



Silvia-Amalia Nemeș (căs. Antal Berbecaru)

EXPERIENȚA PROFESIONALĂ

Senator - Membru în Comisia de cercetare, dezvoltare și inovare

Universitatea de Științe Agricole și Medicină Veterinară Cluj-Napoca [2020 – 2024]

Localitatea: CLUJ-NAPOCA | Țara: România

Cadru didactic asociat

Universitatea de Științe Agricole și Medicină Veterinară Cluj-Napoca [13/03/2023 – 23/07/2024]

Localitatea: CLUJ-NAPOCA | Țara: România

Asistent de cercetare

Universitatea de Științe Agricole și Medicină Veterinară Cluj-Napoca [01/11/2021 – 31/12/2023]

Localitatea: CLUJ-NAPOCA | Țara: România

Tehnician în industria alimentara fermentativa

Universitatea de Științe Agricole și Medicina Veterinara Cluj Napoca [27/02/2020 – 29/09/2021]

Localitatea: Cluj-Napoca | Țara: România

EDUCAȚIE ȘI FORMARE PROFESIONALĂ

Doctorand

Scoala Doctorală de Științe Agricole Inginerești, USAMV-CN [19/09/2021 – În curs]

Adresă: Calea Mănăștur 3-5, 400658 Cluj-Napoca (România)

Modulul pedagogic Nivelul II

Universitatea de Științe Agricole și Medicina Veterinara Cluj-Napoca [06/04/2023 – 01/07/2023]

Localitatea: CLUJ-NAPOCA | Țara: România

Specializare - competențe antreprenoriale

Ministerul Educatiei si Ministerul Muncii și Protecției Sociale [14/03/2022 – 29/03/2022]

Master

Gastronomie, Nutriție și Dietetică Alimentara, FSTA [29/09/2019 – 09/06/2021]

Localitatea: Cluj- Napoca | Țara: România | Nivelul CEC: Nivelul 6 CEC

Modulul pedagogic Nivelul I

Universitatea de Științe Agricole și Medicina Veterinara Cluj-Napoca [01/10/2019 – 14/02/2020]

Localitatea: CLUJ-NAPOCA | Țara: România

Inginer în industria alimentară

Facultatea de Știința și Tehnologia Alimentelor, USAMV-CN [30/09/2015 – 18/06/2019]

Localitatea: Cluj-Napoca | Țara: România

Diplomă de Bacalaureat

Liceul Tehnologic nr. 1 Luduș [14/09/2012 – 29/05/2015]

Localitatea: Luduș | Țara: România

COMPETENȚE LINGVISTICE

Limbă(i) maternă(e): română

Altă limbă (Alte limbi):

engleză

COMPREHENSIUNE ORALĂ B2 CITIT C1 SCRIS C1

EXPRIMARE SCRISĂ B2 CONVERSAȚIE B2

Niveluri: A1 și A2 Utilizator de bază B1 și B2 Utilizator independent C1 și C2 Utilizator experimentat

COMPETENȚE DIGITALE

Navigare Internet / Social Media / Zoom / O bună cunoaștere a instrumentelor Microsoft Office / Google Drive / Skype / Android / Biorender App / Google Meet / Reference management software (Zotero, EndNote) / Google drive/ gmail

PUBLICAȚII

[2024]

Enhancing phenolic and lipid compound production in oat bran via acid pretreatment and solid-state fermentation with *Aspergillus niger*

Nemes, Silvia Amalia, et al. "Enhancing phenolic and lipid compound ..." *New Biotechnology* (2024).

[2024]

Enhancing nutritional quality and bioactivity of wheat bran through acid and alkaline pretreatments

NEMES, Silvia Amalia, et al. "Enhancing nutritional" *Journal of Cereal Science* (2024)

[2024]

Recent advances and insights into the bioactive properties and applications of *Rosa canina* L. and its by-products

Negrean, et al. "Recent advances and insights into the bioactive properties ..." *Heliyon* (2024).

[2024]

Characterization of the Chemical Composition and Biological Activities of Bog Bilberry (*Vaccinium uliginosum* L.) Leaf Extracts Obtained via Various Extraction Techniques

Ștefănescu, et al. "Characterization of the Chemical Composition...." *Foods* 13.2 (2024)

[2024]

Succinic acid—A run-through of the latest perspectives of production from renewable biomass

Mitrea, L., et al. "Succinic Acid—A Run-through of the Lates... *Heliyon* 2024, 10 (3), e25551."

