

Activitati si realizari 2020

1. Participari la reuniuni stiintifice

- Conferintele online, de primavara si de toamna, organizate de AOSR la Bucuresti in cursul anului 2020 – au participat cinci dintre membrii filialei;
- Simpozionul ”Combaterea daunatorilor din culturile de porumb si floarea soarelui si impactul neonicotinoidelor asupra mediului”, organizat in februarie de ASAS Bucuresti. A participat cu o prezentare CS I dr. ing. Elena Trotus
- ”EUROINVENT” – International Workshop, Editia a 12-a, 21 mai 2020, Iasi, organizat online de prof. univ dr. Ion Sandu. Au participat cu prezentari: prof. univ. dr. Ion Sandu si CS I dr. ing. Elena Trotus;
- Simpozionul ”Biologia si dezvoltarea durabila”, organizat online de catre Complexul Muzeal de Stiintele Naturii din Bacau (decembrie 2020). A participat prof. univ.dr. Gogu Ghiorghita;
- Congresul stiintific international organizat de USAMV Iasi in octombrie 2020. A participat cu prezentari CS I dr. ing. Elena Trotus.

2. Lucrari stiintifice publicate

- Boutiuc-Haulica M., Florescu O., Vasilache V., Sandu I., *The Comparative Study of the State of Conservation of Two Medieval Documents on Parchment from Different Historical Periods*. Materials, 2020, **13**, 21. (art. cotat ISI).
- Surpateanu Gh., Nistor I. D., Georgescu A. M., Lungu N. C., *Syntone chemistry. Theoretical study on the formation of cysreine, aspartic acid, asparagine and threonine*. Rev. Chim., 2020, 71, 7, 278-283 (art. cotat ISI).
- Boutiuc- Haulica M, Vasilache V., Florescu O., Brebu M., Sandu I., Tanasa P. O., Negru I. C. *Study of the effects of skin surface lipids on old cellulose-support documents*, Int. J. Conservation Sci., 2020, 11, 3, 731-746.
- Cazacu M. M., Pelin V., Radinschi I., Sandu I., Ciocan V., Sandu I. G., Gurlu S., *Effects of Meteorological Factors on the Hydrophobization of Specific Calcareous Geomaterials From Repedea - Iasi Area, Under the Urban Ambient Air Exposure*. Int. J. Conservation Sci., 2020, 11, 4, 1019-1030.
- Sharairi A., Sandu I. C. A., Vasilache V., Sandu I., *Deterioration and corrosion detection of medieval silk fibers and metal threads from Romania*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 9-31.
- Boutiuc M., Florescu O., Vasilache V., Sandu I., *Aciditatea suportului celulozic al documentelor vechi*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 32-55.
- Boutiuc M., Florescu O., Vasilache V., Sandu I., *Celuloza din lemn, principalul component al suportului documentelor de arhiva, muzee și biblioteci*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 56-70.
- Boutiuc M., Florescu O., Vasilache V., Sandu I., *Cercetari privind prezervarea si restaurarea patrimoniului arhivistic*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 71-94.
- Colbu D. E., Ghavidelesfahlan, Sandu I., Vasilache V., Sandu I. C. A., *Interventii de prezervare prin tratarea obiectelor de arta cu radiatii ionizante*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 95-111.
- Florescu O., Nanescu M., Boutiuc M., Vasilache V., Sandu I., *Patrimoniul tehnic iesean – aductiuni vechi de apa*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 132-147.

