revista de Chimie**, 63 (11), 2012, pp. 1124-1131);
96. B. Huang, K.Q. Qiao, Y.S. Cui, *Corrosion Inhibition of Sodium Hexametaphosphate for Carbon Steel in KCl Solution*, **Advanced Materials Research** (ISSN 1662-8985), 886, 2014, p.12-15, **(ISI Factor 0.00/2012)**, **cit ref. no.** (A.V. Sandu, A. Ciomaga, C. Bejinariu, G. Nemtoi, I. Sandu, *Journal of Optoelectronics and Advanced Materials*, 14 (7-8), 2012, 704-708);
97. L.G. Sarbu, E. Bicu, D. Belei, *Synthesis of mesoionic [2-(10H-phenothiazinyl)-1,3-dithiolium] phenolates*, **Revista de Chimie** (ISSN 0034-7752), 65, 2, 2014, pp. 249-251, **(ISI Factor 0.538/2012)**, **cit.ref.no. 15** (Sandu, I., Cecal, A., Petrescu, S., Sunel, V., **Revue Roumaine de Biochimie**, 21, 1984, p. 207);
98. F. Kacík, P. Šmíra, D. Kacíková, L. Reinprecht, A. Nasswetrová, *Chemical changes in fir wood from old buildings due to ageing*, **Cellulose Chemistry and Technology** (ISSN 0576-9787), 48 (1-2), 2014, pp. 79-88, **(ISI Factor 0.825/2012)**, **cit ref. no. 25** (I. C. A. Sandu, M. Brebu, C. Luca, I. Sandu and C. Vasile, **Polym. Degrad. Stabíl.**, 80, 2003, p. 83);
99. L.G. Bahrin. A.C. Luca, L.M. Birsa, *Synthesis of new flavanone-dihydrocarbamic acid esters from 2,5-dihydroxyacetophenone*, **Revista de Chimie** (ISSN 0034-7752), 65, 2, 2014, pp. 199-201, **(ISI Factor 0.538/2012)**, **cit.ref.no. 21** (Sandu, I., Cecal, A., Petrescu, S., Sunel, V., **Revue Roumaine de Biochimie**, 21, 1984, p. 207);
100. L.G. Bahrin. A.C. Luca, L.M. Birsa, *Synthesis of new flavanone-dihydrocarbamic acid esters from 2,5-dihydroxyacetophenone*, **Revista de Chimie** (ISSN 0034-7752), 65, 2, 2014, pp. 199-201, **(ISI Factor 0.538/2012)**, **cit.ref.no. 34** (Lungu, N.C., Sandu, I., Chirita, P., **Rev.Chim.**, 64, 7, 2013, p. 697);
101. K. Vijayalakshmi, K. Karthick, *The role of substrates on the structural, optical, and morphological properties of zno nanotubes prepared by spray pyrolysi*, **Microscopy Research and Technique** (ISSN:1059-910X), 77, 1, 2014, pp. xxx-xxx, DOI: 10.1002/jemt.22329, **(ISI Factor 1.593/2012)**, **cit.ref.no.** (Traistaru, A.A.T., Sandu, I.C.A., Timar, M.C., Dumitrescu, G.L., Sandu, I., **Microscopy Research and Technique**, 76, 2, 2013, p. 209);
102. A. El Jazouli, B. Tbib, A. Demourgues, M. Gaudon, *Structure and colour of diphosphate pigments with square pyramid environment around chromophore ions (Co<sup>2+</sup>, Ni<sup>2+</sup>, Cu<sup>2+</sup>)*, **Dyes and Pigments** (ISSN 0143-7208), xx,xx, 2014, pp.xxx-xxx **(ISI Factor 3.532/2012)**, **cit. ref. no. 28** (A.M. Saviuc-Paval, A. Victor Sandu, I. Marcel Popa, I.C. Anca Sandu, A. Petru Berteau, I. Sandu, *Colorimetric and microscopic study of the thermal behavior of new ceramic pigments*, **Microsc Res Tech**, 76 (2013), pp. 564–571);
103. N. Sasithorn, L. Martinová, *Preparation of Silk Fibroin/Gelatine Blend Nanofibres by Roller Electrospinning Method*, **Advanced Materials Research** (ISSN 1662-8985), 849, 2014, p. 45-49, **(ISI Factor 0.00/2012)**, **cit ref. no.** (F. Tofoleanu, T. B. Mindru, F. Brinza, N. Sulitanu, I. C. Sandu, D. Raileanu, et al., "Electrospun Gelatin Nanofibers Functionalized with Silver Nanoparticles," **Journal of Optoelectronics and Advanced Materials**, Vol. 10, No. 12, 2008, pp. 3512-3516);
104. R. Aseeva, B. Serkov, A. Sivenkov, *Effect of Natural Aging of Timber Building Structures on Fire Behavior and Fire Safety*, **Fire Behavior and Fire Protection in Timber Buildings** (ISBN 978-94-007-7460-5), Springer

