

Romanian Academy

The „Gheorghe Ionescu-Șișești” Prize awarded in 2018

Assoc. Prof. Daniel HĂDĂRUGĂ, PhD & Assist. Prof. Gerlinde RUSU, PhD

“ROMANIAN ACADEMY AWARDS - 2016” ceremony was held on December 13, 2018, in Bucharest, during the General Meeting of the Romanian Academy. Seventy awards belonging to fourteen sections have been awarded for the top scientifically publications in the year 2016.

Two of the “Gheorghe Ionescu-Șișești” Awards, “Agricultural and Forestry Sciences” section, has been awarded for the scientifically contributions entitled “Differentiation of the rye and wheat flour as well as mixtures by using the kinetics of Karl Fischer water titration” and “Nanoencapsulation competitiveness of omega-3 fatty acids and correlations of thermal analysis and Karl Fisher water titration for European anchovy (*Engraulis encrasicolus* L) oil / β -cyclodextrin complexes”.

These studies were published in highly esteemed top journals Food Chemistry (Elsevier) 2016, 195, 49-55, and LWT - Food Science and Technology (Elsevier) 2016, 68, 135-144 (quartile Q1 in WoS), having authors from the Politehnica University Timișoara Assoc. Prof. Daniel Hădărugă, PhD and Assist. Prof. Gerlinde Rusu, PhD from the Department of Applied Chemistry, Organic and Natural Compounds Engineering (CAICON), Faculty of Industrial Chemistry and Environmental Engineering.

Researches were conducted in collaboration with researchers from the country and abroad (Heinz-Dieter Isengard - University of Hohenheim, Germany, Mustafa Ünlüsayın - Akdeniz University, Turkey, as well as Nicoleta Hădărugă, Corina Costescu, Laura Corpaș - University of Agricultural Sciences and Veterinary Medicine “King Mihai I of Romania” of Timișoara, Virgil Păunescu and Alexandra Gruia - University of Medicine and Pharmacy of Timișoara). They are approaching theoretical and applicative subjects in the food chemistry and supramolecular chemistry fields. Researches have a high level of multidisciplinary, dealing the influence of cereal product composition on the bonding of water molecules into the food matrix from the kinetic point of view. On the other hand, the protection and stability of omega-3 fatty acid-based triglycerides, contained by fish oils, have been evaluated by cyclodextrin nanoencapsulation. Both studies have great impact on the quality and stability of these products with food, pharmaceutical or cosmetic applications, and further to the human health.

These studies had significant impact in the scientific world, being cited in highly esteemed journals from the organic chemistry and food chemistry fields from Elsevier, Springer and Beilstein Institute (e.g., Food Chemistry - ISI 4.529, Food and Bioprocess Technology - ISI 2.998, International Journal of Thermal Sciences - ISI 3.361 and Beilstein Journal of Organic Chemistry - ISI 2.330). w



1. Hădărugă, D.I.; Costescu, C.I.; Corpaș, L.; Hădărugă, N.G.; Isengard, H.-D., Differentiation of rye and wheat flour as well as mixtures by using the kinetics of Karl Fischer water titration, Food Chemistry 2016, 195, 49-55, doi: 10.1016/j.foodchem.2015.08.124 (ISI 4.529 / Q1);
2. Ünlüsayın, M.; Hădărugă, N.G.; Rusu, G.; Gruia, A.T.; Păunescu, V.; Hădărugă, D.I., Nano-encapsulation competitiveness of omega-3 fatty acids and correlations of thermal analysis and Karl Fischer water titration for European anchovy (*Engraulis encrasicolus* L.) oil / β -cyclodextrin complexes, LWT – Food Science and Technology 2016, 68, 135-144, doi: 10.1016/j.lwt.2015.12.017 (ISI 2.329 / Q1).