## **Research Interest September 2017**

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I am food engineer and hold a PhD degree with 19 years experience at the Turkish Atomic Energy Authority (TAEA) and 13 years at the international level, mainly International Atomic Energy Agency (IAEA). I have been working at Near East University Food Engineering Department as Full-time Teaching Staff since 2016.

### **Research fields at NEU (2016 to present):**

- Pesticide residues in minor crops of TRNC such as molakhia
- Vibrio parahaemolyticus in seafood
- Nutritional quality of some edible insects
- Aflatoxin presence in some African food like garri and egusi consumed in TRNC
- <u>Allergen analysis in food especially baby food by using biosensors and other</u> <u>techniques</u> (planned future research field)

## Working subjects during 2016-2008:

- Training/consultancy of analysts/laboratories from United Nations' Member States on "analysis of agrochemicals based on the principles of analytical quality assurance"; "using radio tracer and related analytical techniques in agricultural researches" and "method validation and estimation of measurement uncertainty"
- Training/consultancy on "Laboratory accreditation according to ISO 17025"

### Research fields at the IAEA (2008-2003):

- Adaptation and validation of the QuEChERS method to determine pesticide residues in fruits and vegetables
- Adaptation and validation of the IAEA-ethyl acetate multi residue method in grain
- Cost-effective multi residue determination of organochlorine pesticides in edible fish by gas chromatography
- Simultaneous determination of organochlorine pesticides and polychlorinated biphenyls in fish tissue using QuEChERS-Ethyl Acetate method

- Adaptation and validation of the multiresidue method for the analysis of avermectins in animal tissues
- FAO / PFL 49 : Analysis of indoxacarb residues in kale, within the frame of Development of Sampling Guidelines for Pesticide Residues and Strengthening Capacity to Introduce Certification Systems PFL /INT/856/PFL-111740

# Research fields at the TAEA (2002-1984):

- 1. Food Irradiation (1984-1990):
  - Preservation of tomatoes by gamma irradiation and effect of different stages of ripening on shelf life of tomatoes
  - Effect of gamma irradiation on shelf life of mushroom
  - Sprout inhibition in different varieties of onions and potatoes by irradiation and effect of gamma irradiation on the quality of onions and potatoes
  - Effect of gamma irradiation on shelf lives of some Turkish grape and strawberry varieties
  - Determination of the Dio radiation dose of *Asperpillus flavus* spores in dried fig
- **2.** Use of Nuclear Techniques in the Field of Food and Environmental Safety (1990-2002):
  - IAEA Technical Co-operation Project, TUR/5/015: Pesticide Residues in Turkish Foods and Environment
  - IAEA RC- Project 5495: Radiotracer studies to reduce or eliminate pesticide residues during food processing
  - Reducing of C14-dimethoate residues in olive oil during food processing
  - IAEA RC-Project 8162: Measurement of pesticide residues in agricultural products as a part of co-ordinated program "The use of nuclear and immunochemical methods in pesticide analysis"
  - IAEA RC-10335: Investigations on sensibility of different *Spodoptera littoralis* populations to chlorpyrifos using radiotracer technique
  - IAEA RC-9909: Alternative Methods to Gas and High Performance Liquid Chromatography for Pesticide Residue Analysis in Grain

• C14-Thiobencarb residues in rice and rice paddy under the supervision of Dr. M. Hussain at FAO/IAEA Seibersdorf Laboratories-Austria