

Norman Munroe

1. Name and academic rank:

Professor, Department of Mechanical and Materials Engineering

2. Education – degree, discipline, institution, year

Eng.Sc.D. Chemical Metallurgy, Columbia University New York City, NY, May 1987

M.S. Metallurgical Engineering, University of British Columbia, Vancouver, BC, May 1982

M.Phil. Mineral Processing Engineering, Leeds University, Leeds, UK, July 1977

B.S. Chemistry and Physics, Dar-es-Salaam University, Dar-es-Salaam, Tanzania, August 1973

3. Academic experience – institution, rank, title

34 Years

Professor, Mech. & Mater. Eng. Dept., FIU, 2015-present

Director, Office of Student Access & Success 2013-2017

Assoc. Dean, Undergrad Studies & Acad. Affairs College of Eng. & Computing, FIU, 2010-2015

Director, Applied Research Center, FIU, 2008-2010

Assoc. Director, Applied Research Center, FIU, 2005-2008

Assoc. Dean for Research, College of Eng. & Computing, FIU, 2003-2005

Chairperson, Mech. & Mater. Eng. Dept., FIU, 2000-2003

Associate Professor, Mech. & Mater. Eng. Dept., FIU, 1996-2015

Assistant Professor, Mech. & Mater. Eng. Dept., FIU, 1991-1996

Lecturer, University of Guyana, South America, 1977-1979

Assistant Lecturer, University of Guyana, South America, 1973-1975

4. Non-Academic experience:

Assistant Chief of Inspectors, NYC Board of Ed., Environmental Health & Safety, 1987-1991

Faculty Intern, Foster Wheeler-Wastewater Pilot Plant, New Bedford Harbor, June – Dec., 2000

5. Certifications or professional registrations: N/A

6. Current membership in professional organizations

The Mineral, Metal and Material Society (TMS)

American society of Mechanical Engineers (ASME)

American Society of Metals (ASM)

American Ceramic Society (ACerS)

Sigma Xi, The Scientific Research Society; Kappa Chapter

International Association of Advanced Materials (IAAM)

7. Honors and awards

Fulbright Scholar Award, 2019-2020

IAAM Medal for Notable and Outstanding research in advanced materials science & technology, Stockholm, Sweden, 2018

2016 Best Educator award, Legacy Magazine

Florida State Teaching Incentive award, 1996

Florida International University Excellence in Teaching award, 1994.

8. Service activities (within and outside of the institution)

Academic Editor, SurFACTS Newsletter, BioInterface Workshop & Symposium, Surfaces in Biomaterials Foundation, 2015 – Present; Journal of IAAM, Advanced Materials Letters, 2019 – Present; Founding member of the National Society of Black Engineers (NSBE) student chapter, College Curriculum Committee, College T&P Committee, and several faculty search & screen committees, NSF Reviewer, NASA, DOE Reviewer

9. Briefly list the most important publications and presentations from the past five years

C. Okafor, N. Munroe, “Investigation of biodegradable Mg-Li quaternary alloys with improved uniform degradation”, MS&T 21 - Materials Science and Technology Symposium: Next Generation Biomaterials, Columbus, Ohio, October 17 – 21, 2021.

C. Okafor, N. Munroe, “In-vitro degradation assessment of bioresorbable Mg-Li-Zn-Ca alloys”, 13th Symposium on Biodegradable Metals at the biomedical applications, August 22 - 27, 2021.

C. Okafor, N. Munroe, “Bioresorbable alloy design for improved electrochemical degradation”, National Association for the Professional Advancement of Black Chemists and Chemical Engineers, NOBCCChE 2020, September 24-25, Virtual Conference.

C. Okafor, N. Munroe, “Improving degradation behavior of bioresorbable Mg-Zn-Ca alloy by Lithium addition”, Updates in Bioresorbable Metals 2020, August 24-25, Virtual Symposium.

C. Okafor and N. Munroe, “Influence of composition and microstructure on mechanical properties and biodegradation of magnesium alloys”, 36th Southern Biomedical Engineering Conference, March 6-8, 2020. Crowne Plaza, New Orleans- Airport.

N. Munroe, D. Miranda, D. Garcia, R. Perez, D. Serna, J. Del Risco and C. Okafor, “Simulating Biological Responses Via Lab on a Chip Devices”, Asian Advanced Materials Congress, Singapore, 31 October - 4 November, 2019.

N. Munroe, “Cytotoxicity and Hemocompatibility of Magnesium Alloys”, 10th Biometals Symposium on Biodegradable for Biomedical Applications, St. Catherine College, Oxford, United Kingdom, August 26 – 31, 2018.

N. Munroe, “Biocompatibility and Hemocompatibility of Next Generation Biomaterials”, European Advanced Materials Congress, Stockholm, Sweden, 20 - 23 August 2018.

N. Munroe, A. Datye, “Surface Treated Biosorbable Materials for Sensors and Cardiovascular Applications”, 3rd International Workshop “NanoBio Surfaces and Interfaces in Healthcare and Science, EPFL Lausanne, Switzerland 8 - 9 May, 2018.

N. Munroe, E. Mirtaheri and V. Musaramthota “Tailoring the Corrosion and Biological Response of Novel Biomaterials”, 1st International Symposium on NanoBio Surfaces and Interfaces, University of Twente/MESA+/MIRA, Netherlands, 27-28 September, 2016.

N. Munroe, V. Musaramthota, J. Gonzalez and K. Jones, “Influence of Material Composition in Modular Hip Prostheses”, SurFACTS in Biomaterials, Volume 20, Issue 2, Spring 2016.

10. Briefly list the most recent professional development activities

Moderator – Faculty of Engineering & Technology Mini Retreat, Herdsmanton, Georgetown, Guyana, January 30, 2020

“Climate Resilience: Challenges and Opportunities”, The United States and Caribbean: New Opportunities for Strategic Engagement, Panelist Virtual Webinar, September 9, 2021.

Panel Speaker – 2nd Guyana International Petroleum Exposition & Business Summit, 2019.