

1. **Name:** Michael A. Fiddy

Academic Rank: Professor

2. **Degrees:**

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| BS | University of London | 1973 |
| PhD | University of London | 1977 |

3. **UNC Charlotte (number of years = 14)**

- Professor: 2002 - present

University of Massachusetts at Lowell (number of years = 14)

- Professor - 1994-2001
- Associate Professor - 1987-1994

University of London, Kings College (number of years = 9)

- Lecturer – 1979 - 1987

4. **Other related experience:**

- Director, NSF I/UCRC since 2011
- Founding Director, UNC Charlotte Center for Optoelectronics (2002-2010)
- ECE Department Head, UMass Lowell (1994-2001)

5. **Certifications or professional registrations:** C. Phys. (UK)

6. **Current membership in professional organizations**

- IEEE (Senior Member since 1989), SPIE (Fellow since 2000), OSA (Fellow since 1998), Electromagnetics Academy (Fellow), Inst. Of Physics (Fellow since 1995)

7. **Honors and awards:**

- UMass Lowell Outstanding Graduate Educator of the year, 1990/91.
- UMass Lowell ECE Department Teaching Excellence Award, 2001.

8. **Institutional and professional service in the last five years:**

- UNC Charlotte Phys. & Opt. Sci Department Review Committee, 2011-2014.
- UNC Charlotte, CLAS Diversity Officer (2014-2015)
- University Patent Committee, 2004-present.
- Editor-in-Chief, Waves in Random and Complex Media, since Jan 1996 (Taylor & Francis)
- Deputy Editor, Photonics Research Journal, (OSA Press) since 2013
- OSA Board of Directors, 2014-2015
- OSA Meetings Council 2009-present

9. **Principal publications of last five years:**

- Fiddy, M. A. and Ritter, R. S., Introduction to Imaging from Scattered Fields, CRC Press, (2014), ISBN 1466569581, 9781466569584.
- Sheih, M., C. L. Byrne and M. A. Fiddy, “Resolution Enhancement using Prior Information” in Image Restoration: Fundamentals and Advances, Ed. B. Gunturk, CRC/Taylor and Francis Press, Chapter 4, (2012).
- Fiddy, M. A., “Slow light for sensing”, Photonic Bandgap Structures: a Novel Technological Platform Physical, Chemical and Biological Sensing, Ed. M. Pisco, A. Cusano and A. Cutolo, Bentham Press, Chapter 6, (2012), pp 118-134.
- L. Beilina, M. Klibanov, T. Nuygen and M. A. Fiddy, “Imaging of buried objects from

- experimental backscattering time dependent measurements using a globally convergent inverse algorithm”, *SIAM Journal of Imaging Sciences*, Vol 8, No 1, pp 757-786, 2015.
- H. A. Alisafae and M. A. Fiddy, “Polarization-dependent bandwidth in low-index plasmonic metamaterials”, *Applied Optics*, 53, pp8043-8048, 2014.
 - H. Alisafae and M. A. Fiddy, “Nanoantennas for nanowire photovoltaics”, *Applied Physics Letters*, 105 (11), 113107, 2014.
 - R. Tsu and M. A. Fiddy, “Waves in man-made materials: superlattice to metamaterials”, *Waves in Random and Complex Media*, Vol 24, No. 3, pp250-263, August 2014.
 - L. Beilina, M. Klibanov, T. Nuygen and M. A. Fiddy, “Reconstruction of the refractive index from experimental backscattering data using a globally convergent inverse method”, *SISC-SIAM*, vol 36, B273-293, (2014).
 - L. Beilina, N.T. Nuygen, M. V. Klibanov and M. A. Fiddy, “Reconstruction from blind experimental data for an inverse problem for a hyperbolic equation”, *Inverse Problems*, Vol 30, 025002, (2014).
 - R. Hegde, M. A. Fiddy and W. J. R. Hofer, “The Reconstruction of finite extent objects with the Superlens”, *Applied Physics A*, DOI 10.1007/s00339-014-8466-4, (2014).
 - H. Alisafae, M. A. Fiddy, “Polarization insensitivity in epsilon-near-zero metamaterial from plasmonic aluminum-doped zinc oxide nanoparticles” *J. Nanophoton.*, 8, 1, 083898 (2014).
 - H. Alisafae, J. Marmon, M. A. Fiddy, “Spectral properties of Au–ZnTe plasmonic nanorods” *Photonics Research Journal*, 2, 1, 10-14 (2014).
 - M. A. Fiddy and U. Shahid, “Legacies of the Gerchberg-Saxton algorithm”, *Ultramicroscopy*, 134, pp 48-54, (2013),
 - R. Tsu and M. A. Fiddy, “Generalization of the effects of high Q for metamaterials”, *Photonics Research*, 1, issue 2, pp 77-87, August 2013.
 - A.V. Kuzhuget, L. Beilina, M.V. Klibanov, A. Sullivan, L. Nguyen and M.A. Fiddy, Quantitative image recovery from measured blind backscattered data using a global convergent inverse method, *IEEE Transactions of Geoscience and Remote Sensing*, 51, 2937-2948, 2013.

10. Professional development activities in the last five years:

- Chair and program committee member of multiple SPIE and OSA meetings
- Grants: DURIP, \$542k, 3D Nanostructure Design and Fabrication, Aug 2015 – Aug 2016; DoD, Low loss scattering structures, \$531k, June 2014 –June 2016; DURIP, co-PI M. Klibanov, Virtual Network Analyzer (VNA) for the Accurate Measurement of the Spectral Properties of Anisotropic Permittivities and Permeabilities of Complex Man-made and Naturally Occurring Objects, \$75k, June 2014; ARO membership of NSF I/UCRC, \$53k year 1, then \$42k per year through to 2019; Electromagnetic Scattering Studies, Army Res. Labs \$139,000, 1/10/13 2/14/14; AFRL via NSF, I/UCRC for Metamaterials: Low loss low index metamaterials, \$79,000, 09/01/12 – 08/30/14; Co-PI with M. Klibanov, ARO DURIP, Experiments to advance a new, globally convergent, quantitative imaging method by measuring the time history of backscattered fields, \$233k September 2011; NSF I/U CRC Center for Metamaterials Grant, \$275k; \$55k/year for 5 years, awarded Feb 2011.