

Personal information

Name and surname: IULIANA APRODU

Present academic position: Professor, Faculty of Food Science and Engineering, „Dunarea de Jos” University of Galati, Romania

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Education

2012: Postdoctoral associate at “Dunarea de Jos” University of Galati, Romania POSDRU/89/1.5/ S/52432 project, *Organizing the national interest postdoctoral school of applied biotechnologies with impact on Romanian bioeconomy*, a project co-financed by the European Social Fund through the Sectoral Operational Programme Human Resources Development 2007–2013

2005-2008: PhD in Bioengineering/Biotechnology, Department of Bioengineering, Politecnico di Milano, Italy

2002-2004: MS, Food Control and Expertise, Faculty of Food Science and Engineering, “Dunarea de Jos “University of Galati, Romania

1997-2002: BS, Food Biotechnology, Faculty of Food Science and Engineering, “Dunarea de Jos” University of Galati, Romania

Professional experience

2013, January-July - Fulbright Postdoctoral Associate - Visiting Scholar, Department of Food Science, College of Agriculture and Life Sciences, Cornell University, Ithaca, New York, U.S.A

Since 2012: Associate Professor, - Faculty of Food Science and Engineering, „Dunarea de Jos” University of Galati

2008-2012: Lecturer – Faculty of Food Science and Engineering, “Dunarea de Jos” University of Galati, Romania

2005 -2008: Researcher – Department of Bioengineering, Politecnico di Milano, Italy

2002-2005: Teaching assistant - Faculty of Food Science and Engineering, “Dunarea de Jos” University of Galati, Romania

Research interests

Increasing quality of proteins and sustainability of their processing; Intermolecular interactions in food systems; Development of new functional foods; Combining experimental and molecular modelling approach for investigating proteins’ structure-function relationships

Selected publications

Pătrașcu L., Banu I., Vasilean I., [Aprodu I.](#) 2017. *Effect of gluten, egg and soy proteins on the rheological and thermo-mechanical properties of wholegrain rice flour*. Food Science and Technology International, 23(2), 142-155.

Stănciuc N., Banu I., Turturică M., [Aprodu I.](#) 2016. *pH and heat induced structural changes of chicken ovalbumin in relation with antigenic properties*. International Journal of Biological Macromolecules, 93, 572-581.

Patrașcu L., Banu I., Vasilean I., Aprodu I. 2016. *Effects of germination and fermentation on the functionality of whole soy flour*. Bulletin of University of Agricultural Sciences and Veterinary Medicine. Animal Science and Biotechnologies, 73(2), 126-134.

Aprodu I., Banu I. 2015. *Rheological, thermo-mechanical, and baking properties of wheat-millet flour blends*. Food Science and Technology International, 21(5), 342-353.

Aprodu I., Stănciuc N., Dumitrașcu L., Râpeanu G., Stanciu S. 2014. *Investigations towards understanding the thermal denaturation of lactoperoxidase*. International Dairy Journal, 38(1), 47-54.

Aprodu I., Stănciuc N., Banu I., Bahrim G. 2013. *Probing thermal behaviour of microbial transglutaminase with fluorescence and in silico methods*, Journal of the Science of Food and Agriculture, 93(4), 794–802.

Stănciuc N., Aprodu I., Râpeanu G., van der Plancken I., Bahrim G, Hendrickx M. 2013. *Analysis of the thermally induced structural changes of bovine lactoferrin*. Journal of Agricultural and Food Chemistry, 61 (9), 2234–2243.

Aprodu I., Banu I. 2012. *Antioxidant properties of wheat mill streams*, Journal of Cereal Science, 56(2), 189-195

Stănciuc N., Râpeanu G., Bahrim G., Aprodu I. 2012. *pH and heat-induced structural changes of bovine apo- α -lactalbumin*, Food Chemistry, 131(3), 956-963

Banu I., Aprodu I. 2012. *Studies concerning the use of Lactobacillus helveticus and Kluyveromyces marxianus for rye sourdough fermentation*, European Food Research Technology, 234(5), 769-777.

Aprodu I., Walcher G., Schelin J., Hein I., Norling B., Rådström P., Nicolau A., Wagner M. 2011. *Advanced sample preparation for the molecular quantification of Staphylococcus aureus in artificially and naturally contaminated milk*. International Journal of Food Microbiology, 145(1), S61-S65.

Banu I., Stoenescu G., Ionescu V., Aprodu I. 2010. *Physico-Chemical and Rheological Analysis of Flour Mill Streams*, Cereal Chemistry, 87(2), 112-117.

Aprodu I., Redaelli A., Soncini M. 2008. *Actomyosin interaction: mechanical and energetic properties in different nucleotide binding states*, International Journal of Molecular Sciences, 9(10), 1927-1943.

Ionescu A., Aprodu I., Daraba A., Porneala L. 2008. *The effects of transglutaminase on the functional properties of the myofibrillar protein concentrate obtained from beef heart*, Meat Science, 79(2), 278-284.

Selected research grants

2013 - Fulbright Senior postdoctoral grant - *Structural and functional investigations of non-traditional, emerging food proteins* – Cornell University, Ithaca, NY, U.S.A.

2012-2015 - Contract 140/2012, PN-II-PT-PCCA-2011-3.1-1538 - *Developing new graphene-polymer composites biomaterials for scaffold fabrication with applicability in bone repair by coupling multiscale molecular modelling and experiments* (POLYGRAPH)

2008 – 2011 - *Improved bio-traceability of unintended micro-organisms and their substances in food and feed chains* (BIOTRACER), Contract FP6-2006-FOOD-036272

2005-2008 – Early Stage Research Training - Marie Curie Program, within FP6 Biomimetic Systems, cod MEST-CT-2004-504465; research fellow at Department of Bioengineering, Politecnico di Milano, Italy. Project title: *Analysis of the motor proteins by molecular modelling*

Other academic activities

Editor in Chief, *The Annals of University Dunarea de Jos of Galati*, Fascicle VI, *Food Technology* (<http://www.ann.ugal.ro/tpa/>)