[2023]

Plant-Based Dairy Alternatives—A Future Direction to the Milky Way Plamada, D., Teleky, B. E., Nemes, S. A., Mitrea, L., Szabo, K., Călinoiu, L. F., ... & Nănescu, M. (2023). Plant-Based Dairy Alternatives—A Future Direction to the Milky Way. *Foods*, 12(9), 1883.

[2023]

Fruit and vegetable wastes for biobased chemicals Mitrea, L., Calinoiu, L. F., Teleky, B. E., Szabo, K., Martău, A. G., Nemes, S. A., ... & Vodnar, D. C. (2023). Fruit and vegetable wastes for biobased chemicals. In *Fruit and Vegetable Waste Utilization and Sustainability* (pp. 43-76). Academic Press.

[2023]

Fruit and vegetable waste and by-products for pigments and color Calinoiu, L. F., Mitrea, L., Teleky, B. E., Szabo, K., Martău, A. G., Nemes, S. A., ... & Vodnar, D. C. (2023). Fruit and vegetable waste and by-products for pigments and color. In *Fruit and Vegetable Waste Utilization and Sustainability* (pp. 77-100). Academic Press.

[2023]

Food Additives as Functional Ingredients in Food Products Socaci, S. A., Salanță, L., Fărcaș, A. C., Nemeș, S. A., & Medeleanu, M. (2023). Food Additives as Functional Ingredients in Food Products. In *Sustainable Use of Feed Additives in Livestock: Novel Ways for Animal Production* (pp. 47-78). Cham: Springer International Publishing.

[2022]

Guts Imbalance Imbalances the Brain: A Review of Gut Microbiota Association With Neurological and Psychiatric Disorders Mitrea, L., Nemeș, S. A., Szabo, K., Teleky, B. E., & Vodnar, D. C. (2022). Guts imbalance imbalances the brain: A review of gut microbiota association with neurological and psychiatric disorders. *Frontiers in Medicine*, 9, 706.

[2022]

Cereal Waste Valorization through Conventional and Current Extraction Techniques—An Up-to-Date Overview Fărcaș, A. C., Socaci, S. A., Nemeș, S. A., Salanță, L. C., Chiș, M. S., Pop, C. R., ... & Vodnar, D. C. (2022). Cereal Waste Valorization through Conventional and Current Extraction Techniques—An Up-to-Date Overview. *Foods*, 11(16), 2454.

[2022]

Development of pectin and poly (vinyl alcohol)-based active packaging enriched with itaconic acid and apple pomace-derived antioxidants Teleky, B. E., Mitrea, L., Plamada, D., Nemes, S. A., Călinoiu, L. F., Pascuta, M. S., ... & Vodnar, D. C. (2022). Development of pectin and poly (vinyl alcohol)-based active packaging enriched with itaconic acid and apple pomace-derived antioxidants. *Antioxidants*, 11(9), 1729.

[2022]

Micropropagation of *Vaccinium corymbosum* L.: An Alternative Procedure for the Production of Secondary Metabolites Clapa, D., Nemeș, S. A., Ranga, F., Hârța, M., Vodnar, D. C., & Călinoiu, L. F. (2022). Micropropagation of *Vaccinium corymbosum* L.: An Alternative Procedure for the Production of Secondary Metabolites. *Horticulturae*, 8(6), 480.

[2022]

Polysaccharide-based edible gels as functional ingredients: Characterization, applicability, and human health benefits Pascuta, M. S., Varvara, R. A., Teleky, B. E., Szabo, K., Plamada, D., Nemeș, S. A., ... & Vodnar, D. C. (2022). Polysaccharide-based edible gels as functional ingredients: Characterization, applicability, and human health benefits. *Gels*, 8(8), 524.

[2022]

The physicochemical properties of five vegetable oils exposed at high temperature for a short-time-interval Mitrea, L., Teleky, B. E., Leopold, L. F., Nemes, S. A., Plamada, D., Dulf, F. V., ... & Vodnar, D. C. (2022). The physicochemical properties of five vegetable oils exposed at high temperature for a short-time-interval. *Journal of Food Composition and Analysis*, 106, 104305.

