

Moruf Olanrewaju OKE 40: 2nd December, 1973 Food Processing Engineering



<u>ola4ade@yahoo.com</u>; <u>okem1@ukzn.ac.za</u>; +27836962237; +27843305767; +2348030758356

Dr Moruf Olanrewaju Oke is a registered Food Engineer and Senior Lecturer in the Department of Food Science and Engineering, Ladoke Akintola University of Technology, Nigeria. His research focuses are: modeling of mass and heat transfer in agricultural products; innovative food processing and packaging technologies; food process drying and optimization. He is a postdoctoral fellow in Food Processing Engineering unit of the School of Engineering, Bioresources Engineering, UKZN, South Africa.

CURRENT RESEARCH

Topic

Modeling the effect of different drying methods and conditions on the drying and quality of South African indigenous vegetables: A case study on drying of sweet potato slices/chips and some selected fruits and vegetables

Methodology

- Determination of quality parameters of sweet potato slices.
- Effect of pretreatment, drying methods and conditions on the drying kinetics and quality of the slices
- Mathematical modeling of drying curves for the sweet potato slices.

Application

Process drying and optimization of fruit and vegetables such as tomato, Sweet potato and yam

UKZN main Publications

- 1. T. Seyoum Workneh and M. Olanrewaju Oke. The influence of the combined microwave power and hot air ventilation on the drying kinetics and colour quality of tomato slices. Africa Journal of Biotechnology 11(87):15353-15364.
- 2. Tilahun S. Workneh and Moruf O. Oke. Thin layer modelling of microwave- convective drying of tomato slices (Accepted, International Journal of Food Engineering).
- 3. M.O. Oke, S.O. Awonorin and T.S.Workneh. Expansion Ratio of Extruded Water Yam (Dioscorea alata) Starches Using Single Screw Extruder. African Journal of Agricultural Research, 8(9):750-762.

Past Researches

- M.O. Oke, S.O. Awonorin, L.O. Sanni, C.T. Akanbi and A.O. Abioye (2007). Determination of Some Selected Engineering Properties of Sweet Potato Cuts as Function of Temperature. Journal of Food Technology 5(1): 66-70.
- Tunde-Akintunde, T.Y. and Oke, M.O. (2012). Thin-Layer Drying Characteristics of Tiger Nut (*Cyperus esculentus*) Seeds. Journal of Food Processing and Preservation. 36:457–464. doi: 10.1111/j.1745-4549.2011.00604x.

Future Interests

- Integrated Pre-and Postharvest Management Processes Affecting Fruit and Vegetable Quality
- Determination of Engineering Properties of food materials