

RAPORT
privind activitatea Centrului de Cercetări pentru Oenologie Iași desfășurată în anul 2021

1. Membrii Secției – lucrări publicate în anul 2021; cea mai importantă lucrare a fiecărui membru apărută în anul 2021.

1. **Scutarașu Elena Cristina** - *Studii privind influența folosirii unor preparate enzimatică în tehnologia de obținere a vinurilor albe în podgoria Iași*, Teză de doctorat, susținută pe 2.07.2021
2. Ștefan Bucur, **Niculaua Marius**, Catălina-Ionică Ciobanu, N.C. Lungu, Ionel Mangalagiu, *Simple synthesis route using β -cyclodextrin - copper complex sandwich as protecting agent*, *Molecules* 2021, 26(18), 5669; <https://doi.org/10.3390/molecules26185669>
3. **Cotea V. Valeriu**, Focea Cristian Mihai, Luchian Camelia Elena, Lucia Cintia Colibaba, **Elena Cristina Scutarașu**, **Niculaua Marius**, **Zamfir Cătălin Ioan**, Popîrdă Andreea, 2021 – *Influence of different commercial yeasts on volatile fraction of sparkling wines*, *Foods*, 10 (2):247, FI 4,092. <https://doi.org/10.3390/foods10020247>.
4. Macoviciuc Sorin, **Niculaua Marius**, **Nechita Constantin Bogdan**, **Cioroiu Ionel Bogdan**, **Cotea V. Valeriu**, 2021 – *Amino acids profiles in wines with low content of sulphur dioxide from Panciu wine region*, prezentată la Congresul Științific Internațional 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.

2. Institute/centre de cercetare. Domenii de Cercetare. Programe fundamentale (dacă este cazul). Programe prioritare (dacă este cazul)

În conformitate cu planul de cercetare pentru anul 2021, s-au efectuat cercetări în cadrul următoarelor proiecte de cercetare:

- Dezvoltarea cunoașterii în domeniul controlului calității produselor vitivinicole;
- Dezvoltarea cunoașterii în domeniul tehnologiilor folosite în industria vinicolă;
- Cercetări privind utilizarea unor materiale noi de uz oenologic pentru ameliorarea calității produselor vitivinicole;
- Evoluția calității vinurilor în contextul schimbărilor climatice;

3. Resurse umane: cercetători, doctori, conducători de doctorate (vă rugăm folosiți tabelul din anexa 2).

1. Prof. univ. dr. ing. Valeriu V. Cotea, CS I, normă ½, coordonatorul Centrului;
2. Dr. chim. Marius F. Niculaua, CS III, normă 1/1,
3. Dr. ing. Zamfir V. Cătălin-Ioan, CS III, normă 1/1,
4. Dr. ing. Nechita Constantin-Bogdan, CS III, normă 1/1,
5. Dr. chim. Cioroiu Bogdan, CS III, normă 1/1,
6. Dr. ing. Gheorghe T. Odăgeriu, CS III, normă ½,
7. Dr. ing. Scutărășu Cristina, ACS

Se menționează faptul că, domnul prof. dr. ing. Valeriu V. Cotea are calitatea de conducător de doctorat în cadrul USAMV Iași în domeniul fundamental Științe Agricole și Silvicultură, domeniul "Horticultură", specializarea "Viticultură și Oenologie".

4. Activități de formare a tinerilor cercetători: doctoranzi, post-doctoranzi.

Nu este cazul

5. Infrastructură de cercetare nouă achiziționată/completată în anul 2021: biblioteca de specialitate, echipamente de cercetare (cu valori peste 10.000 Euro) etc.

Nu este cazul

6. Rezultatele cercetării desfășurate în anul 2021 (conform tabelului din anexa 2).

a) Articole publicate in reviste cotate ISI în străinătate

1. Scutărășu Elena Cristina, Teliban Iulian Valentin, Zamfir Cătălin Ioan, Luchian Camelia Elena, Colibaba Lucia Cintia, Cotea V. Valeriu, 2021 – *Effect of different winemaking conditions on organic acids compounds of white wines*, Foods, 10:2569, FI 4,35. <https://doi.org/10.3390/foods10112569>.
2. Cotea V. Valeriu, Focea Cristian Mihai, Luchian Camelia Elena, Lucia Cintia Colibaba, Elena Cristina Scutărășu, Niculaua Marius, Zamfir Cătălin Ioan, Popîrdă Andreea, 2021 – *Influence of different commercial yeasts on volatile fraction of sparkling wines*, Foods, 10 (2):247, FI 4,092. <https://doi.org/10.3390/foods10020247>.
3. Popîrdă Andreea, Luchian Elena Camelia, Cotea V. Valeriu, Colibaba Lucia Cintia, Scutărășu Elena Cristina, Toader Ana Maria, 2021 – *A review of representative methods used in wine authentication*, Agriculture, 11(3):225, FI 2,07. <https://doi.org/10.3390/agriculture11030225>.
4. Dumitriu, Georgiana Diana, Teodosiu Carmen, Moroșanu Irina, Plavan Oana, Gabur Iulian, Cotea V. Valeriu, 2021 – *Heavy metals assessment in the major stages of winemaking: Chemometric analysis and impacts on human health and environment*,

