



Layal Karam

Ph.D., & Assistant Professor

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Biography

Layal Karam is currently an Assistant Professor in Food Safety and Quality Management, at the Faculty of Nursing and Health Sciences at NDU. Dr. Karam received a Ph.D. Degree in Food Science and Technology from Lille 1 University - Science and Technology and completed her Postdoctoral research in France. Both her PhD and Post-doc were funded by an EU scholarship. She acquired an international and practical experience through her work for several years with USAID, UNIDO and EU. She was a Manager of a Research & Development center, established by USAID, to improve traditional Lebanese products and develop new products in the food sector. With UNIDO, she was a Consultant for the implementation of food safety systems for industries. She initiated many research collaborations on the local and international levels, participated in exchange teaching programs in France and Greece and attended more than 11 international conferences. Her main goal is to improve the Lebanese food safety and quality in order to protect the public health, address the needs of the government and industries, and promote the local economical development. Her research interests are (1) to evaluate and improve the quality, safety and shelf-life of food products, (2) to develop and set-up innovative active and intelligent food packaging, (3) to assess and create strong food safety culture in food establishments. Her teaching concentration is in Food Safety and Quality Management, Food Microbiology, Product Development as well as Laboratory Techniques in Food Microbiology and Food Science Research.

Peer-reviewed Journals

International

- Tsiraki, M. I., Karam, L., Abiad, M. G., Yehia, H. M., & Savvaidis, I. N. (2017). Use of natural antimicrobials to improve the quality characteristics of fresh "Phyllo" – A dough-based wheat product – shelf life assessment. *Food Microbiology*, 62, 153-159.
- Karam, L., Casetta, M., Chihib, N. E., Bentiss, F., Maschke, U., & Jama, C. (2015). Optimization of cold nitrogen plasma surface modification process for setting up antimicrobial low density polyethylene films. *Journal of the Taiwan Institute of Chemical Engineers*, 64, 299-305.
- Karam, L., Jama, C., Nuns, N., Mamede, A., Dhulster, P., & Chihib, N. (2013). Nisin adsorption on hydrophilic and hydrophobic surfaces: Evidence of its interactions and antibacterial activity. *Journal of Peptide Science*, 19(6), 377-385.
- Karam, L., Jama, C., Mamede, A., Boukla, S., Dhulster, P., & Chihib, N. (2013). Nisin-activated hydrophobic and hydrophilic surfaces: Assessment of peptide adsorption and antibacterial activity against some food pathogens. *Applied Microbiology and Biotechnology*, 97(24), 10321-10328.
- Karam, L., Jama, C., Dhulster, P., & Chihib, N. (2013). Study of surface interactions between peptides, materials and bacteria for setting up antimicrobial surfaces and active food packaging. *Journal of Materials and Environmental Science*, 4(5), 798-821.
- Karam, L., Jama, C., Mamede, A., Fahs, A., Louarn, G., Dhulster, P., & Chihib, N. (2013). Study of nisin adsorption on plasma-treated polymer surfaces for setting up materials with antibacterial properties. *Reactive and Functional Polymers*, 73(11), 1473-1479.

Peer-reviewed Conference Proceedings

International

- Karam, L., Chihib, NE ., Jama, C., Dhulster, P. (2010). Fonctionnalisation de polyéthylène basse densité pour la mise au point d’emballage alimentaire bioactif antilisteria, Matériaux 2010, Nantes, France, October 18-22..

Specialized Reports

Local

- Alterations required as pre-requisites for the compliance of different “Food Establishments” to Food Safety Management Systems (FSMS)” – UNIDO reports

International

- Validation of the new surface conditions to improve the adhesion properties of surfaces – EU report

Exhibitions, Competitions and Creative Work

- Communication award for presenting an innovative project, Forum «Doctoriales franco-belge 2011 » (Marcq-en-Baroeul, France, 22-27 May)

CV

<http://www.ndu.edu.lb/Library/Assets/Files/Documents/NDUFacultyProfiles/NDUFacultyCVs/Layal%20Karam.pdf>