*Series in Wood Science*, 2014, pp. 229-258, **cit ref. no. 18** (*Sandu ICA, Brebu M, Luca C, Sandu I, Vasile C Thermogravimetric study on the aging of lime wood supports of old paintings, Polym Degrad Stab., 80, (2003), pp. 83-91*);

- 105.** M.M.H. Khalila, K.Z. El-Wakeelb, S.S. Abd El Rehima, H. Abd El Monemb, *Adsorption of Fe(III) from Aqueous Medium onto Gycine-Modified Chitosan Resin: Equilibrium and Kinetic Studies*, **Journal of Dispersion Science and Technology** (ISSN 0193-2691), 2014, DOI:10.1080/01932691.2013.859624, (ISI Factor 0.600/2012), **cit.ref.no. 10** (*Sieliech, J.M., Kayem, G.J., Sandu, I., International Journal of Conservation Science, 1, 3, 2010, pp. 175 – 182*);
- 106.** G. Poggi, N. Toccafondi, L. N. Melita, J. C. Knowles, L. Bozec, R. Giorgi, P. Baglioni, *Calcium hydroxide nanoparticles for the conservation of cultural heritage: new formulations for the deacidification of cellulose-based artifacts*, **Applied Physics A.**, (ISSN 0947-8396), 2013, DOI 10.1007/s00339-013-8172-7, (ISI Factor 1.545/2012), **cit.ref.no. 37** (*I.C.A. Sandu, M. Brebu, C. Luca, I. Sandu, C. Vasile, Polym. Degrad. Stab., 80, 03, (2003), p. 83.*);

### **Lucr ri proprii recenzate în reviste ISI si BDI (0):**

#### **Membru în comisii na ionale de evaluare, titularizare/atestare**

B? **Membru în comisia pentru ocuparea prin concurs** a postului didactic de profesor la Facultatea de Inginerie Chimic și Protecția Mediului, Universitatea Tehnică Gheorghe Asachi din Iași, **Decizia Rectorului Nr. 1160/11.07.2014**, candidat: conf.dr. Margareta Gabriela CIOBANU, concursul în data de 08.09.2014, ora 11.00

C? **Membru în comisia de doctorat în calitate de conduc tor (2)**, în baza Deciziei:

- Rectorului Universității Alexandru Ioan Cuza, nr. 2703/27.02.2013, pentru teza *Cercet ri privind influența aerosolilor salini asupra îmbun t țirii activității școlare a elevilor, elaborată de Catălina DUMBRAVĂ ( TIRBU)*, la data de 11.04.2014;

- Rectorului Universității Alexandru Ioan Cuza, nr. 18764/19.11.2013, pentru teza *Noi sisteme fizico-chimice utilizate în tratarea apelor de suprafața și subterane în vederea potabilizării*, elaborat de Monica-Anca HUTANU (casatorita CRETU) la data de 12.12.2014.

