



CURRICULUM VITAE

Personal information	
First name(s) / Surname(s)	UNTEA ARABELA ELENA
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Nationality	romanian
Date of birth	1979 September 12 - Bucuresti
Gender	F
STUDIES:	1998 – 2002 – University of Bucharest - Faculty of Chemistry – Licence degree 2002 – 2004 - Master - University of Bucharest - Faculty of Chemistry – Optimization of Analytical Chemical Control and Quality Assurance - Master degree 2006 – 2012 - University of Bucharest - Faculty of Chemistry – PhD
Work experience	
Dates	<u>2020 -</u>
Occupation or position held	Scientific researcher I
Name and address of employer	INCDBNA
Type of business or sector	LABORATORY OF CHEMISTRY AND NUTRITION PHYSIOLOGY
Main activities and responsibilities	<ul style="list-style-type: none"> • Studies on the bioavailability of minerals, their metabolism and interrelationships with other nutrients in monogastric animals; • Studies on methods for assessing oxidative stability of animal products • Nutritional strategies for functional food designing (team work)
Dates	<u>2015 - 2020</u>
Occupation or position held	Scientific researcher II
Name and address of employer	INCDBNA
Type of business or sector	LABORATORY OF CHEMISTRY AND NUTRITION PHYSIOLOGY

Main activities and responsibilities	<ul style="list-style-type: none"> Participate with the Laboratory team at developing nutritional strategies for obtaining functional foods (egg, meat). Analytical chemistry studies on aspects of quality and safety of food and feed through the development and / or optimization of analytical methods for the determination of nutrients / contaminants in feed and animal samples. Participation in development of scientific papers, patents, national / international research projects 			
Dates	<u>2008 - 2015</u>			
Occupation or position held	Scientific researcher III			
Name and address of employer	INCDBNA			
Type of business or sector	LABORATORY OF CHEMISTRY AND NUTRITION PHYSIOLOGY			
Main activities and responsibilities	<ul style="list-style-type: none"> Determination of minerals in feed, raw materials and animal samples Optimization of analytical methods for the preparation and determination of minerals in feed, raw materials and samples of animal origin Mineral bioavailability studies in monogastric animals. Participation in development of scientific papers, patents, national / international research projects 			
Dates	<u>2006 - 2008</u>			
Occupation or position held	Scientific researcher			
Name and address of employer	INCDBNA			
Type of business or sector	LABORATORY OF CHEMISTRY AND NUTRITION PHYSIOLOGY			
Main activities and responsibilities	<ul style="list-style-type: none"> Determination of minerals in feed, raw materials and animal samples Participation in development of scientific papers. 			
Education and training				
Dates	<u>2010</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>
Title of qualification awarded	Certificat seria E 26.11.2010; cod COR 24125	Certificat 2 / 15.06.2007	Certificat 6223/29.08.2006	Certificat 11970 / C7 / 26.07.2005
Principal subjects/occupational skills covered	Training program for trainer qualification,	Application of mathematical statistics in evaluating analytical results	English	Validation of methods - the standard SR EN ISO / CEI 17025:2001 requirement
Name and type of organisation providing education and training	SC CEPECOM SA, Bucuresti, ROMANIA	University of Bucharest	University of Bucharest	FIATEST
Personal skills and competences				
Mother tongue(s)	romanian			
Self-assessment	Understanding	Speaking	Writing	
English	advanced	good	good	
Organisational skills and competences				
Technical skills and competences/ Computer skills and competences	Microsoft office.			

Relevant experience for the proposed subject of the project, accumulated in national and international programmes