- Stingu C. C., Nedeff V., Mosnegutu E. F., Sandu I. et al., *Masuri specifice de conservare a biodiversitatii zonelor umede*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 148-180.
- Antonovici M. O., Sandu I., Vasilache V., Sandu I. G., Stingu C. C., *Relatii intre mediul ambient cu aerosolii salini și frecventa bolilor pulmonare*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 181-204.
- Drobotă V., Negru I. C., Tanasa O., Sandu I., *Investigarea falsului documentelor sub semnatura privata si a documentelor oficiale*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 205-217.
- Stanila A., Sandu I., Sandu A. V., Neculai O., Toma A. M., *Strategia de crestere economica prin educatie nationala. I. Sinteza de informatii FIR*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 417-425.
- Stanila A., Sandu I., Sandu A. V., Neculai O., Toma A. M., *Strategia de crestere economica prin educatie nationala. II*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 426-441.
- Stanila A., Sandu I., Sandu A. V., Neculai O., Toma A. M., *Statut de functionare in universitati a Scolii Academice de Inventica*. "Euroinvent" Internat. Workshop, 12-th Edition, Iasi, 2020, p. 442-457.
- Stanila A., Sandu I., Sandu A. V., Neculai O., Toma A. M., *Propuneri de curricula pentru Scoala academica de inventica*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 458-472.
- Stanila A., Sandu I., Sandu A. V., Neculai O., Toma A. M., *Principii de implementare a Scolii academice de inventica prin terapie de soc*. Euroinvent Internat. Workshop, 12-th Edition, Iasi, 2020, p. 473-489.
- Ghiorghita G., *The Human Evolution - Past, Present and the Future*. Acad. Rom. Scient. Annals, Ser. Biol. Sci., 2020, 9, 5-25.
- Ghiorghita G., *The gene as a story*. Mukherjee Siddhartha: "Gena: o istorie fascinanta". Editura "ALL", 2018, Bucuresti, 556p. J. Exp. Molec. Biol., 2020, 21, 1, 13-18. (Recenzie).
- Ghiorghita G., *A perfect educator and a special person departed from our midst - PhD Professor Vlad Artenie (1936 -2020)*. J. Exp. Molec. Biol., 2020, 21, 1, 3-12. (In memoriam).
- Ghiorghita G., *The academic Gabriel Corneanu (1942 - 2019) - The man who placed profession above it all*. J. Exp. Molec. Biol., 2020, 21, 2, 55-62. (In memoriam).
- Ghiorghita G., *Posthumous Tribute to a Great Professor and Researcher - Academician Constantin Toma, PhD. Omagiu postum unui mare dascal si cercetăor - Academician profesor dr. Constantin Toma*. Acad. of Rom. Scient. Annals, Ser. Biol. Sci., 2020, 9, 171-190. (In memoriam).
- Oprea B. S., Motelica D. M., Vrinceanu N., Trotus E., Isticioaia S. F., Bolohan C., *Research on the content and distribution of macronutrients (NPK) in different plant components of Sorghum bicolor (L.) Moench grown at A.R.D.S. Secuieni*. Adv. in Agric. & Botanic – Bioflux, 2020, 12, 32, 73-82.
- Ghavidel A., Hosseinpourpia R., Militz H., Vasilache V., Sandu I., *Characterization of archaeological european white elm (Ulmus laevis p.) and black poplar (Populus nigra l.)*. Forests, 2020, 11, 12.
- Cazacu M. M., Pelin V., Radinschi I., Sandu I., Ciocan V., Sandu I. G., Gurlu S., *Effects of meteorological factors on the hydrophobization of specific calcareous geomaterials from Repedea - Iasi area, under the urban ambiental air exposure*. Internat. J. Conserv. Sci., 2020, 11, 4, 1019-1030.
- Ghavidel A., Scheglov A., Karius V., Mai C., Tarmian A., Vioel W., Vasilache V., Sandu I., *In-depth studies on the modifying efects of natural ageing on the chemical structure of European spruce (Picea abies) and silver fr (Abies alba) woods*. J. Wood Sci., 2020, 66.