3. **Membru în comisia de doctorat în calitate de referent oficial (5)**, în baza:

- Ordinului Senatului Universit ii Tehnice „Gh. Asachi” Ia i nr. /1970/681/19.09.2012, pentru teza "Cercet ri asupra corel rii st rii de suprafața i a condi iilor de depunere termic prin procedeul CVD combustie în pat fluidizat în vederea ob inerii de straturi sub iri metalice", elaborat de ing. Irina-Elena SURDU, sub conducerea prof.univ.dr.ing. Dan-Gelu G LU C , la data de 26.09.2014;

- Ordinului Senatului Universit ii Tehnice „Gh. Asachi” Ia i nr. 1366/02.09.2014, pentru teza "Cercet ri privind noi posibilit ții de utilizare a PET-ului reciclat" elaborat de Ovidiu CONSTANDACHE, sub conducerea prof.univ.dr.ing. Augustin MURESAN, la data de 30.09.2014;

- Ordinului Senatului Universit ii Tehnice „Gh. Asachi” Ia i nr. 1366/02.09.2014, pentru teza "Cercet ri privind modificarea unor pigmenți organici în vederea îmbun t țirii proprietăților acestora" elaborat de Tatiana BISCU (CONSTANDACHE), sub conducerea prof.univ.dr.ing. Augustin MURESAN, la data de 30.09.2014;

- Ordinului Senatului Universit ii Tehnice „Gh. Asachi” Ia i nr. 1172/15.07.2014, pentru teza "Cercet ri privind ob inerea, caracterizarea și aplica iile unor biomateriale apatitice substituite", elaborat de Ana-Maria BARGAN (MATEIUC), sub conducerea prof.univ.dr. Constantin LUCA, la data de 24.09.2014;

- Ordinului Senatului Universit ii „Babe -Bolyai” Cluj-Napoca nr. 20372/30.07.2014 de numire ca membru în Comisia de analiz și sus inere a tezei de doctorat elaborat de Adela Maria MEGHE AN (BREJA), cu titlul de "Contribuții la determinarea reziduurilor de pesticide din legume și fructe prin diferite tehnici cromatografice", conducator tiin ific prof.univ.dr. Constantin M TUȚOIU, la data 29.09.2014;

2. **Pre edinte al Juriului** la Concursul Na ional Tehnico- tiin ific „Înv m s invent m”, Edi ia a IX-a, Septembrie 2014, Palatul Copiilor Ia i;

#### **Director de proiecte prin programe na ionale (0):**

## **Membru in colectivul de cercetare a unor proiecte na ionale (2):**

**1. Proiect de cercetare IDEI – prof.univ.dr. Marius ALEXIANU**

**2. Proiect de cercetare cofinan at din Fondul Social European prin POSDERU – prof.univ.dr. Dorin POPA**

## **Recunoa teri interna ionale i na ionale:**

### **Medalii (40):**

- Aur: 29 (Paun Putra, Malayasia – 4, Londra – 2, Seoul – 1; Macau – 3, Ho Shi Min – 1, Zagreb -2, Sevastopol –3 , Cluj-Napoca – 4, Iasi - 6, Bacau - 4);
- Argint: 9 (Paun Putra, Malayasia – 2, Macao – 2, Seoul – 1; Zagreb – 2, Ia i – 2 );
- Bronz: 2 (Paun Putra, Malayasia – 1, Galati - 1);

**Ordine i Distinc ii:** 12 (Paun Putra, Malayasia – 5; Sevastopol – 1, Zagreb - 3, Cluj-Napoca – 1, Ia i – 3)

**Diplome de Excelen :** 14 (Paun Putra, Malayasia – 7, Londra - 2, Ho Shi Min – 1, Bacau - 2, Ia i - 2).

### ***Odine și distincții (10):***

1. **Special Award, New Time 2014**, Sevastopol, 22.Sept. 2014;
2. **Grand Prix** at Moldavian Technical University, EUROINVENT 2014,
3. **Leading Inovation Award** for New procedure on potabilization water, Invention Show & Technomart, IIPNF – International Intellectual Property Network Forum, Taipei, Oct. 2014;
4. **Leading Inovation Award** for Device of administration phytosanitary substances in ligneous plants, Invention Show & Technomart, IIPNF – International Intellectual Property Network Forum, Taipei, Oct. 2014;
5. **INOVA Best International Exhibitor Award**, International Invention Show - INOVA, Zagreb, 12-17 Nov. 2014;
6. **Award for International Innovation Achievements** – HALLER ProInventio Foundation, International Invention Show - INOVA, Zagreb, 12-17 Nov. 2014;
7. **Honor of Invention – WIIPA** for New Procedure on potabilization water, International Invention Show - INOVA, Zagreb, 12-17 Nov. 2014;
8. **Medalia Jubiliara** a AGEPI 20 ani din Republica Moldova, EUROINVENT, Ia i, 2014;
9. **Diplom of the Honor of Invention**, World Invention Intellectual Property Association, Taiwan 2014;
10. **Special Priz Best Invention**, Istanbul Aydin University, 2014.