- Journal of Food Composition and Analysis, 100:103935, FI 4,556. <https://doi.org/10.1016/j.jfca.2021.103935>.
5. Vararu Florin, Moreno-García, **Niculaua Marius**, **Cotea V. Valeriu**, Mayén Manuel, Moreno Juan José, 2021 – *Fermentative volatilome modulation of Muscat Ottonel wines by using yeast starter cultures*, Lebensmittel-Wissenschaft und-Technologie 129(2):109575, FI 4,952. <https://doi.org/10.1016/j.lwt.2020.109575>.
 6. Dumitru Georgiana Diana, Teodosiu Carmen, Gabur Iulian, **Cotea V. Valeriu**, Peinado Rafael A., López de Lerma Nieves, 2021 - *Alternative winemaking techniques to improve the content of phenolic and aromatic compounds in wines*, Agriculture, 11(3), 223, FI 2,925 <https://doi.org/10.3390/agriculture11030233>.
 7. **Scutarașu Elena Cristina**, Luchian Camelia Elena, Vlase Laurian, Colibaba Lucia Cintia, Gheldiu Ana Maria, **Cotea V. Valeriu**, 2020 – *Evolution of phenolic profile of white wines treated with enzymes*, Food chemistry, 340:127910, FI 6,3. <https://doi.org/10.1016/j.foodchem.2020.127910>.
 8. Christofi Stefania, Katsaros George, Mallouchos, **Cotea Valeriu**, Kallithaka Stamatina, 2021 – *Reducing SO₂ content in wine by combining high pressure and glutathione addition*, OenoOne 55(1):235-252, FI 2,305. <https://doi.org/10.20870/oeno-one.2021.55.1.4558>.
 9. Peinado A. Rafael, de Lerma Nieves López, Dumitriu Georgiana Diana, **Cotea V. Valeriu**, 2020 – *Volatilome fingerprint of red wines aged with chips or staves: Influence of the aging time and toasting degree*, Food chemistry, 310:125801, FI 7.514. <http://10.1016/j.lwt.2020.109575>.
 10. Ștefan Bucur, **Niculaua Marius**, Cătălina-Ionică Ciobanu, N.C. Lungu, Ionel Mangalagiu, *Simple synthesis route using β -cyclodextrin - copper complex sandwich as protecting agent*, Molecules 2021, 26(18), 5669; FI 4,411; <https://doi.org/10.3390/molecules26185669>

b) Articole publicate in reviste cotate ISI în România

1. Maria Iulia Cerbu, **Valeriu V. Cotea**, Cătălin-Ioan Zamfir, **Marius Niculaua**, Ioana Călin, Andreea Popîrdă, Cintia Lucia Colibaba, Ștefan Tudose Sandu-Ville, 2021 – *The effect of different techniques of maceration-fermentation on the phenolic composition of red wines*, Journal of Applied Life Sciences and Environment, vol. LIV(1):63-69. <http://10.46909/journalalse-2021-006>.
2. Călin Ioana, Luchian Camelia Elena, Colibaba Lucia Cintia, **Scutarașu Elena Cristina**, Popîrdă Andreea, Cimpoi Vlăduț, **Zamfir Cătălin Ioan**, **Cotea V. Valeriu**, 2021 – *Study concerning the influence of sulphur dioxide and dimethyl dicarbonate treatments in wine*, Scientific Papers, Series B, Horticulture, vol. LXIV, 2:139 – 148.

c) Articole susținute la conferințe naționale și internaționale

1. Filimon Vasile Răzvan, Filimon Roxana Mihaela, Nechita Ancuța, Bora Florin Dumitru, **Cotea Valeriu**, 2021 – *Compositional characteristics of low-alcohol wines obtained by staggered grape harvesting technology*, prezentată la Congresul Științific

- International 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.
2. Grosaru Dragoș Florin, Luchian Camelia Elena, Popîrdă Andreea, Colibaba Lucia Cintia, **Zamfir Cătălin Ioan**, **Cotea V. Valeriu**, 2021 – *Study of white wines obtained by blancs de noir method from the romanian grape varieties Fetească neagră and Busuioacă de Bohotin*, prezentată la Congresul Științific Internațional 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.
 3. Toader Ana Maria, Popîrdă Andreea, Luchian Camelia Elena, Colibaba Lucia Cintia, Tarcan (Foce) Elena Cornelia, **Cotea V. Valeriu**, Tudose-Sandu-Ville Ștefan, 2021 – *Study of the sensory profile of bio white wines obtained in Dobrogea, Romania, in 2020*, prezentată la Congresul Științific Internațional 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.
 4. **Scutarașu Elena Cristina**, Trincă Lucia Carmen, **Cotea V. Valeriu**, Luchian Camelia-Elena, Cozma Andreea Paula, Călin Ioana, 2021 – *Influence of enzymes on the phenolic compounds content from Sauvignon blanc wines*, prezentată la Congresul Științific Internațional 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.
 5. Trincă Lucia Carmen, Cozma Paula Andreea, **Scutarașu Cristina**, Ariton Mirela, Ungureanu Elena , Trofin Alina, 2021 - *Study of the sensory and physico-chemical parameters of apple chips*, prezentată la Congresul Științific Internațional 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.
 6. Trincă Lucia Carmen, Cozma Paula Andreea, **Scutarașu Cristina**, Ariton Mirela, Ungureanu Elena, Trofin Alina, 2021 - *Study of sensory and physico-chemical parameters of dried plums*, prezentată la Congresul Științific Internațional 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.
 7. Popîrdă Andreea, Luchian Camelia Elena, Tudose-Sandu-Ville Ștefan, Colibaba Lucia Cintia, **Cotea V. Valeriu**, Bora Florin Dumitru, Filimon Vasile Răzvan – *Physico-chemical and sensory analysis of low alcohol beverages, obtained by fermentation of musts of the Muscat Ottonel variety after the application of the reverse osmosis process*, prezentată la Congresul Științific Internațional 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.
 8. Cerbu Maria Iulia, **Cotea V. Valeriu**, Colibaba Lucia Cintia, Călin Ioana , Niță Răzvan George, Sandu-Ville Tudose Ștefan, **Zamfir Cătălin Ioan**, **Niculaua Marius**, 2021 – *Influence of maturation products on chromatic and physical-chemical parameters of sauvignon blanc and Busuioacă de Bohotin wines*, prezentată la Congresul Științific Internațional 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.
 9. Călin (Buțerchi) Ioana, **Cotea V. Valeriu**, Colibaba Lucia Cintia, Luchian Camelia Elena, Cerbu Iulia Maria, **Zamfir Cătălin-Ioan**, **Nechita Bogdan Constantin**, 2021 – *The dynamic of methanol and acetaldehyde in white wines treated with sulphur dioxide and dimethyl dicarbonate*, prezentată la Congresul Științific Internațional

