

Biographical Sketch: Michael Louis Norton, Ph.D

(a) Professional Preparation

Louisiana State University of Shreveport	Chemistry	B.S. 1977
Arizona State University	Solid State Chemistry	Ph.D., 1982
Naval Weapons Center, China Lake, Ca.	Electronic Materials	NRC Postdoc, 1982-1984

(b) Appointments

Marshall University, Professor, 1995 – present
Marshall University, Associate Professor of Chemistry, 1991 – 1995
University of Georgia, Assistant Professor of Chemistry, 1984 - 1991

(c) Publications

Related Publications

1. Rahman, M. M.; Norton, M. L.; Hierarchical Lithography for Generating Molecular Testbeds, *Sensors Journal*, IEEE; v. 10.3, pg. 498 - 502, 2010.
2. Shen, Wanqiu; Zhong, Hong; Neff, David and Norton, Michael L., NTA Directed Protein Nanopatterning on DNA Origami Nanoconstructs, *J. Am. Chem. Soc.*, 131 (19), 6660–6661, 2009.
3. Norton, Michael; Day, B. Scott; Cao, Huan; Rahman, Mashiur; and Gin, Aaron; Arrays of Nanoarrays: Elements of Binding, *IEEE Sensors Journal*, 8(6), 874-879, 2008.
4. Norton, Michael; Designed Self-Organization for Molecular Optoelectronic Sensors, *International Journal of High Speed Electronics and Systems*, 17(2), 311-326, 2007.
5. Rahman, Mashiur; Day, B.Scott; Cao, Huan; Butts, Heather and Norton, Michael; Ordered DNA Arrays Prepared via Soft Lithography, *Proceedings of SPIE Volume: 6370, Nanomaterial Synthesis and Integration for Sensors, Electronics, Photonics, and Electro-Optics* Editor(s): Nibir K. Dhar, Achyut K. Dutta, M. Saif Islam ISBN: 0-8194-6468-6; 2006.

Other Significant Publications

1. Globus, T. R. Norton, M. L. Lvovska, M. I. Gregg, D. A. Khromova, T. B. Gelmont, B. L., Reliability Analysis of THz Characterization of Modified and Unmodified Vector Sequences, *Sensors Journal*, IEEE, V. 10 I. 3, pg. 410 - 418, 2010.
2. Bellido, Edson P.; Bobadilla, Alfredo D.; Rangel, Norma L.; Zhong, Hong; Norton; Alexander Sinitskii, Alexander and J. M. Seminario.; Current-voltage-temperature characteristics of DNA origami, *Nanotechnology* 20, 175102, 2009.
3. Bobadilla, Alfredo D; Bellido, Edson P.; Rangel, Norma L.; Zhong, Hong; Norton, Michael; Sinitskii, Alexander and Seminario, Jorge M.; DNA origami impedance measurement at room temperature; *J. Chem. Phys.*, 130 171101 (2009). Selected for the *Vir. J. Nan. Sci. & Tech.*, Vol. 19, Issue 20, Organic-Inorganic hybrid nanostructures (2009); and for the May 15, 2009 issue of *Vir. J. Bio. Phys. Res.* (2009)
4. Hong, Sungmin; Jauregui, Luis A.; Rangel, Norma L.; Cao, Huan; Day, B. Scott; Norton, Michael L.; Sinitskii, Alexander S.; and Seminario, Jorge M.; Impedance measurements on a DNA junction, *J. Chem. Phys.* 128(20), 201103-201106, 2008.
5. Santagata, N.M., Pengshun Luo, Lakhani, A.M., DeWitt, D.J., Day, B.S., Norton, M.L., Pearl, T.P.; Organizational Structure and Electronic Decoupling of Surface Bound Chiral Domains and Biomolecules, *IEEE Sensors Journal*, 8(6), 758-766, 2008.

(d) Synergistic activities

1. Teaching Innovations and Service:
Developed low cost stereo projection system for classroom use.
Direct Molecular and Biological Imaging Center (<http://www.marshall.edu/mbic/>. SEM, Confocal and Scanned Probe methods) - facilities for High School, Undergraduate as well as Graduate student use
2. Founding member for a DNA mass production company: <http://www.vandaliaresearch.com/about.asp>
3. Inventor and consultant for novel solid state lamp systems: <http://www.ecer.area125.com/main3.html>
4. National Service: Regularly participate in NSF, DOD and PRF (ACS) proposal reviews.
5. Broadening Science participation:
Oversee the Marshall University Summer Undergraduate Research Program
Mentor an average of 4 high school and 5 undergraduate researchers per year

(e) Collaborators and Other Affiliations

Collaborators

Steve Armentrout (Parabon)	Tatiana Globus (U Virginia)
Scott Barker (U Virginia)	David Lederman (West Virginia U)
Eric Blough (Marshall)	Richard Niles (MU)
Elliott Brown (UC Santa Barbara)	Nadrian Seeman (New York University)
Steve Brueck (UNM)	Jorge Seminario (Texas A&M)
Ngee-Sing Chong (Middle Tenn State U)	Charles Somerville (Marshall)
Chris Dwyer (Duke)	John Stickney (U of Georgia)
Boris Gelmont (U Virginia)	Jay Switzer (U of Missouri, Rolla)
Philippe Georgel (Marshall)	Aaron Timperman (West Virginia U)
Aaron Gin (CINT)	

Graduate Advisors:

Robert VonDreele (LANL/Argonne)
William Glaunsinger (ASU)

Post Doctoral Advisor:

Robert Schwartz (Naval Weapons Center)

Thesis Advisees:

Sirintorn Klinsukont	Fan Zhang
Ming Liang (NIH)	Aoune Barhoumi (Rice)
Melanie Wolfe (Pfizer)	Thabo Gcwabaza (U Kentucky)
Duy Bao Dinh	Anuradha Rajulapati
Brian Baker (Special Metals),	Dawn Nicholas (current)
Farrah Boggess (WV State Police)	

Postdoctoral Fellows Sponsored:

Hong Zhong (NYU) (current)	Chris Meadows (Purdue)
Masudur Rahman (Japan) (current)	Mashiur Rahman (Bangladesh)
Wanqiu Shen (NYU)	Ashish Vaidya (India)
Brian Scott Day (VT)	Ava Dykes (U Hawaii)
Maryna Lvovska (Ukraine)	Chad Huffman (ManTech International)