### **Manifest ri tiin ifice interna ionale (17):**

1. **The 3rd International Conference on Advanced Material Engineering & Technology, ICAMET 2014**, 5th - 6th December 2014, Ho Chi Minh City, Vietnam (International Advisory Board);
2. **The 3rd International Congress on Chemistry for Cultural Heritage, ChemCH 2014**, (Institute of Science and Technology in Art of the Academy of Fine Arts Vienna), 1-5 July 2014 (2 comunicari);
3. **The Proceedings of the 14th GeoConference on Science and Technologies in Geology Exploration and Mining** (International Multidisciplinary Scientific GeoConferences-SGEM), 17-26 June 2014, Sofia (o comunicare);
4. **The IXth International Symposium Present Environment and Sustainable Development - PESD**, Alexandru Ioan Cuza University of Iasi, 06-08 June, 2014, Iasi (2 comunicari),
5. **The Youth in the Conservation of Cultural Heritage, YOCOCU 2014**, Agsu, 28-30 May 2014, Azerbaijan (3 comunicari);
6. **Second International Conference on Natural and Anthropic Risks**, Vasile Alecsandri University of Bacau, 4-6 June 2014 (6 comunicari);

7. **The International Conference dedicated to the 55th anniversary from the foundation of the Institute of Chemistry of the Academy of Science of Moldova**, May 28-30, 2014, Chisinau (Stiintific Board, 3 comunicari);
8. **The 6th International Scientific Conference UGALMAT 2014 (Advanced Materials and Technologies)**, Dunarea de Jos University of Galati, 29-31 may 2014 (Membru in Comitetul de Organizare, 6 comunicari);
9. **6th European Exhibition of Creativity and Innovation, EUROINVENT**, 22-24 May 2014, Iasi (President of Salon, Member of International Jury)
10. **International Salon PROINVENT 2014**, Cluj-Napoca, 19-21 martie 2014 - Membru in Comitetul de Organizare ();
11. **5<sup>th</sup> International Engineering Invention and Innovation Exhibition, i-ENVEX**, Dewan Peperiksaan Pauh Putra, University Malaysia Perlis, 11-13 April, 2014 (7 grupe de inventii, 4 medalii de aur, 2 de argint, 1 de bronz, 5 Premii Speciale/EYRec Creative Invention Award, World Invention Intellectual Property Association Award (WIIPA - 2 premii), Korea University Invention Association Award (KUIA) si Association of Young Innovator and Scientist Indonesia Award (AYISI) si 7 Diplome de participare);
12. **INST 2014-11-26 Taipei INT'L Invention Show & Technomart, IIPNF** – International Intellectual Property Network Forum, Taipei, Nov. 2013(trei grupe de inven ii, o medalie de aur, al turi de Leading Inovation Award for New procedure on potabilization water Leading Inovation Award for Device of administration phytosanitary substances in ligneous plants);
13. **Croatian Invention Show 2013 INOVA**, Zagreb, 12-17 Nov. 2014 (4 grupe de inven ii, 3 medalii de aur, 2 de argint, al turi de INOVA Best International Exhibitor Award Award for International Innovation Achieveniments – HALLER ProInventio Foundation Honor of Invention – WIIPA for New Procedure on potabilization water Honor of Invention – WIIPA for Device of administration phytosanitary substances in ligneous plants);
14. **The 1<sup>ST</sup> International Conference for Doctoral Students, ICP2013** Lucian Blaga University of Sibiu, 22-23 nov. 2014 (comunicat 3 lucr ri)
15. **IX<sup>th</sup> International Salon of Inventions and New Technologies „New Time”**, Sevastopol, 27-29 September, 2014 (3 grupe de inventii – 3 medalii de aur si Diploma de Excelenta a Institutului Ukrainean de Proprietate Industriala);
16. **8<sup>th</sup> International Symposium „Contemporary Chemistry Conferences”** (Academia Româna i Revista de Chimie), Hotel Athenee Palace Hilton, Bucure ti, 14-15 may 2014 (Comitetul de Organizare);
17. **25<sup>th</sup> International Invention, Innovation and Technology Exhibition, ITEX 2013**, Kuala Lumpur, Malaysia, 9- 11 May 2014(1 poster, diploma de participare);