'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.

10. Macoviciuc Sorin, **Niculaua Marius, Nechita Constantin Bogdan, Cioroiu Ionel Bogdan, Cotea V. Valeriu**, 2021 – *Amino acids profiles in wines with low content of sulphur dioxide from Panciu wine region*, prezentată la Congresul Științific Internațional 'Life Sciences Today for Tomorrow', organizat în perioada 21.10.2021 – 22. 10. 2021 de USV Iași.

7. Realizări excelente obținute în anul 2021 (minim 3 realizări), ale Secției și institutelor/centrelor coordonate:

- Cărți (opere fundamentale);
- Lucrări științifice (publicate în reviste cu factor de impact ridicat);
- Rapoarte/studii de mare interes național;
- Alte realizări pe care le considerați excelente (dacă este cazul).

1. **Scutarașu Elena Cristina** - *Studii privind influența folosirii unor preparate enzimatică în tehnologia de obținere a vinurilor albe în podgoria Iași*, Teză de doctorat, susținută pe 2.07.2021
2. Luchian Camelia Elena, **Cotea V. Valeriu, Scutarașu Elena Cristina**, Colibaba Lucia Cintia, 2021 – *Metode și tehnici de analiză a calității băuturilor*. Editura Ion Ionescu de la Brad, Iași, ISBN: 978-973-147-372-7.
3. Ștefan Bucur, **Niculaua Marius**, Catălina-Ionică Ciobanu, N.C. Lungu, Ionel Mangalagiu, *Simple synthesis route using β -cyclodextrin - copper complex sandwich as protecting agent*, *Molecules* 2021, 26(18), 5669, **FI 4,411**; <https://doi.org/10.3390/molecules26185669>
4. Dumitriu (Gabur) Georgiana Diana, Teodosiu Carmen, **Cotea V. Valeriu**, 2021 – *Management of Pesticides from Vineyard to Wines: Focus on Wine Safety and Pesticides Removal by Emerging Technologies*, *IntechOpen*, <https://doi.org/10.5772/intechopen.98991>.
5. Peinado A. Rafael, de Lerma Nieves López, Dumitriu Georgiana Diana, **Cotea V. Valeriu**, 2020 – *Volatilome fingerprint of red wines aged with chips or staves: Influence of the aging time and toasting degree*, *Food chemistry*, 310:125801, **FI 7.514**. <http://doi.org/10.1016/j.lwt.2020.109575>.
6. **Scutarașu Elena Cristina**, Luchian Camelia Elena, Vlase Laurian, Colibaba Lucia Cintia, Gheldiu Ana Maria, **Cotea V. Valeriu**, 2020 – *Evolution of phenolic profile of white wines treated with enzymes*, *Food chemistry*, 340:127910, **FI 6,3**. <https://doi.org/10.1016/j.foodchem.2020.127910>.
7. Dumitriu, Georgiana Diana, Teodosiu Carmen, Moroșanu Irina, Plavan Oana, Gabur Iulian, **Cotea V. Valeriu**, 2021 – *Heavy metals assessment in the major stages of winemaking: Chemometric analysis and impacts on human health and environment*, *Journal of Food Composition and Analysis*, 100:103935, **FI 4,556**. <https://doi.org/10.1016/j.jfca.2021.103935>.

8. Vararu Florin, Moreno-García, **Niculaua Marius**, **Cotea V. Valeriu**, Mayén Manuel, Moreno Juan José, 2021 – *Fermentative volatilome modulation of Muscat Ottonel wines by using yeast starter cultures*, Lebensmittel-Wissenschaft und-Techologie 129(2):109575, **FI 4,952**. <https://10.1016/j.lwt.2020.109575>.
9. **Scutarașu Elena Cristina**, Teliban Iulian Valentin, **Zamfir Cătălin Ioan**, Luchian Camelia Elena, Colibaba Lucia Cintia, **Cotea V. Valeriu**, 2021 – *Effect of different winemaking conditions on organic acids compounds of white wines*, Foods, 10:2569, **FI 4,35**. <https://doi.org/10.3390/foods10112569>.
10. **Cotea V. Valeriu**, Focsa Cristian Mihai, Luchian Camelia Elena, Lucia Cintia Colibaba, **Elena Cristina Scutarașu**, **Niculaua Marius**, **Zamfir Cătălin Ioan**, Popîrdă Andreea, 2021 – *Influence of different commercial yeasts on volatile fraction of sparkling wines*, Foods, 10 (2):247, **FI 4,092**. <https://doi.org/10.3390/foods10020247>.