[2022]

Microencapsulation and Bioaccessibility of Phenolic Compounds of *Vaccinium* Leaf Extracts Ștefănescu, B. E., Nemes, S. A., Teleky, B. E., Călinoiu, L. F., Mitrea, L., Martău, G. A., ... & Crișan, G. (2022). Microencapsulation and Bioaccessibility of phenolic compounds of *vaccinium* leaf extracts. *Antioxidants*, 11(4), 674.

[2022]

An update regarding the bioactive compound of cereal by-products: Health benefits and potential

applications Fărcaș, A. C., Socaci, S. A., Nemeș, S. A., Pop, O. L., Coldea, T. E., Fogarasi, M., & Biriș-Dorhoi, E. S. (2022). An update regarding the bioactive compound of cereal by-products: Health benefits and potential applications. *Nutrients*, 14(17), 3470.

[2022]

Integrated Technology for Cereal Bran Valorization: Perspectives for a Sustainable Industrial Approach Nemes, S. A., Călinoiu, L. F., Dulf, F. V., Fărcaș, A. C., & Vodnar, D. C. (2022). Integrated Technology for Cereal Bran Valorization: Perspectives for a Sustainable Industrial Approach. *Antioxidants*, 11(11), 2159.

[2022]

Natural polyphenol recovery from apple-, cereal-, and tomato-processing by-products and related health-promoting properties Szabo, K., Mitrea, L., Călinoiu, L. F., Teleky, B. E., Martău, G. A., Plamada, D., ... & Vodnar, D. C. (2022). Natural polyphenol recovery from apple-, cereal-, and tomato-processing by-products and related health-promoting properties. *Molecules*, 27(22), 7977.

[2020]

Applicability of Agro-Industrial By-Products in Intelligent Food Packaging Nemes, S. A., Szabo, K., & Vodnar, D. C. (2020). Applicability of agro-industrial by-products in intelligent food packaging. *Coat* 10 (6): 550.

Link: <https://www.mdpi.com/2079-6412/10/6/550>

[2020]

Coronavirus disease (Covid-19) caused by (sars-cov-2) infections: A real challenge for human gut microbiota Vodnar, D. C., Mitrea, L., Teleky, B. E., Szabo, K., Călinoiu, L. F., Nemeș, S. A., & Martău, G. A. (2020). Coronavirus disease (COVID-19) caused by (SARS-CoV-2) infections: a real challenge for human gut microbiota. *Frontiers in cellular and infection microbiology*, 10, 575559.

Link: <https://doi.org/10.3389/fcimb.2020.575559>

[2020]

Food processing by-products and molecular gastronomy Precup, G., Mitrea, L., Călinoiu, L. F., Martău, A. G., Nemeș, A., Teleky, B. E., ... & Vodnar, D. C. (2021). Food processing by-products and molecular gastronomy. In *Gastronomy and Food Science* (pp. 137-163). Academic Press.

Link: <https://doi.org/10.1016/B978-0-12-820057-5.00008-X>

VOLUNTARIAT

[14/03/2020 – 19/10/2020]

Agronomia Agro Food Innovation SRL

[14/03/2018 – 14/09/2018]

Agronomia Agro Food Innovation SRL

[31/01/2018 – 30/04/2019]

Life Science Institute “King Mihai I of Romania” of the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca

[31/08/2015 – 18/09/2019]

Șef de an

WORKSHOP

[06/2024]

Training for the Future: Innovative Design Methods for Agri-Food Education

[2023]

2nd Friets Workshop

[2023]

1st FEEDACTIV Workshop

[2019]

AgroTransilvania Cluster și Wageningen Economic Research

[2016]

"Latte art & cup tasting"

CONFERINȚE ȘI SEMINARE

[2024]

The 14th CASEE Conference," The Role of the Life Sciences Universities in the Green Transition of Central and Eastern Europe", Romania CASEE Conference 2024: 19th – 21st of June 2024 The effect of acid and alkaline pretreatment on phenolic and lipid components in wheat bran

[2024]