#### **Manifest ri tiin ifice na ionale (1):**

1. **Expotehnica – Salonul national al cercetarii si inovarii**, Bacau 19-23 septembrie 2014 (Parcul Expozitional Bacau), (cuvant de deschidere, presedinte – Comitetul Stiintific, 7 grupe de inventii);

#### **Activit i ca membru în asocia ii tiin ifice i profesionale din ar i str in tate:**

- *Forumul Inventatorilor Români (Pre edinte);*
- *Societatea Român de Chimie (membru);*
- *Societatea EURACHEM – România (membru);*

- *Clubul Internațional de Inovare ARCHIMEDES, Moscova (membru fondator);*
- *Asociația Internațională a Inventatorilor (AII), Moscova (membru fondator);*
- *Groupe des Méthodes Pluridisciplinaires Contribuant à l'Archéologie (GMPCA) – Liege (Membru activ 2011).*

**Activități în colectivul redacțional al unor reviste din străinătate:**

- **INTERNATIONAL JOURNAL OF CONSERVATION SCIENCE**, (Print ISSN 2067-533X, Online 2067-8223), „Al.I.Cuza” University of Iasi, (grupa CNCSIS B+/SCOPUS) – **Editor Șef**;
- **INTERNATIONAL JOURNAL OF CRIMINAL INVESTIGATION**, (Online ISSN:2247-0271), „Al.I.Cuza” Police Academy Bucharest and AIT SRL Laboratories, (grupa CNCSIS BDI) – **Senior Editor**;
- **OPEN JOURNAL OF ARCHAEOLOGY** (PAGEPress Publications, Pavia, Italy), (eISSN 2038-1956), (grupa CNCSIS BDI) 2011 – **Editor și referent științific**;
- **REVISTA DE CHIMIE** (ISSN 0034-7752), București (cotat ISI Thomson, **Factor Impact 0.538/2012**) – **membru colegiului de redacție și referent științific**;
- **MATERIAL CHEMISTRY AND PHYSICS**, (ISSN: 0254-0584), ELSEVIER SCIENCE SA (cotat ISI Thomson, **Factor Impact 2.356/2010**) - **referent științific**;
- **DESALINATION AND WATER TREATMENT**, (ISSN: 1944-3994), (cotat ISI Thomson, **Factor Impact 0.852/2012**) - **referent științific**;
- **DESALINATION**, (ISSN: 0011-9164), (cotat ISI Thomson, **Factor Impact 3.041/2012**) - **referent științific**;
- **JOURNAL OF ARCHAEOLOGICAL SCIENCE**, (ISSN: 0305-4403), Elsevier, (cotat ISI Thomson, **Factor Impact 1.710/2010**) – **referent științific**;
- **JOURNAL OF APPLIED ELECTROCHEMISTRY**, (ISSN: 0021-891X - print version, ISSN: 1572-8838 - electronic version), Springer Netherlands, (cotat ISI Thomson, **Factor Impact 1.496/2010**) - **referent științific**;
- **JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY**, (ISSN: 1388-6150 Print version și 1572-8943 Online version) Springer Budapest, (cotat ISI Thomson, **Factor Impact 1.752/2010**) - **referent științific**;
- **THERMOCHIMICA ACTA**, (ISSN: 0040-6031), Elsevier, (Cotat ISI Thomson, **Factor impact 1.908/2010**) - **referent științific**;
- **WOOD AND FIBER SCIENCE**, (ISSN: 0735-6161), (Cotat ISI Thomson, **Factor impact 0.717/2012**) - **referent științific**;
- **AFRICAN JOURNAL OF AGRICULTURAL RESEARCH** (AJAR) (ISSN 1991- 637X), (Cotat ISI Thomson, **Factor impact 0.263/2010**) - **referent științific**, [www.academicjournals.org/ajar](http://www.academicjournals.org/ajar);
- **AFRICAN JOURNAL OF MICROBIOLOGY RESEARCH** (AJMR), (ISSN 1996-0808), (Cotat ISI 0031 Thomson, **Factor impact 0.528/2010**) - **referent științific**, [www.academicjournals.org/ajmr](http://www.academicjournals.org/ajmr);
- **AFRICAN JOURNAL OF ENGINEERING RESEARCH** (AJER),(non-ISI Thomson, Grupa CNCSIS BDI), 2013, - **referent științific**, [www.netjournals.org](http://www.netjournals.org);
- **BASIC RESEARCH JOURNAL OF SOCIAL AND POLITICAL SCIENCE** (BRJSPS),(non-ISI Thomson, Grupa CNCSIS BDI), 2013 - **referent științific**, [www.basicresearchjournals.org](http://www.basicresearchjournals.org)
- **BIORESOURCES** (BR), (ISSN: 1930-2126), (non-ISI Thomson, Grupa CNCSIS BDI), 2013- **referent științific**,
- **JOURNAL OF PETROLEUM AND GAS EXPLORATION RESEARCH** (JPGER), (ISSN 2276-6510),(non-ISI Thomson, Grupa CNCSIS BDI), 2011 - **referent științific**, <http://interesjournals.org/JPGER/index.htm>;
- **JOURNAL OF ENGINEERING AND TECHNOLOGY RESEARCH** (JETR) (ISSN:2006-9790), (Grupa CNCSIS BDI) 2011 - **referent științific**, , [www.academicjournals.org/jetr](http://www.academicjournals.org/jetr);
- **RECENT PATENTS ON CORROSION SCIENCE JOURNAL** (Bentham Science Publishers, New York), (ISSN 1877-6108), (grupa CNCSIS BDI) 2011 – **membru colegiului de redacție și referent științific**;