Program/Project	Position	Period
FP 6		
1. Development of natural alternatives to anti-microbials for the control of pig health and promotion of performance FEED FOR PIG HEALTH <u>contract: 506144/ 2003</u>	Team member	2004-2007
2. Healthy Feed for Safety – Dissemination of research results of EC funded research on feed quality FEED SEG: <u>contract: 043077/2006</u>	Team member	2006-2009
EUROPEAN PROGRAM EUREKA		
3. E!5008 EUROAGRI+ EGSE - Eggshells processing and eggs with functional food properties production	Team member	2009-2011
4. EUREKA - 8686 E!/2013 - VEG4EGG - Valorisation of wine processing by-products as natural antioxidants for the layer diets rich in polyunsaturated fatty acid	Team member	2013-2016
TE 301/2015 Obținerea unui aliment functional (carne de porc/pasare imbogatita in Zn), prin folosirea unor concentrate furajere, prietenoase fata de mediu		
Project director		2015-2017
NUCLEU		
5. PN 09-38.01.02 - Evaluation of nutritional chromium potential for increasing the quality of animal foods high in fat	Project director	2012-2014
6. PN 1641-03.02 – Development and validation of analytical methods for lipid peroxidation evaluation from feeds and animal samples	Project director	2012-2014
INOVARE		
11. Contract 1 DPST – VITAOU - Obtaining of egg with low cholesterol, new product on the Romanian market	Team member	2013-2015
PN II		
12. SUPLIBOR 52-048 - Transdisciplinary researches concerning the essentiality and boron supplementary levels in broiler's and pig's diet	Project executive	2008-2011
13. FITOMIN - 51-025 Reducing mineral traceelements level from pig's manure by replacing chemical premixes with fitogenic additives and enzymatic preparations, accession way to a sustainable agriculture	Team member	2007-2010
CEEX		
17. BIOTECH 134 / 2006 – BIOFIB – Bioavailability of mineral salts from bakery products enriched in fibers	Project executive	2006-2007
20. M4 - EURONUTRICAL / Development capacity and competitiveness of a control laboratory from a animal husbandry area to ensure the quality control of forrage according to European Union regulation and legislation	Team member	2005-2007

Anex 1. List of patents, published scientific papers and communications, related to the project

List of patents with abstracts published in the Official Bulletin of the Intellectual Property, related to the project

- **Patent** no. 12935 / 28.07.2017: Compound feed for laying hens;
Authors: Criste R. D., Olteanu M., Vasilachi A., Cornescu M. G., Panaite T. D., Ropota M., Maros I., **Untea A. E.**, Dragomir C., Bercaru A. M.
- **Patent** no. 87 / 30.06.2022: Compound feed for broilers;
Authors: **Untea E. A.**, Panaite T. D., Olteanu M., Panaite C. V.

LIST OF PUBLICATIONS (ISI – indexed journals)

1. **Untea, A. E.**, Varzaru, I., Vlaicu, P. A., Turcu, R. P., & Panaite, T. D. (2022). Studies on antioxidant activities of grape pomace using in vitro, ex vivo, and in vivo models. *Journal of Food Measurement and Characterization*, 1-8.
2. Vlaicu, P. A., **Untea, A. E.**, Turcu, R. P., Saracila, M., Panaite, T. D., & Cornescu, G. M. (2022). Nutritional Composition and Bioactive Compounds of Basil, Thyme and Sage Plant Additives and Their Functionality on Broiler Thigh Meat Quality. *Foods*, 11(8), 1105.
3. Vlaicu, P. A., **Untea, A. E.**, Turcu, R. P., Panaite, T. D., & Saracila, M. (2022). Rosehip (*Rosa canina* L.) Meal as a Natural Antioxidant on Lipid and Protein Quality and Shelf-Life of Polyunsaturated Fatty Acids Enriched Eggs. *Antioxidants*, 11(10), 1948.
4. Saracila, M., **Untea, A. E.**, Panaite, T. D., Varzaru, I., Oancea, A., Turcu, R. P., & Vlaicu, P. A. (2022). Creeping Wood Sorrel and Chromium Picolinate Effect on the Nutritional Composition and Lipid Oxidative Stability of Broiler Meat. *Antioxidants*, 11(4), 780.
5. Oancea, A. G., **Untea, A. E.**, Dragomir, C., & Radu, G. L. (2022). Determination of Optimum TBARS Conditions for Evaluation of Cow and Sheep Milk Oxidative Stability. *Applied Sciences*, 12(13), 6508.
6. Vlassa, M., Filip, M., Țăranu, I., Marin, D., **Untea, A. E.**, Ropotă, M., ... & Sărăcilă, M. (2022). The Yeast Fermentation Effect on Content of Bioactive, Nutritional and Anti-Nutritional Factors in Rapeseed Meal. *Foods*, 11(19), 2972.
7. Hăbeanu, M., Lefter, N. A., Toma, S. M., Dumitru, M., Cismileanu, A., Surdu, I., ... & **Untea, A.** (2022). Changes in Ileum and Cecum Volatile Fatty Acids and Their Relationship with Microflora and Enteric Methane in Pigs Fed Different Fiber Levels. *Agriculture*, 12(4), 451.
8. Taranu, I., Marin, D., Pistol, G. C., **Untea, A.**, Vlassa, M., Filip, M., ... & Anghel, A. C. (2022). Assessment of the ability of dietary yeast-fermented rapeseed meal to modulate inflammatory and oxidative stress in piglets after weaning. *Journal of Animal and Feed Sciences*, 31(2), 109-122.
9. **Untea A. E.**, Varzaru I., Turcu R. P., Panaite T.D., Saracila M. The use of dietary chromium associated with vitamins and minerals (synthetic and natural source) to improve some

quality aspects of broiler thigh meat reared under heat stress condition, Italian Journal of Animal Science.

