


Brief CV

Name	Ubong Eduok	中文名		
Gender	Male	Title (Pro./Dr.)	Dr.	
Position	Research scientist	Country	Canada	
University/ Department	University of Saskatchewan/Mechanical Engineering			
Personal Website	https://scholar.google.ca/citations?hl=en&user=DSWtEUQAAAAJ&view_op=list_works&sortby=pubdate			
Research Area	Material science (metal corrosion; corrosion electrochemistry)			

Brief introduction of your research experience:

I am an experienced researcher with background and demonstrated working history in material degradation and corrosion control. I am highly skilled in designing electrochemical corrosion monitoring systems, including the use of various mathematical models in predicting corrosion kinetics. My research interests revolve around the development of corrosion inhibition routes for industrial material protection with special interests in protective coatings/inhibitor designs for biocorrosion/biofouling remediation; and corrosion electrochemistry. Generally, in my more than 15 years of research and teaching in the UK, Canada, Saudi Arabia and Nigeria, I have been involved several environmental corrosion chemistry corrosion electrochemistry; physical metallurgy, surface treatments, analyses and spectroscopy, corrosion inhibition, and environmental researches. I have published over 40 research articles in national and international journals, book chapters in edited books and have also participated in national and international conferences. I am a reviewer for several international conferences and over 40 research journals (with reputable publishers like *Elsevier*, *ACS Publications*, *Springer*, *Taylor and Francis*, etc) with over 100 completed review assignments.

My *Bacterium-in-coating* model have exhibited enhanced protective performance against the biofouling and corrosion of steel-based hulls. This research as contributed to a better understanding of the biofouling patterns of submerged surfaces of marine vessels and offshore plants in the Arabian Sea. Modified versions of this coating protocol have also been adopted towards manufacturing orthopedic medical implants. I have also explored the use of novel chitosan-based corrosion inhibitor composites towards corrosion remediation in well-head equipment and transportation/storage platform structures. I have also utilized this composite as an active ingredient in an acid corrosion inhibitor formulation consisting of surfactants, intensifiers, amine and carboxylic components in non-flammable ketonic oil-based media. Its principal components have met the environmental requirements for safe industrial application with zero risk. A repeat field trial in a typical pipeline steel is still ongoing. I recently developed an intelligent inhibitor-release silicone coating that replenishes inherent surface cracks on medical implant-grade magnesium alloy for potential biomedical applications. The use of this this inhibitor-coating assemblage has been reported as a sustainable and innovative technique towards corrosion protection in bodily fluids. I am currently working as a research scientist at the Department and Mechanical Engineering, University of Saskatchewan, Canada. I earned a PhD degree in Analytical/material chemistry in 2016. I have also served as a visiting research scholar at the Biomedical Research Centre, Sheffield Hallam University and the Corrosion & Protection Centre, School of Materials, University of Manchester, UK.

I am also a member of the following profession bodies: National Association of Corrosion Engineers (NACE International),

American Chemical Society, Canadian Society for Chemistry, Canadian Society for Chemical Engineering, Association of the Chemical Profession of Ontario, Electrochemical Society, Saudi Arabian Int'l Chemical Sciences Chapter of American Chemical Society, Society of Electroanalytical Chemistry, Chemical Society of Nigeria. I have been invited to serve as a technical committee member in many international conferences worldwide.