8. Citări ale lucrărilor anterioare în 2021 (Conform Web of Science)

1. *New pyridazine-fluorine derivatives: Synthesis, chemistry and biological activity. Part II* Tucaliuc, RA; **Cotea, VV**; (...); Mangalagiu, II, Sep 2013, EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY 67 , pp.367-372

patru citări:

1. *Copper-Mediated Oxidative [3+2]-Annulation of Nitroalkenes and Ylides of 1,2-Diazines: Assembly of Functionalized Pyrrolo[1,2-b]pyridazines*, Motornov, VA; Tabolin, AA; (...); Ioffe, SL, **Oct 6 2021**, CHEMISTRYSELECT 6 (37) , pp.9969-9974
2. *Hybrid Pyridine Bis-Anthracene-Imidazolium Salt: NMR Studies on Zn-Acetate Complexation*, Amariuca-Mantu, D; Mangalagiu, V; (...); Antoci, V, **Sep 2021**, MOLBANK 2021 (3)
3. *[3+n] Cycloaddition Reactions: A Milestone Approach for Elaborating Pyridazine of Potential Interest in Medicinal Chemistry and Optoelectronics*, Amariuca-Mantu, D; Mangalagiu, V and Mangalagiu, II, **Jun 2021**, MOLECULES 26 (11)
4. *Benzoquinoline Derivatives: A Straightforward and Efficient Route to Antibacterial and Antifungal Agents*, Antoci, V; Oniciuc, L; (...); Zbancioc, G, **Apr 2021**, PHARMACEUTICALS 14 (4)

2. *Mesoporous silica SBA-15, a new adsorbent for bioactive polyphenols from red wine* **Cotea, VV**; Luchian, CE; (...); Niculaua, M, 7th Symposium on In Vino Analytica Scientia, Jun 30 2012, ANALYTICA CHIMICA ACTA 732 , pp.180-185

două citări:

1. *Mesoporous materials as adsorbents for biologically active substances*, Moritz, M and Geszke-Moritz, M, **Oct 2021**, PRZEMYSŁ CHEMICZNY 100 (10) , pp.992-994
2. *Green Synthesis for MCM-41 and SBA-15 Silica Using the Waste Mother Liquor*, Barbosa, TSB; Barros, TRB; (...); Rodrigues, MGF, **Sep 2021 (Early Access)**, SILICON

3. *Selection of aroma compounds for the differentiation of wines obtained by fermenting musts with starter cultures of commercial yeast strains*, Vararu, F; Moreno-Garcia, J; Cotea, VV, (...); Moreno, J, Apr 15 2016, FOOD CHEMISTRY 197 , pp.373-381

trei citări

1. *Effect of calcium alginate coating on the cell retention and fermentation of a fungus-yeast immobilization system*, Lopez-Menchero, JR; Ogawa, M; (...); Moreno-Garcia, J, Jun 2021, LWT-FOOD SCIENCE AND TECHNOLOGY 144
2. *Does Traceability Lead to Food Authentication? A Systematic Review from A European Perspective*, Dimitrakopoulou, ME and Vantarakis, A, May 2021 (Early Access), FOOD REVIEWS INTERNATIONAL
3. *Influence of Different Commercial Yeasts on Volatile Fraction of Sparkling Wines*, Cotea, VV; Focsa, MC; (...); Popirda, A, Feb 2021, FOODS 10 (2) – autocitare

4. *Effect of aging time, dosage and toasting level of oak chips on the color parameters, phenolic compounds and antioxidant activity of red wines (var. Fetească neagră)*, Dumitriu, GD; de Lerma, NL; (...); Peinado, RA, Dec 2016, EUROPEAN FOOD RESEARCH AND TECHNOLOGY 242 (12) , pp.2171-2180

două citări

1. *New Accelerating Techniques Applied to the Ageing of Oenological Products*, Solar, S; Castro, R and Guerrero, ED, Jun 2021 (Early Access), FOOD REVIEWS INTERNATIONAL
2. *Alternative Winemaking Techniques to Improve the Content of Phenolic and Aromatic Compounds in Wines*, Dumitriu, GD; Teodosiu, C; (...); de Lerma, NL, Mar 2021 AGRICULTURE-BASEL 11 (3) – autocitare

5. *Volatile and phenolic composition of red wines subjected to aging in oak cask of different toast degree during two periods of time*, Dumitriu, GD; de Lerma, NL; (...); Cotea, VV; Peinado, RA, Dec 2017, LWT-FOOD SCIENCE AND TECHNOLOGY 86 , pp.643-651

două citări

1. *Deciphering the succession patterns of bacterial community and their correlations with environmental factors and flavor compounds during the fermentation of Zhejiang rosy vinegar*, Fang, GY; Chai, LJ; (...); Jiang, YJ, Mar 2 2021, INTERNATIONAL JOURNAL OF FOOD MICROBIOLOGY 341
2. *Wine Polyphenol Content and Its Influence on Wine Quality and Properties: A Review*, Gutierrez-Escobar, R; Aliano-Gonzalez, MJ and Cantos-Villar, E, Feb 2021, MOLECULES 26 (3)