10. **Untea AE**, Panaite TD, Varzaru I, Turcu RP, Gavris T, Lupu A. Study on the influence of dietary sea buckthorn meal on nutritional properties of laying hen eggs, Czech J. Anim. Sci. 66 (2021):225-234.
11. **Untea, A. E.**, Lupu, A., Varzaru, I., Panaite, T. D., & Gavris, T. Effect of supplementation of a phytogetic feed additive in the diet of laying hens on nutritional quality of eggs, Animal Nutrition and Feed Technology, 21(2), 353-361, 2021.
12. Turcu, R. P., Panaite, T. D., **Untea, A. E.**, Vlaicu, P. A., Badea, I. A., & Mironeasa, S. (2021). Effects of Grape Seed Oil Supplementation to Broilers Diets on Growth Performance, Meat Fatty Acids, Health Lipid Indices and Lipid Oxidation Parameters. Agriculture, 11(5), 404.
13. Panaite, T. D., Nour, V., Saracila, M., Turcu, R. P., **Untea, A. E.**, & Vlaicu, P. A. (2021). Effects of Linseed Meal and Carotenoids from Different Sources on Egg Characteristics, Yolk Fatty Acid and Carotenoid Profile and Lipid Peroxidation. Foods, 10(6), 1246.
14. Saracila M., Panaite T.D., Mironeasa S., **Untea A.E.**, 2021. Dietary supplementation of some antioxidants as attenuators of heat stress on chicken meat characteristics. Agriculture, 11, 638.
15. Popescu RG, Bulgaru C, **Untea A**, Vlassa M, Filip M, Hermenean A, Marin D, Taranu I, Georgescu SE and Dinischiotu A., The Effectiveness of Dietary Byproduct Antioxidants on Induced CYP Genes Expression and Histological Alteration in Piglets Liver and Kidney Fed with Aflatoxin B1 and Ochratoxin A, Toxins, Volume: 13, Issue: 2, Article Number: 148,
16. **Untea, A. E.**, Varzaru, I., Panaite, T. D., Gavris, T., Lupu, A., & Ropota, M.. The Effects of Dietary Inclusion of Bilberry and Walnut Leaves in Laying Hens' Diets on the Antioxidant Properties of Eggs. Animals, 10(2), 191, 1-13, 2020.
17. Varzaru, I., **Untea, A. E.**, Panaite, T., & Olteanu, M.. Effect of dietary phytochemicals from tomato peels and rosehip meal on the lipid peroxidation of eggs from laying hens. Archives of Animal Nutrition, 1-13, 2020.
18. Varzaru, I., **Untea, A. E.**, & Saracila, M.. In Vitro Antioxidant Properties of Berry Leaves and Their Inhibitory Effect on Lipid Peroxidation of Thigh Meat from Broiler Chickens. European Journal of Lipid Science and Technology, 122(4), 1900384, 2020.
19. Turcu, R. P., Panaite, T. D., **Untea, A. E.**, Şoica, C., Iuga, M., & Mironeasa, S. Effects of Supplementing Grape Pomace to Broilers Fed Polyunsaturated Fatty Acids Enriched Diets on Meat Quality. Animals, 10(6), 947, 2020.
20. Ciurescu, G., Dumitru, M., Gheorghe, A., **Untea, A. E.**, & Drăghici, R. (2020). Effect of Bacillus subtilis on growth performance, bone mineralization, and bacterial population of broilers fed with different protein sources. Poultry Science.

