



## Region 2 Director–Elect Nominee

Kate Duncan, Ph.D.

**Annual Region 2 Meeting, Galloway, NJ**  
Sunday February 23, 2014

# Professional Experience

Principal Investigator, Printed RF Structures Group  
U.S. Army CERDEC, S&TCD  
Aberdeen Proving Ground, Maryland, USA

I received a B.E. in Computer Engineering and an M.E. in Electrical Engineering from Stevens Institute of Technology and a Ph.D. in Applied Physics from New Jersey Institute of Technology. I joined the Antennas Technology & Analysis Branch of CERDEC in 2009, where I have been engaged in the development of novel nanomaterials for the next generation antennas systems. Synthesis, deposition, material, and electrical characterization have been my research focus. This has resulted in my group being among the first to successfully deposit chemically reduced graphene by ink-jet printing on transparent substrate for RF applications. I have developed a direct-write laboratory enhancing the Army's in-house prototyping capabilities.

I am also a Research Adjunct Professor of Electrical and Computer Engineering at the University of Delaware in Newark, Delaware. My research at the University focuses on printed energy scavenging devices. I have several students that I work with on different levels. This research has resulted in numerous publications.

# Relevant IEEE Experience

## IEEE Accomplishments and Activities (S'-M'-SM'13)

### IEEE ACTIVITIES:

- North Jersey Section Member at Large (2007–2010)
- North Jersey Section WIE Chair (2009)
- North Jersey Section Membership Development Chair (2008–2010)
- Baltimore Section Secretary (2012)
- Baltimore Section Treasurer (2013)
- Baltimore Section Vice Chair (2014)
- WIE Region 2 Coordinator (2013–present)

# Initiatives

## Statement

Through my membership and volunteer activity with the IEEE, I have a firm understanding of how IEEE functions as an organization. If elected, I shall use this organizational, administrative, and financial knowledge to the advantage of the Region 2 membership to advocate for the members of the region. I shall grow the regions membership activities in the follow areas:

- Sustain the engagement of students, both undergraduate and graduate, with a focus on retaining the students as members when they transition to Graduates of the Last Decade (GOLD) status.
- Develop engineering outreach programs to improve STEM (science, technology, engineering, and math) education for our future engineers.
- Support collaboration between sections, academia, and local industries that focus on practical applications of emerging technologies while offering needed professional development for practicing engineers.
- Actively encourage participation in conferences and meetings held in the sections of Region 2.
- Promote the development of member and student retention programs.

THANK YOU!