Scientific Students Session, „AUREL VLAICU” University of Arad, 22-24 May 2024 OPTIMIZING PHENOLIC AND LIPID COMPOUND SYNTHESIS IN OAT BRAN THROUGH ACID PRETREATMENT AND SOLID-STATE FERMENTATION WITH ASPERGILLUS NIGER

[2023]

The 22nd International Conference "LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT", Cluj-Napoca, 28-30 Septembrie 2023 THE INFLUENCE OF ACID PRETREATMENT ON PHENOLIC COMPOUNDS DURING SOLID-STATE FERMENTATION OF OAT BRAN Silvia Amalia NEMES, Anca Corina FARCAȘ, Lavinia Florina CĂLINOIU, Francisc Vasile DULF, Dan Cristian VODNAR

[2023]

16th World Congress on Polyphenols Applications, September 28-29, 2023, Malta Bioactive Compound Production Via Solid-State Fermentation Using Acid-Pretreated Cereal Bran Autori: NEMES, Silvia Amalia, FĂRCAȘ, Anca Corina, CĂLINOIU, Lavinia Florina, DULF, Francisc Vasile and VODNAR, Dan Cristian

[2023]

THE CASEE CONFERENCE 2023 „Smart Life Sciences and Technology for Sustainable Development”, June 28-30, 2023 Cereal Bran Acid Pretreatment for Enhanced Bioactive Compound Production through Solid-State Fermentation Autori: Silvia Amalia NEMES, Lavinia Florina CĂLINOIU, Anca Corina FARCAȘ, Francisc Vasile DULF and Dan Cristian VODNAR

[2022]

The 21 st International Conference "LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT" PRETREATMENTS AND BIOPROCESSES FOR INCREASING THE BIOACCESSIBILITY AND BIOAVAILABILITY OF CEREAL BRAN PHYTOCHEMICALS

[2022]

The 21 st International Conference "LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT" COMPREHENSIVE OVERVIEW OF THE CONVENTIONAL AND NOVEL EXTRACTION METHODS APPLIED TO RELEASE THE BIOACTIVE COMPOUNDS FROM CEREAL WASTE AND BY-PRODUCTS

[2022]

PhD STUDENTS' DAYS, The Second Edition, November 25-26, 2022 ARAD, ROMANIA PRETREATMENTS OF CEREAL BRAN TO INCREASE THE CONCENTRATION OF BIOACTIVE COMPOUNDS

[2022]

RETASTE: RETHINK FOOD WASTE Heraklion, Greece, October 20-21, 2022 Integrated technology for a sustainable valorization of bioactive compounds from cereal by-products

[2022]

15th World Congress on Polyphenols Applications CEREAL BY-PRODUCTS AS NATURAL SOURCES OF PHENOLIC COMPOUNDS

[2022]

20th ICC Conference 2022 "Future Challenges for Cereal Science and Technology" 5 - 7 July 2022 Vienna, Austria Techniques for extraction and isolation of bioactive fractions from cereal by-products

[22/09/2021 - 23/09/2021]

The 20th International Conference "Life Sciences for Sustainable Development"

[06/06/2021 - 07/06/2021]

CASEE CONFERENCE

[17/12/2020 - 17/12/2020] Suceava, România

INTERNATIONAL CONFERENCE FOR STUDENTS "STUDENT IN BUCOVINA"

Link: <https://fia.usv.ro/student-in-bucovina-2020/>

[14/12/2020 - 14/12/2020]

44th CONFERENCE FOR STUDENTS OF AGRICULTURE AND VETERINARY MEDICINE WITH INTERNATIONAL PARTICIPATION

[26/11/2020 - 26/11/2020]

Simpozionul Științific Studentesc din USAMV Iași

[16/05/2018 - 18/05/2018]

Conferința națională studentescă " Provocări și oportunități privind valorificarea deșeurilor din Industria Alimentară"

[23/09/2020 - 24/09/2020]

The 19th International Conference "Life Sciences for Sustainable Development"

[17/05/2019 - 17/05/2019] Mențiune

Sesiunea de Comunicări Științifice Studentești USAMV CN, Ediția XVII

[28/05/2018 - 30/05/2018] Mențiune

Faza națională a Concursului Internațional de creație studentescă "ECOTROPHELIA"