- **EGYPTIAN JOURNAL OF ARCHAEOLOGICAL AND RESTORATION STUDIES**, (print ISSN 2090-4932, eISSN 2090-4940), (grupa CNCSIS BDI) 2011 – *membru colegiul de redac ie i referent tiin ific*, <http://ejars.sohag-univ.edu.eg/>;
- **STUDIA ANTIQUA ET ARCHAEOLOGICA**, Universitatea „Al. I. Cuza” Ia i, ISSN (Grupa B+ CNCSIS, 2010-2011) – *membru colegiul de redac ie i referent tiin ific*;
- **ACTA UNIVERSITATIS CIBINIENSIS, Seria F CHEMIA** (ISSN 1583-5030), Universitatea „Lucian Blaga” Sibiu (grupa CNCSIS B+) – *membru colegiul de redac ie i referent tiin ific*;
- **ANALELE UNIVERSIT II „DUN REA DE JOS” DIN GALA I, Fascicula IX METALURGIE I TIIN A MATERIALELOR** (ISSN 1453-083X), (grupa CNCSIS B+) – *membru colegiul de redac ie i referent tiin ific*;
- **PRO-LIGNO** (ISSN 2069-7430), (grupa CNCSIS B+) – *membru colegiul de redac ie*;
- **REVISTA DE INVENTIC** (ISSN 1210-3084), Institutul Na ional de Inventic Ia i (grupa CNCSIS B) – *membru colegiul de redac ie*;
- **REVISTA DANUBIUS** (ISSN ), Muzeul de Istorie Gala i, (grupa CNCSIS C) – *membru colegiul de redac ie*;
- **REVISTA CERCETARII TIIN IFICE** (ISSN 2066-6713), Ed. Performantica Ia i, - *membru în colegiul de redac ie*;
- **PATRIMONY BOOK**, „Al.I.Cuza” University Publishing House, - *coordinated series*.

