

Curriculum vitae

Mrs. Mercy Badu (PhD),

Department of Chemistry,
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Career Objective

To conduct critical research in Natural Product in promoting green chemistry and addressing food security and improve nutritional health of Mankind, to acquire knowledge relevant to impact positively on the scientific community, the Ghanaian economy, the students I teach and to mentor especially the female science students in Ghana.

Research Interest

- Using novel Chromatographic, Spectroscopic and Spectrophotometric approaches to elucidate and characterize the macro and micronutrients, anti-nutritional compounds.
- Investigate the functional properties, thermal behavior and the crystallization kinetics of vegetable oils and fats with their application as feedstock for the Ghanaian chemical industry.

Education

2015: PhD Organic Chemistry, Kwame Nkrumah University of Sci. & Tech., Kumasi

2006: MSc. Natural Products Chemistry, Kwame Nkrumah University of Sci. & Tech., Kumasi

2002: B.Sc (Hons), Chemistry, Kwame Nkrumah University of Sci. & Tech., Kumasi

Positions and employments

2014- present: Senior Lecturer, Organic and Natural Products Chemistry, KNUST

2007 - 2013: Lecturer, Organic Chemistry, KNUST

2006 - 2007: Lecturer, Dept. of Chemical Engineering, Kumasi Technical University

2003 – 2005: Demonstrator Laboratory, Dept. of Chemistry, KNUST, Kumasi-Ghana

2002- 2003: Research Assistant - Forestry Research Institute of Ghana (CSIR)

International Collaboration and International Research Awards

2019: Organization of Women in Science for the Developing World (OWSD)
Early Career Fellowship

2017: The World Academy of Sciences (TWAS) Research Grant

2017: The Africa Academy of Sciences Research Grant, Climate Impact Capacity and Leadership Enhancement (CIRCLE) Fellowship (Postdoc)

2013: L'Oréal UNESCO for Women in Science Regional Fellowship

2013: Ph.D Scholarship. Commonwealth fellowship Split site programme

2012: UMAPS Fellow: University of Michigan African Presidential Scholars (UMAPS)

Publication summary (2017)

Total number of peer-reviewed publications (First appeared in 2010): **19**

Google Scholar h-index: **8**, Google Scholar Total Citation: **328**

Selected Publications

Badu, M., Pedavoah, M.M., and Dzaye, I.Y. (2020). Proximate composition, antioxidant properties, mineral content and anti-nutritional composition of *Sesamum indicum*, *Cucurmeropsis edulis* and *Cucurbita pepo* seeds grown in the Savannah regions of Ghana. *Journal of Herbs, Spices & Medicinal Plants*, 1 -11

Badu, M., Awudza, A. M. J., Budd, P., Yeates, S. (2018). Determination of the physical properties and characterization kinetics of oils from *Allanblackia* seeds and she aunts under different thermal conditions, *European Journal of Lipid Science and Technology*, 120 (1700156) 1 – 9

Badu, M., Awudza A. M. J. (2016). Determination of the triacylglycerol content for the identification and assessment of purity of shea butter Fat, peanut oil and palm kernel oil using Maldi-Tof/Tof mass spectroscopic technique, *International Journal of Food Properties*, 20(2) 271-280

Badu, M., Boateng, W. I., and Boadi, N.O. (2014). Evaluation of adsorption of textile dyes by wood sawdust. *Research Journal of Physical and Applied Sciences*, 3(1) 006-014

Badu, M., Wemegah, D.D., Boadi, N.O and Brown, F.A. (2013). Assessment of the nutrient load and selected heavy metals in the Owabi reservoir and its feeder waters. *American Journal of Scientific and Industrial Research*, 4(4) 337-343

Boadi, N.O., Okyere, H., **Badu, M.**, and Mensah, J.K. (2013). Effects of mercury on the proximate composition of maize (*Zea mays L.*). *Journal of Agricultural Science and Technology B*. 3, 487-492

Badu, M., Mensah, J.K., and Boadi, N.O., (2012). Antioxidant Activity of Methanol and Ethanol/water extracts of *Tetrapleura tetraptera* and *Parkia biglobosa*. *International Journal of Pharm and Bio Sciences*. 3(3), 312-321

Boadi, N.O., Mensah, J.K., Twumasi, S., **Badu, M.** and Osei, I. (2012). Levels of selected heavy metals in canned tomato paste sold in Ghana. *Food Additives and Contaminants: Part B Surveillance*, 1–5

Boadi, N.O., Twumasi, S.K., **Badu, M.** and Osei, I. (2011). Heavy metal contamination in canned fish marketed in Ghana. *American Journal of Science and Industrial Research*, 2(6): 877-882

Badu, M., Twumasi, S.K., Boadi N.O. (2011). Effects of Lignocellulosic in Wood Used as Substrate on the Quality and Yield of Mushrooms. *Food and Nutrition Sciences*, 2, 780-784