**Frank Ofori Agyemang**

Frank Ofori Agyemang graduate from the Department of Materials Engineering, KNUST in 2011 and joined Laboratory of Advanced Materials Processing (LAMP) in Myongji University in South Korea in 2012 after his national service as a teaching and research assistant at the Department of Materials Engineering KNUST. At Myongji University where he obtained his PhD under Department of Energy Science and Technology, he worked on synthesizing membrane materials, nanofibers and nanomaterials for energy and environmental applications. He has a number of publications in reputable peer review journals such as Nano-Micro letters, Chemical Engineering journals, Electrochimica Acta, Materials Science and Engineering B and so on. His research focuses on wastewater treatment, Energy materials (supercapacitors and batteries), polymeric materials, composite materials and nanomaterials.

**CURRENT POSITION**

**Kwame Nkrumah University of Science and Technology**

Lecturer, Department of Materials Engineering, January 2018-Present

**EDUCATION**

**Myongji University, Yongin, Republic of Korea**

Ph.D (join Master/Doctor), Energy Science and Technology, 2012-2017

Dissertation: “Fabrication and Characterization of Functionalized Electrospun Nanofibers for Energy and Environmental Applications”

**Kwame Nkrumah University of Science and Technology**, Kumasi

BSc, Materials Engineering, 2007-20011

**RESEARCH INTEREST**

Energy Storage Materials, Composite Materials,

Membranes, Nanofiber fabrications

Polymeric Materials, Nanotechnology

Wastewater treatment Material Synthesis

**RESEARCH PUBLICATIONS IN PEER REVIEWED JOURNALS**

1. Mensah-Darkwa K., **Agyemang O. F**., Akromah S., Arthur K. E., Fuseini A. and Gikunoo E. (2021). A comparative study on the performance of activated carbon electrodes and activated carbon/titanium dioxide nanotubes hybrid electrodes. Scientific Africa 12: e00786.
2. Asante B. E., Koomson B., **Agyemang O. F**. (2021). Heavy metals contamination and distribution in surface water and sediment of the Aboabo stream, Ahafo Region, Ghana. Earth Sciences Malaysia (ESMY) 5(1): 41 – 48.
3. Tabi, N. R., **Agyemang, O. F**., Mensah-Darkwa K., Arthur, K. E., Gikunoo, E. and Momade F. (2021). Zeolite synthesis and its application in water defluorination. Materials Chemistry and Physics 261: 124229
4. Arthur, K. E., Gikunoo, E., **Agyemang O. F**., Azeko, T. S., Andrews A. and Twenewaa A. (2020). Materials selection for water pipes by the multi-objectives decision-making method: the case of alternative materials for PVC pipes. Journal of Science and Technology Vol 5: 29 – 42.
5. Tomboc, M. G., **Agyemang, O. F.** and Kim, H. (2018). Improved electrocatalytic oxygen evolution reaction properties using PVP modified direct growth Co-based metal oxides electrocatalysts on nickel foam. Electrochimica Acta, 263: 362-372.
6. **Agyemang, O. F**., Tomboc, M. G., Kwofie, S. and Kim, H. (2018). Electrospun carbon nanofiber-carbon nanotubes coated polyaniline composites with improved electrochemical properties for supercapacitors. Electrochimica Acta, 259: 1110-1119.
7. **Agyemang, O. F**. and Kim, H. (2016). Electrospun ZnFe2O4 -based nanofiber composites with enhanced supercapacitive properties. Materials Science and Engineering B 211:141-148.
8. **Agyemang, O. F**., Li, F., Momade, F. W. Y. and Kim, H. (2016). Effect of poly(ethylene oxide) and water on electrospun poly(vinylidene fluoride) nanofibers with enhanced mechanical properties as pre-filter for oil-in- water filtration. Materials Chemistry and Physics 182: 208-218.
9. **Agyemang, O. F**., Sheikh, A. F., Appiah-Ntiamoah, R., Yang, X. and Kim, H. (2015). A simple method of electrospun tungsten trioxide nanofibers with enhanced visible-light photocatalytic activity. Nano-Micro Lett. 7: 291-297.
10. **Agyemang, O.F**., Sheikh, A. F., Appiah-Ntiamoah, R., Chandradass, J., and Kim, H. (2015). Synthesis and characterization of poly(vinylidene fluoride)–calcium phosphate composite for potential tissue engineering applications. Ceramic International 41: 7066-7072.
11. Jadhav, A., Mai, X. T., **Agyemang, O. F**. and Kim, H. (2015). Preparation, characterization, and kinetic study of end opened carbon nanotubes incorporated polyacrylonitrile electrospun nanofibers for the adsorption of pyrene from aqueous solution. Chemical Engineering Journal 259: 348-356.
12. Jadhav, A., Zhang, H., **Agyemang, O. F**., Hiremath, V., Lee, K., Chandradass, J., Seo, G. J. and Kim, H. (2015). Preparation and characterization of electro-spun fabricated Ag-TiO 2 composite nanofibers and its enhanced photo-catalytic activity for the degradation of Congo red. Journal of Nanoscience and Nanotechnology 15: 7988-7996.

**CONFERENCE PRESENTATIONS**

Delivered **Poster Presentation** inthe “International Symposium on Catalytic Conversion of Energy and Resources 2016” on my research work “*Electrospun ZnFe2O4-based nanofibers with electrocatalytic properties for oxygen evolution reaction*” at Seoul 2016.

Delivered **Poster Presentation** in “The Korean Society of Industrial and Engineering” on my research work “*Characterization of electrospun ZnFe2O4/CNT nanofiber composites*” at Jeju South Korea during 4-6 November 2015.

Delivered **Poster Presentation** in “The Korean Society of Industrial and Engineering Chemistry” on my research work “*Fabrication and characterization of porous PVDF nanofiber as a pre-filter for oil-in-water filtration*” at Busan South Korea during 29th April - 1st May, 2015.

Delivered **Poster Presentation** in the “6th International Symposium on Functional Materials” on my research work “*Influence of nanopores on electrospun poly(vinylidene fluoride) nanofiber mat with superhydrophobic surface*” at Singapore during August, 2014.

**CONFERENCE PROCEEDINGS PUBLICATIONS**

Mensah-Darkwa K., **Agyemang O. F**., Yeboah, D., and Akromah S. (2021). Dye-synthesized solar cells based on graphene oxide and neutral plant extract. Materials Today Proceedings 38: 514 – 521