6. *Evaluation of Aroma Compounds in the Process of Wine Ageing with Oak Chips*, Dumitriu, GD; Teodosiu, C; (...); Cotea, VV; de Lerma, NL, Dec 2019, FOODS 8 (12)

opt citări

1. *The art of flavored wine: Tradition and future*, Liang, ZJ; Zhang, PZ; (...); Fang, ZX, Oct 2021, TRENDS IN FOOD SCIENCE & TECHNOLOGY 116 , pp.130-145

2. *New Accelerating Techniques Applied to the Ageing of Oenological Products*, Solar, S; Castro, R and Guerrero, ED, **Jun 2021 (Early Access)**, FOOD REVIEWS INTERNATIONAL
3. *The relationship between flavor formation, lipid metabolism, and microorganisms in fermented fish products*, Feng, L; Tang, NI; (...); Chang, M, Jul 7 2021 | **Apr 2021 (Early Access)** FOOD & FUNCTION 12 (13) , pp.5685-5702
4. *Influence of Oak Chips and Oak Barrel Ageing on Volatile Profile in Chardonnay Wine of Romania*, Stegarus, DI; Calugar, A; (...); Coldea, TE, **Apr 2021**, APPLIED SCIENCES-BASEL 11 (8)
5. *Enantiomer composition of chiral compounds present in traditional Slovak Tokaj wines* Khvalbota, L; Machynakova, A; (...); Spanik, I, **Mar 2021**, JOURNAL OF FOOD COMPOSITION AND ANALYSIS 96
6. *Modulation by yeasts of aroma profile of 'feteasca regala' wines protected with low concentration of sulphur dioxide*, Cojocaru, GA and Antoce, AO, **2021**, SCIENTIFIC PAPERS-SERIES B-HORTICULTURE 65 (1) , pp.328-335
7. *Application of Ultraviolet-Visible Absorption Spectroscopy with Machine Learning Techniques for the Classification of Cretan Wines*, Philippidis, A; Poulakis, E; (...); Velegrakis, M, **Jan 2021**, FOODS 10 (1)
8. *Reuse of oak chips for modification of the volatile fraction of alcoholic beverages*, Coelho, E; Teixeira, JA; (...); Oliveira, JM, **Jan 2021**, LWT-FOOD SCIENCE AND TECHNOLOGY 135
7. *Evaluation of phenolic compounds content in grape seeds*, Cotea, VV; Luchian, C; (...); Colibaba, C, Apr 2018, ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL 17 (4) , pp.795-802

o lucrare

1. *A review on protein extracts from sunflower cake: techno-functional properties and promising modification methods*, Subasi, BG; Vahapoglu, B; (...); Mohammadifar, MA, **Mar 2021 (Early Access)**, CRITICAL REVIEWS IN FOOD SCIENCE AND NUTRITION
8. *Removal of Mn(II), Ni(II) and Cu(II) Ions from White Wine through Ion Exchange in Microporous Mordenite and Mesoporous Al-MCM-41*, Luchian, CE; Cotea, VV; (...); Bilba, N
Aug 2011, REVISTA DE CHIMIE 62 (8) , pp.782-786

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1. *Application of natural and synthetic zeolites in the oenological field*, Noviello, M; Gattullo, CE; (...); Gambacorta, G, **Dec 2021**, FOOD RESEARCH INTERNATIONAL 150
9. *Rapid assessment of mycotoxins in wine by on-line SPE-UHPLC-FLD*, Nistor, AM; Cotan, SD; (...); Cotea, VV, 40th World Congress of Vine and Wine, 2017 | 40TH WORLD CONGRESS OF VINE AND WINE 9

două citări

1. *Recent Advances in Mycotoxin Analysis and Detection of Mycotoxigenic Fungi in Grapes and Derived Products*, Kizis, D; Vichou, AE and Natskoulis, PI, **Mar 2021**, SUSTAINABILITY 13 (5)

2. *Current role of modern chromatography and mass spectrometry in the analysis of mycotoxins in food*, Medina, DAV; Borsatto, JVB; (...); Lancas, FM, **Feb 2021**, TRENDS IN ANALYTICAL CHEMISTRY 135

10. *Volatilome fingerprint of red wines aged with chips or staves: Influence of the aging time and toasting degree*, Dumitriu, GD; Peinado, RA; **Cotea, VV**, (...); de Lerma, NL, Apr 25 2020, FOOD CHEMISTRY 310

patru citări

1. *Combination of two analytical techniques improves wine classification by Vineyard, Region, and vintage*, Crook, AA; Zamora-Olivares, D; (...); Powers, R, **Aug 30 2021**, FOOD CHEMISTRY 354

2. *Detailed chemical composition of Cabernet Sauvignon wines aged in French oak barrels coopered with three different stave bending techniques*, Casassa, LF; Ceja, GM; (...); Llodra, D, **Mar 15 2021**, FOOD CHEMISTRY 340