#### **Membru în Juriile Interna ionale (5):**

- a. **Croatian Invention Show INOVA 2014**, Zagreb, 12-16.nov. 2013.
- b. **Mejdunarodnii Salon Izobretenii i Novih Tehnologhii „Novoe Vreame”**, Sevastopol, septembrie 2014;
- c. **Expozi ia European a Creativiti i Inovrii – EUROINVENT**, Ia i, 9 – 11 mai 2014
- d. **International Salon PROINVENT 2013**, Cluj-Napoca, 19-23 martie 2014
- e. **Salonul International de Proprietate industrială i creativitate tehnic „ARCHIMEDES 2014”**, Moscova, Rusia, martie 2013.

#### **Membru în comitetul de organizare/comitetul tiin ific/chairman manifest ri tiin ifice interna ionale și na ionale (7):**

1. **The 3rd International Conference on Advanced Material Engineering & Technology, ICAMET 2014**, 5th - 6th December 2014, Ho Chi Minh City, Vietnam (International Advisory Board);
2. **The International Conference dedicated to the 55th anniversary from the foundation of the Institute of Chemistry of the Academy of Science of Moldova**, May 28-30, 2014, Chisinau (Stiintific Board, 3 comunicari);
3. **The 6th International Scientific Conference UGALMAT 2014 (Advanced Materials and Technologies)**, Dunarea de Jos University of Galati, 29-31 may 2014 (Membru in Comitetul de Organizare, 6 comunicari);
4. **The 6th European Exhibition of Creativity and Innovation, EUROINVENT**, 22-24 May 2014, Iasi (President of Salon, Member of International Jury)
5. **International Salon PROINVENT 2014**, Cluj-Napoca, 19-21 martie 2014 (Membru in Comitetul de Organizare);
6. **Simpozionul Interna ional „Conferin e de Chimie Contemporan ”** (Academia Romana i Revista de Chimie), Hotel Athenee Palace Hilton, Bucure ti, 23 iunie 2014 – membru în Comitetul de Organizare;
7. **Concursul Na ional Tehnico- tiin ific “Inventiv m s invent m”**, Palatul Copiilor Ia i, 7-8 septembrie 2013 (Pre edintele Juriului)

### Activitate didactic :

În anul universitar 2014 – 2015 am de efectuat un număr total mediu de 13,75 ore/s ptamân activități didactice, din cele 24,15 ore/s pt mân total activități, după cum urmează :

#### - **Curs:**

8. Expertiza științifică a operelor de art (anul II Master) 3,75 ore;
9. Chimie pentru conservare-restaurare (anul II Licență) 4,00 ore;
10. Restaurare metal (anul III Licență) 1,00 ore.

#### - **Lucrări practice:**

1. Expertiza științifică a operelor de art (anul II Master) 4,5 ore;
2. Chimie pentru conservare-restaurare (anul II Licență) 2,00 ore;
3. Restaurare metal (anul III Licență) 0,50 ore.

#### - **Alte activități cumulate însumând 8,4 ore, cuprind:**

1. *Examene:* 0,9 ore/s pt mân (ce corespund pentru 38 de studenți în loc de 48 efectiv pentru 2009-2010);
2. *Consultații:* 3,00 ore/s pt mân (1,00 ore dizertații și 2,00 ore licență);
3. *Participare la Consiliul Profesional:* 0,5 ore/s pt mân
4. *Cercetare:* 4,00 ore/s pt mân.

### Titular la alte discipline din Universitatea „Al.I.Cuza” Iași:

- *Ecologia sistemelor sportive*, Master, anul I, sem I (Facultatea de Ed. Fizică și Sport) 2,5 ore/s ptamân curs și 1,5 ore/s ptamân seminar;
- *Metodologia programelor și proiectelor de cercetare științifică în geotehnologie, anul I, Școala Doctorală de Știința Mediului* (Facultatea de Geografie și Geologie), 3,2 ore/s pt mân;
- *Conducere teme de doctorat*, anul I, II și III, Școala Doctorală de Știința Mediului (Facultatea de Geografie și Geologie)  $0,5 \times 9 = 4,5$  ore/s pt mân.

### Activități de expertizare:

- Executarea expertizelor pentru 3 lucrări de restaurare și pictură frescă;
- Executarea expertizelor pentru 6 probe de var utilizate la realizarea frescelor;
- Executarea expertizelor de autentificare pentru 5 violonceluri Stradivarius;
- Executarea expertizelor de autentificare pentru 12 picturi de sec. XVII și XIX.