21. **Untea A.**, Panaite T., Dragomir C., Ropota M., Olteanu M., Varzaru I., Effect of dietary chromium supplementation on nutritional quality and antioxidant status of broilers fed with n-3 PUFA enriched diets, *Animal*, 1-9, **2019**.
22. Hăbeanu, M., Lefter, N. A., Gheorghe, A., **Untea, A.**, Ropotă, M., Grigore, D. M, Varzaru I. & Toma, S. M. Evaluation of Performance, Nitrogen Metabolism and Tissue Composition in Barrows Fed an n-3 PUFA-Rich Diet. *Animals*, 9(5), 234, **2019**.
23. **Untea, A. E.**, Varzaru, I., Panaite, T. D., Hăbeanu, M., Ropota, M., Olteanu, M., & Cornescu, G. M. (2017). Effects of chromium supplementation on growth, nutrient digestibility and meat quality of growing pigs. *South African Journal of Animal Science*, 47(3), 332-341, **2017**.
24. **Untea, A. E.**, Criste, R. D., Vladescu, L., Tamas, V., Lefter, N., & Mihaila, C.. Effects of Dietary Botanical Mix on Excretion and Tissue Levels of Some Trace Minerals (Cu, Fe, Mn, Zn) in Weaned Piglets. *Romanian Biotechnological Letters*, 21(4), 11773-81, (**2016**).
25. Panaite, T., Criste, R. D., Ropota, M., Cornescu, G. M., Alexandrescu, D. C., Criste, V., ... & **Untea, A.**, Effect of layer diets enriched in Omega-3 fatty acids supplemented with Cu on the nutritive value of the eggs, *Romanian Biotechnological Letters*, 21(4), 11754-62, **2016**.
26. Varzaru I., **Untea A.E.**, Van I., Determination of bioactive compounds with benefic potential on health in several medicinal plants, *Romanian Biotechnological Letters*, 20 (5), 10773-10783, **2015**.
27. Hăbeanu M., Lefter N.A., Gheorghe A., Tabuc C., **Untea A.**, Surdu I., Ciurescu G., Balan C.G. & Dragomir C., Changes in certain serum and faeces parameters in weaned piglets as a response to nutritional stress, *South African Journal of Animal Science*, 45 (No. 2), 164-172, **2015**.
28. Ciurescu C. G., Gheorghe A., Marin D. E., **Untea A. E.**, Aspects of the plasma biochemistry and tibia minerals of broilers fed amorphous dolomite as a natural source of calcium and magnesium, *The Indian Journal of Animal Sciences*, 84(4), 125-129, **2014**.
29. **Untea A. E.**, Criste R. D., Taranu I., Souffrant W., Janczyk P., Vladescu L., Dragomir C., Availability of microelements in recently weaned piglets fed diet supplemented with inulin, *Czech Journal of Animal Science*, 58 (8), 369-374, **2013**.
30. Varzaru I., **Untea A. E.**, Martura T., Olteanu M., Panaite T., Schitea M., Van I., Development and validation of an RP-HPLC method for methionine, cystine and lysine separation and determination in corn samples, *Rev. Chim. (Buc.)*, 64 (7), 673-679, **2013**.
31. Criste R. D., **Untea A. E.**, Olteanu M., Radutoiu D., Lacatusu A. and Vladescu L., Heavy metals accumulation in some plants of spontaneous flora in correlation with soil composition, *Rev. Chim. (Buc.)*, 64 (3), 225-232, **2013**.
32. **Untea A. E.**, Criste R. D., Vladescu L.; Development and validation of a liver samples preparation method for FAAS trace elements content determination. *Rev Chim (Buc)* 63(4), 341-346, **2012**.

33. Taranu I., Marin D. E., **Untea A. E.**, Janczyk P., Motiu M., Criste R. D. and Souffrant W., Effect of dietary natural supplements on immune response and mineral bioavailability in piglets after weaning, *Czech Journal of Animal Science*, 57(7), 332-343, **2012**.
34. **Untea A. E.**, Criste R. D., Panaite T., Costache I.; Effect of the dietary oregano (*Origanum Vulgare*) on Cu and Zn balance in weaned piglets, *Journal of Trace Elements in Medicine and Biology*, Journal of Trace Elements in Medicine and Biology, Vol. 25 (1), S35-S40, **2011**.
35. Papuc C., Criste R. D., Durdun N., **Untea A. E.**, Nicorescu V., The effect of some mineral and phytogenic additives, rich in polyphenols, upon lipid peroxidation process, *Revista de Chimie*, 61 (10), 920-925, **2010**.
36. Vladescu L., Badea I. A., **Patrichi A. E. (Untea)**; Simultaneous determination of Vitamin E and Vitamin H1 by first derivative spectrometry in an ointment preparation; *Rev. Roumaine Chim.*, 51 (5), 439-445, **2006**.