3. *Alternative Winemaking Techniques to Improve the Content of Phenolic and Aromatic Compounds in Wines*, Dumitriu, GD; Teodosiu, C; (...); de Lerma, NL, **Mar 2021**, AGRICULTURE-BASEL 11 (3)

4. *Impact of oak wood ageing modalities on the (non)-volatile composition and sensory attributes of red wines*, Gonzalez-Centeno, MR; Teissedre, PL and Chira, K, **2021**, OENO ONE 55 (2) , pp.285-299

11. *Antioxidant and antimicrobial effects of grape pomace extracts*, Luchian, CE; **Cotea, VV**; (...); Rotaru, L, 42nd World Congress of Vine and Wine, 2019, 42ND WORLD CONGRESS OF VINE AND WINE 15

două citări

1. *Biotechnological Conversion of Grape Pomace to Poly(3-hydroxybutyrate) by Moderately Thermophilic Bacterium *Tepidimonas taiwanensis**, Kourilova, X; Pernicova, I; (...); Obruca, S

Oct 2021, BIOENGINEERING-BASEL 8 (10)

2. *A Comparative Analysis on the Effect of Variety of Grape Pomace Extracts on the Ice-Templated 3D Cryogel Features*, Raschip, IE; Fifere, N and Dinu, MV, **Sep 2021**, GELS 7 (3)

12. *Study of the potential use of mesoporous nanomaterials as fining agent to prevent protein haze in white wines and its impact in major volatile aroma compounds and polyols*, Dumitriu, GD; de Lerma, NL; **Cotea, VV**; (...); Peinado, RA, Feb 1 2018 | FOOD CHEMISTRY 240 , pp.751-758

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1. *Nanotechnology: recent advances in viticulture and enology*, Garde-Cerdan, T; Souza-da Costa, B; (...); Perez-Alvarez, EP, Dec 2021, **Jul 2021 (Early Access)**, JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE 101 (15) , pp.6156-6166

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2. *Effect of different pre-treatment maceration techniques on the content of phenolic compounds and color of Dornfelder wines elaborated in cold climate*, Wojdylo, A; Samoticha, J and Chmielewska, J, **Mar 1 2021**, FOOD CHEMISTRY 339
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17. *Assay of Antioxidant Capacity and Phenolic Compounds in some Romanian and Cypriot Wine*, Luchian, CE; Colibaba, CL; (...); **Cotea, VV**, Jan-jun 2018 | NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA 46 (1) , pp.240-246

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1. *Effect of grape yield and maceration time on phenolic composition of 'Feteasca neagra' organic wine*, Artem, V; Antoce, AO; (...); Ranca, A, **2021**, NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA 49 (2)

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19. *A Review of Representative Methods Used in Wine Authentication*, Popirda, A; Luchian, CE; (...); **Cotea, VV**; Toader, AM, Mar 2021 | AGRICULTURE-BASEL 11 (3)

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1. *Multi-Sensor Characterization of Sparkling Wines Based on Data Fusion*, Izquierdo-Llopart, A and Saurina, J, **Aug 2021**, CHEMOSENSORS 9 (8)

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24. *Content of metals and organic acids from experimental sparkling white wine*, Focsa, MC; Luchian, CE; (...); Zamfir, CI, 40th World Congress of Vine and Wine

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1. *Non-targeted metabolomic approach as a tool to evaluate the chemical profile of sparkling wines fermented with autochthonous yeast strains*, Tufariello, M; Rizzuti, A; (...); Grieco, F, **Aug 2021**, FOOD CONTROL 126

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1. *Influence of Oak Chips and Oak Barrel Ageing on Volatile Profile in Chardonnay Wine of Romania*, Stegarus, DI; Calugar, A; (...); Coldea, TE, **Apr 2021**, APPLIED SCIENCES-BASEL 11 (8)

26. *Quantification of toxic metals during different winemaking stages*, Dumitriu, GD; Teodosiu, C; (...); **Cotea, VV**, 42nd World Congress of Vine and Wine

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1. *Multi-Elemental Analysis of Wine Samples in Relation to Their Type, Origin, and Grape Variety*, Gajek, M; Pawlaczyk, A and Szykowska-Jozwik, MI, **Jan 2021**, MOLECULES 26 (1)

27. *Quantitative Determination of Heavy Metal in Water and Sediment from Lakes in North Moldova, Romania*, Luchian, CE; Popirda, A; (...); **Cotea, VV**, 7th E-Health and Bioengineering Conference (EHB)

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1. *Sustainable Alternative Routes versus Linear Economy and Resources Degradation in Eastern Romania*, Mihai, FC and Minea, I, **Oct 2021**, SUSTAINABILITY 13 (19)

28. *In vitro* Antifungal Activity of a New Bioproduct Obtained from Grape Seed Proanthocyanidins on *Botrytis cinerea* Mycelium and Spores, Nechita, A; Filimon, RV; (...); Cotea, VV, 2019 | NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA 47 (2) , pp.418-425

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1. Characterization of grape marc hydrolysates and their antifungal effect against phytopathogenic fungi of agricultural importance, Tzintzun-Camacho, I; Hernandez-Jimenez, V; (...); Moreno-Cruz, CF, **Apr-jun 2021**, CHILEAN JOURNAL OF AGRICULTURAL RESEARCH 81 (2) , pp.151-160