[16/05/2018 - 18/05/2018]

Conferința națională studentescă " Provocări și oportunități privind valorificarea deșeurilor din Industria Alimentară"

[03/05/2018 - 04/05/2018] Mențiune

Simpozionul Științific Studentesc USAMV Cluj-Napoca

[03/05/2018 - 04/05/2018]

Simpozionul Științific Studentesc USAMV Cluj-Napoca

[25/04/2017 - 25/04/2017]

Simpozionul Științific Studentesc USAMV Cluj-Napoca, ediția a XV-a

DISTINȚII ONORIFICE ȘI PREMII

[27/02/2024] Ministerul Cercetării, Inovării și Digitalizării - România

Premiul "Gheorghe Ionescu-Șișești" pentru domeniul științific Biotehnologiei, în cadrul Galei Cercetării Românești - Ediția 2024

[2023]

Medalie de Aur - 4th International Exhibition InventCor 14-16.09.2023 - Deva, Romania An integrated model of bioactive compounds production from cereal bran - Silvia Amalia Nemes, Anca Corina Farcas, Dan Cristian Vodnar

[2022]

Salonul Internațional de Invenții și Inovații „TRAIAN VUIA” Timișoara , ediția a VIII -a Testarea și optimizarea unor tehnici moderne de valorificare a subproduselor agro-industriale

[2021]

Salonul International de Inventii si Inovatii Traian Vuia Timisoara Utilizarea subproduselor rezultate la procesarea citricelor ca sursa de compusi functionali

[17/12/2020] INTERNATIONAL CONFERENCE FOR STUDENTS "STUDENT IN BUCOVINA"

Premiul III

[26/11/2020] Simpozionul Științific Studentesc din USAMV IAȘI

Premiu special

[07/11/2019] Centrul de Cercetări pentru Biodiversitate

Premiul III

[21/03/2019] Salonul Internațional al Cercetării Științifice, Inovării și Inventicii PRO INVENT, ediția a XVII-a

Premiu de Excelență

[22/03/2018] Salonul Internațional al Cercetării Științifice, Inovării și Inventicii PRO INVENT Ediția XVI

Premiu de excelență

PERMIS DE CONDUCERE

Permis de conducere: B

Permis de conducere: BE

PROIECTE

Marie Skłodowska-Curie Actions, Research and Innovation Staff Exchange (RISE), Call: H2020-MSCA-RISE-2017

Project Title Sustainable optimization of the value chain of added-value fresh and dried berries through the integration of Precision Agriculture management strategies and innovative dehydration and edible coating, ACRONYM FRIETS

CASEE project Bio-system for cereal by-products-derived antioxidants production

Proiect de cercetare nr. PCE 25/2022, PNIII- P4-PCE-2021-0750 Innovative solid-state fermentation system for enhancing the nutraceutical content of agri-food by-products (Finanțator: UEFISCDI, perioada 2022-2024)

Proiect de cercetare nr. 210 PCE / 2021, PN-III-P4-ID-PCE-2020-2306 Sistem de bioconversie eco-sustenabil pentru valorificarea completă a borhotului de malt

POC/ID P_37_637, 2016-2020 (Development and modeling of bioprocesses for the production of 1,3-propanediol (PD) and crude glycerol citric acid with applications in the food industry

Link: <http://proglycom.usamvcluj.ro/>

[În curs]

International Marie Skłodowska- Curie Actions, Research and Innovation Staff Exchange (RISE), Call: HORIZON-MSCA-2021-SE PROJECT, Project Title Development of functional fish feed based on bioactive compounds of marine and herbal origin

[În curs]

Marie Skłodowska- Curie Actions, Research and Innovation Staff Exchange (RISE), Call: HORIZON-MSCA-2021-SE-01, Project Title Multi-Actor Research and Innovation Approaches for Food Functionality,

RECENZOR ȘTIINȚIFIC

[2024]

Bioresource technology - 1

[2024]

Brain disorders - 1

[2023 – 2024]

Journal of food composition and analysis - 10

ACTIVITATE EDITORIALĂ

[2024]

Topic coordinator - Efficacy of probiotic-enriched foods on digestive health and overall well-being

Silvia Amalia Nemes (căs. Antal Berbecaru)

05/08/2024