- Boutiuc-Haulica M., Florescu O., Vasilache V., Sandu I., *The Comparative Study of the State of Conservation of two medieval documents on parchment from different historical periods*. Materials, 2020, 13, 21.
- Koussi D. K., Kouame I. K., Kof K., Douagui A. G., Sandu A. V., Sandu I., *Assessment of the quality of quaternary groundwater under the influence of anthropogenic activities in the low-income neighbourhoods of the Treichville municipality (Abidjan, Côte d'Ivoire)*, SN Applied Sci., 2020, 2, 10.
- Ghavidel A., Hofmann T., Bak M., Sandu I., Vasilache V., *Comparative archaeometric characterization of recent and historical oak (Quercus spp.) wood*. Wood Sci. Technol., 2020.
- Mosnegutu E. F., Nedeff V., Barsan N., Sandu I., Panaite-Lehadus M., Chitimus D., Sandu I. G., Bontas O., Rusu D. I., Topan G., *Application in Process Industry of the Solid Particles Displacement on a Flat Oscillating Surface*, Rev. Chim., 2020, 71, 6, 42-50.
- Cochiorca A., Nedeff V., Barsan N., Sandu I., Mosnegutu E., Chitimus D. A., Sandu A. V., Irimia O., *Surface water and groundwater quality evaluation in a mining area*, Rev. Chim., 2020, 71, 6, 124-131.
- Iurcovschi T. C. Vasilache V., Sandu I., Marius Z., Pintilie O., Sandu A. V., *New ecological solutions involved in the cleaning of a 19th century icon*. Appl. Sci.-Basel, 2020, 10, 3.
- Sandu I., Tanasa P. O., Sandu I. C. A., Negru I. C., Sandu A. V., Vasilache V., *Authentication of an old violin by multianalytical methods*. Appl. Sci.-Basel, 2020, 10, 1.
- Al-Sharairi N., Sandu I. C. A., Vasilache V., Sandu I., *Recognition of natural silk fibers, dyes and metal threads of historical Romanian textile fragments using the multi-analytical techniques approach*. Textile Res. J., 2020, 90, 4, 1-18.
- Florescu O., Sandu I. C. A., Spiridon-Ursu P., Sandu I., *Integrative participatory conservation of museum artefacts. Theoretical and practical aspects*. Int. J. Conserv. Sci., 2020, 11, 1, 109-116.
- Barsan N., Capsa D., Mosnegutu E., Nedeff V., Sandu I., Chitimus A. D., Tomozei C., Sandu A. V., *Correlations on the air nitrogen oxides pollutant concentration and climatic factors variations in Bacau city*. Rev. Chim. 2020, 71, 2, 358-364.
- Birsa M. L., Apostu M. O., Sandu I., Panainte A. D., Bibire N., *Synthesis and structural characterization of some 1,3-dithiol-2-ylidium salts*, Rev. Chim., 2020, 71, 2, 418-421.
- Asaftei I. V., Sandu I., Bilba N., Lungu N. C., Ignat M., Mahu E., *Oligo-aromatization of light hydrocarbons from petroleum refining processes over ZnO/MFI microporous material*. Rev. Chim., 2020, 71, 2, 273-282.
- Barsan N., Chitimus A. D., Muscalu-Plescan O. M., Nedeff F. M., Sandu I., Partal E., Sandu A. V., Panainte-Lehadus M., *Influence of fertilizers on soils used for oleaginous crop*. Rev. Chim., 2020, 71, 1, 233-238.
- Pelin V., Radinschi I., Ciocan V., Sandu I., Coman T. B., Cazacu M. M., *Preliminary evaluation of coating hydrophobization of natural stone from Repedea - Iasi area (Romania)*. Rev. Chim., 2020, 71, 1, 273-282.
- Chitimus A. D., Nedeff F. M., Sandu I., Radu C., Mosnegutu E., Sandu I. G., *Influence of Bacau city's anthropic activities on the heavy metals concentration measured on Bistrita and Siret river sides*. Rev. Chim., 2020, 71, 1.

3. Carti publicate, editate

- Trotus E., Isticioaia S. F., Mirzan O., Popa D. L., Naie M., Lupu C., Leonte A., Pintilie P. L., Buburuz A. A., Pleşcan I. D., *Tehnologii de cultivare a unor plante de camp pentru conditiile specifice din Centrul Moldovei*. Edit. "Ion Ionescu de la Brad", Iasi, 2020, 291p.
- Trotus E., Pintilie P. L., Amarghioalei R. G., Isticioaia S. F., Matei Gh., *Ghid de bune practici pentru identificarea, determinarea si combaterea buruienilor din culturile de sorg*,

canepa si topinambur, în conditiile din partea vestica a Podisului Central Moldovenesc. Edit. "Ion Ionescu de la Brad", Iasi, 2020, 105p.

• Sandu I. G., Sandu I., Ciornei A. S. (editors), EUROINVENT – Internat. Workshop, Scientific, Technological and Innovative Research in Current European Context, 12th edition, 21 May 2020, Iasi. Edit. "PIM", Iasi, 2020, 496p.

4. Brevete de inventie

• Sirbe G. S., Panite S. V., Sandu I., Copcea D. M., Sandu A. V., Sirbe O. L., Sandu I. G., Pop O., *Compozitie pentru mortar predozat*. Patent RO132190 (A0)/30.05.2020

• Sirbe G. S., Panaite S. V., Sandu I., Copcea D. M., Sandu A. V., Sirbe O. L., Sandu I. G., Pop O., *Compozitie pentru beton celular izolator*. Patent RO132191 (A0)/30.05.2020

• Colbu D. E., Sandu I., Vasilache V., Sandu I. C. A., Colbu G., Sandu I. G., Colbu N., Sandu A.V., *Composition and process for treating old wood artifacts against insects, fungi and water*. Patent RO1234566 (A2), 2020-11-27.