29. Characterization of 'feteasca neagra' red wines aged with oak staves: major volatile compounds, aromatic series and sensory analysis, Dumitriu, GD; Cotea, VV; (...); Niculaua, M, 2018 | MITTEILUNGEN KLOSTERNEUBURG 68 (2) , pp.97-106

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1. A climate-sensitive transition matrix growth model for uneven-aged mixed-species oak forests in North China, Du, X; Chen, XY; (...); Meng, JH, **Apr 2021**, FORESTRY 94 (2) , pp.258-277

30. Innovative materials in winemaking, Luchian, CE; Colibaba, C; (...); Cotea, VV, 38th World Congress of Vine and Wine, 2015 | 38TH WORLD CONGRESS OF VINE AND WINE (PART 1) 5

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1. Purification of water-alcohol mixtures by means of natural materials, Oliinyk, S; Tarasyuk, L; (...); Dulka, O, **2021**, JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-UKRAINE 15 (1) , pp.63-72

9. Premii internaționale/naționale, ale Academiei Române obținute de către cercetători (premiul, autori, lucrări premiate).

a) Premii UEFISCDI. Premiera Rezultatelor cercetării – Articole - 2021

1. Cotea V. Valeriu, Focsa Cristian Mihai, Luchian Camelia Elena, Lucia Cintia Colibaba, Elena Cristina Scutarașu, Niculaua Marius, Zamfir Cătălin Ioan, Popîrdă Andreea, 2021 – *Influence of different commercial yeasts on volatile fraction of sparkling wines*, Foods, 10 (2):247, FI 4,092. <https://doi.org/10.3390/foods10020247>.
2. Scutarașu Elena Cristina, Luchian Camelia Elena, Vlase Laurian, Colibaba Lucia Cintia, Gheldiu Ana Maria, Cotea V. Valeriu, 2020 – *Evolution of phenolic profile of white wines treated with enzymes*, Food chemistry, 340:127910, FI 6,3. <https://doi.org/10.1016/j.foodchem.2020.127910>.
3. Popîrdă Andreea, Luchian Elena Camelia, Cotea V. Valeriu, Colibaba Lucia Cintia, Scutarașu Elena Cristina, Toader Ana Maria, 2021 – *A review of representative*

- methods used in wine authentication*, Agriculture, 11(3):225, FI 2,07. <https://doi.org/10.3390/agriculture11030225>.
4. Stefania Christofi, George Katsaros, Athanasios Mallouchos, **Valeriu Cotea**, Stamatina Kallithraka, 2021 - *Reducing SO2 content in wine by combining High Pressure and glutathione addition*, 55 (1), OENO One, FI 2.305, <https://doi.org/10.20870/oeno-one.2021.55.1.4558>
 5. Premiu-CNCSIS-2021-Dumitriu, Georgiana Diana, Teodosiu Carmen, Moroşanu Irina, Plavan Oana, Gabur Iulian, **Cotea V. Valeriu**, 2021 – *Heavy metals assessment in the major stages of winemaking: Chemometric analysis and impacts on human health and environment*, Journal of Food Composition and Analysis, 100:103935, FI 4,556. <https://doi.org/10.1016/j.jfca.2021.103935>.
 6. Dumitru Georgiana Diana, Teodosiu Carmen, Gabur Iulian, **Cotea V. Valeriu**, Peinado Rafael A., López de Lerma Nieves, 2021 - *Alternative winemaking techniques to improve the content of phenolic and aromatic compounds in wines*, Agriculture, 11(3), 223, FI 2,925 <https://doi.org/10.3390/agriculture11030233>.

Nu este cazul

b) Premii UEFISCDI. Premierea Rezultatelor cercetării – Articole - 2020

Nu este cazul

10. Cooperări științifice naționale și internaționale, inclusiv în cadrul proiectelor, vizitatori din străinătate.

Nu este cazul

10. Conferințe (simpozioane)/manifestări științifice organizate de Secție; conferințe (simpozioane)/manifestări științifice organizate de institutele/centrele coordonate.

Organizare mese rotunde:

1. Masă rotundă „*In memoriam Academician Valeriu D. Cotea*”, în cadrul activităților științifice desfășurate la Centrul de Cercetări pentru Oenologie, 25 martie 2021, ora 12
2. Masă rotundă „*Utilizarea levurilor non-Saccharomyces în vinificație*”, eveniment ce vizează informarea cercetătorilor Centrului cu privire la principalele teme de studiu abordate la nivel mondial și modul în care acestea pot fi implementate în țara noastră - up-grade-area nivelului de informare; manifestare organizată în cadrul Zilelor Academice Ieșene, 21 octombrie 2021, ora 11

12. Granturi/proiecte câștigate în competiții naționale/europene (tabel separat dacă este cazul – titlul, director grant/proiect, organismul finanțator, durata grantului/proiectului, valoarea totală/valoarea pentru anul 2020).