• Sandu I. G., Sandu A. V., Sandu I., Earar K., Vasilache V., Stirbu C. M., Balan G., Crisan-Dabija R. A., Chirazi M., Vladescu A., Cotrut M. C., *Artificial multi-use self-controlled halochamber in dynamic regime*. Patent RO134029 (A2), 2020.04.03.

• Sandu I. G., Sandu A. V., Sandu I., Earar K., Vasilache V., Stirbu C. M., Balan R. A., Crisan-Dabija R. A., Chirazi M., Vladescu A., Cotrut M. C., Vranceanu M. D., *Jacuzzi system for thermalism with hydro-/air-massage and halochamber treatments with solions*. Patent RO134023 (A2), 2020.04.03.

• Earar K., Pascu L. F., Sandu A. V., Matei M. N., Sandu I., Sandu I. G., *Ecological toothpaste with multiple implications*, Patent RO131090 (B1), 30.03.2020.

5. Activitate la proiecte de cercetare in derulare

• Sandu Ion – proiectul "Consolidarea si prezervarea monumentelor istorice utilizand materiale inovative pe baza de nano-hidroxid de calciu, ca atare sau dopat, proaspat sintetizat"; contract nr. 353PED/2020;

• Trotus Elena – proiectul "Sistem complex de valorificare integrata a unor specii agricole cu potential energetic si alimentar"; contract cu UEFISCDI Bucuresti;

Trotus Elena - proiectul "Cercetari privind impactul utilizarii insecticidelor neonicotinoide asupra plantelor si produselor agricole ale culturilor de interes melifer, albinelor si produselor stupului si elaborarea de sisteme de combatere integrata a daunatorilor de sol la culturile de interes melifer", contract MADR – ICDPP Bucuresti;

• Trotus Elena - "Identificarea si introducerea in cadrul tehnologiilor de cultivare a plantelor de camp a unor produse biostimulatoare si de protectia plantelor de tip Naturevo", contract cu NATUREVO;

6. Premii, medalii, distinctii

• Trotus Elena - premiul "Iuliu Prodan" al ASAS Bucuresti pentru cartea "SCDA Secuieni, istoric, generatii de cercetatori si specialisti, rezultate", publicata in 2018 in Edit. "Ion Ionescu de la Brad" Iasi;

• Sandu I. a obtinut în 2020 un numar de 13 medalii, din care 8 de aur, 5 de argint si 1 de bronz la expozitii, saloane si manifestari stiintifice nationale si internationale, pentru unele produse, tehnologii, aparate si metode de investigatie elaborate.

• Surpateanu G. si Ghiorghita G. - Diploma si Medalia de Aur la Salonul "Euroinvent" Iasi (mai 2020) pentru cartea "Syntone chemistry and prebiotic stage", publicata in 2018 in Edit. "Lambert", Berlin.

• Ghiorghita G. - Diploma si Medalia de Aur la Salonul "Euroinvent" Iasi (mai 2020) pentru cartea "Valori nemtene", publicata in 2018 in Edit. AOSR Bucuresti.

- Ghiorghita G. - Diploma si Medalia de Argint la Salonul "Euroinvent" Iasi (mai 2020) pentru cartea "*Androgeneza experimentală la unele specii de Brassica*", publicata in 2018 (in colaborare cu Daniela Nicuta) in Edit. "Alma Mater", Univ. Bacau.

7. Alte activitati si realizari

- Dr. V. Razesu a publicat de-a lungul anului 2020 o serie de articole in ziarele locale din Piatra Neamt, avand ca tematica pandemia Covid-19 sau omagierea unor personalitati disparute;
- Universitarii Ion Sandu si Gheorge Surpateanu, membri ai filialei noastre, au atins la sfarsitul anului 2020 un numar important de citari ale lucrarilor stiintifice publicate: 3020 si respectiv 2090 citari;
- Biroul de conducere al Filialei Neamt a AOSR a informat permanent membrii filialei cu privire la demersurile si solicitarile Prezidiului AOSR si i-a mobilizat la unele conferinte stiintifice on-line care au avut loc in tara in 2020. Biroul a facut totodată eforturi de a mentine treaz interesul si atasamentul colegilor din filiala fata de AOSR (inclusiv printr-un mic sprijin financiar), in conditiile lipirii acesteia de finantare din partea Guvernului;