Nu este cazul

12. Alte rezultate (dacă este cazul).

Nu este cazul

Participare la conferințe internaționale și naționale

Nr. crt.	Nume, prenume	Manifestarea științifică/ organizatorul	Calitatea	Locul/Perioada
1	Cotea V. Valeriu	5th Annual IVES - OENO One SCIENCE MEETING / Institut des sciences de la vigne et du vin – ISVV, Bordeaux	Membru în bordul editorial	28 ian. 2021 3, 4 feb. 2021 (platforma Zoom)
2	Cotea V. Valeriu	Laffort Online Seminar: Stabilizarea Tartrică/Tartaric Stabilization	Participant	5 feb. 2021
3	Cotea V. Valeriu	OENOVITI International Symposium and General Assembly	Participant	19-21 mai 2021 (platforma Zoom)
4	Cotea V. Valeriu	Reuniunea de lucru a subcomisiei „Metode de analiza” a O.I.V.	Secretar științific al Comisiei de Oenologie a OIV	1 -5 mar. 2021 (platforma KUDO)
5	Cotea V. Valeriu	Reuniunea de lucru a grupurilor de experți „Tehnologia vinului” și „Microbiologie”	Secretar științific al Comisiei de Oenologie a OIV	8 – 9 mar. 2021 (platforma KUDO)
6	Cotea V. Valeriu	Reuniunea de lucru a grupului de experți „Tehnologia vinului”	Secretar științific al Comisiei de Oenologie a OIV	10 – 15 mar. 2021 (platforma KUDO)
7	Cotea V. Valeriu	Reuniunea de lucru a grupului de experți „Specificatii ale produselor oenologice”	Secretar științific al Comisiei de Oenologie a OIV	16 – 17 mar. 2021 (platforma KUDO)
8	Cotea V. Valeriu	Laffort Webinar: Textura gustului din vin	Participant	26 mar. 2021
9	Cotea V. Valeriu	Reuniunea Comitetului Stiintific si Tehnic a O.I.V.	Secretar științific al Comisiei de Oenologie a OIV	15 apr. 2021 (platforma KUDO)
10	Cotea V. Valeriu	Reuniunea Comitetului Executiv a O.I.V.	Delegat al României	16 apr. 2021 (platforma KUDO)
11	Cotea V. Valeriu	Adunarea Generală a OIV	Delegat al României	19 apr. 2021 (platforma KUDO)
12	Cotea V. Valeriu	Simpozionul Internațional OENOVITI "Challenges in viticulture and oenology: Wine Appellations,	Participant	18 – 21 mai. 2021 (platforma ZOOM)

		Authenticity and Innovation"		
13	Cotea V. Valeriu	Reuniunea de lucru a grupului de experți „Concursuri internaționale”	Expert	27 iul. 2021 (platforma ZOOM)
14	Cotea V. Valeriu	Concursul Internațional de Vinuri „Berlin Wine Trophy”.	Membru în juriu	Berlin - Germania 8 - 15 oct. 2021
15	Cotea V. Valeriu	Reuniunea de lucru a grupului de experți „Microbiologie”	Secretar științific al Comisiei de Oenologie a OIV	18 oct. 2021 (platforma KUDO)
16	Cotea V. Valeriu	Reuniunea de lucru a grupului de experți „Tehnologia vinului”	Secretar științific al Comisiei de Oenologie a OIV	19 oct. 2021 (platforma KUDO)
17	Cotea V. Valeriu	Reuniunea de lucru a subcomisiei „Metode de analiza” a O.I.V.	Secretar științific al Comisiei de Oenologie a OIV	20 – 21 oct. 2021 (platforma KUDO)
18	Cotea V. Valeriu	Reuniunea de lucru a grupului de experți „Specificații ale produselor oenologice”	Secretar științific al Comisiei de Oenologie a OIV	22 oct. 2021 (platforma KUDO)
19	Cotea V. Valeriu	Reuniunea de lucru a Comisiei de Oenologie a O.I.V.	Secretar științific al Comisiei de Oenologie a OIV	22 oct. 2021 (platforma KUDO)
20	Cotea V. Valeriu	Reuniunea Comitetului Științific și Tehnic (CST) al O.I.V.	Secretar științific al Comisiei de Oenologie a OIV	23 oct. 2021 (platforma KUDO)
21	Cotea V. Valeriu	Reuniunea Comitetului Executiv (COMEX) și AG ale O.I.V.	Delegat al României	25 oct. 2021 (platforma KUDO)
22	Cotea V. Valeriu	Simpozion Internațional OENOVITI: “Developing objective measures of wine sensory complexity”	Participant	10 nov. 2021 (platforma Zoom)

Concluzii și propuneri.

Nu este cazul

Coordonator Centru,
Prof. univ. dr. ing. Valeriu V. COTEA m.c. AR



Tabel
cu rezultatele institutelor/centrelor Academiei Române pe anul 2021

Nr. Crt	Institutul/Centrul	Resurse umane				Articole publicate			Cărți/capitole			Premii		Citări ale lucrărilor anterioare în 2021	Conferințe organizate/conferințe susținute	Raport de interes public	Brevete de invenții
		Nr cercet	Cond. doct.	Dr. Drd	Post-Doc.	Reviste ISI străinătate	Reviste ISI România	Reviste România B+	în străinătate	EAR	în țară	în străinătate	în AR				
1	CCO Iași	7	-	7	-	10	2	10	1	-	1	-	6	56	2/2	-	-
	TOTAL	7	-	7	-	10	2	10	1	-	1	-	6	56	2/2	-	-

* Rapoartele întocmite de institute/centre pot include și alte activități/date considerate relevante – acestea pot fi incluse în Informarea privind activitatea Secției

Coordonator Centru,

Prof. univ. dr. ing. Valeriu V. COTEA m.c. AR

