

# ANESA 2019 Convention Key Speakers' Bios



**Professor James A. Momoh, Ph.D.**

**Chairman & Chief Executive Officer, Nigerian Electricity Regulatory Commission**

Professor James Momoh is currently the Chairman and Chief Executive Officer of Nigerian Electricity Regulatory Commission. He was nominated by the president of Nigeria and confirmed by the senate. Prior to that, he was Professor and Chair of the Electrical Engineering Department at Howard University and Director of the Center for Energy Systems and Control. James Momoh received a BSEE degree (1975) from Howard University, a MSEE degree (1976) from Carnegie Mellon University, a MS degree (1980) in Systems Engineering from the University of Pennsylvania and a Ph.D. degree (1983)

in Electrical Engineering from Howard University. In 1987, Momoh received a National Science Foundation (NSF) Presidential Young Investigator Award. He was Program Director of the Power program in the Electrical and Communications Systems (ECS) Division at NSF from 2001-2004. Momoh is a Fellow at the Institute of Electronics and Electrical Engineering (IEEE) and a Distinguished Fellow at the Nigerian Society of Engineers (NSE). He was inducted as a Fellow Member of Nigerian Academy of Engineering (NAE) in 2004. Momoh's research activities for utility firms and government agencies span several areas in systems engineering, optimization and energy systems control of terrestrial, space and naval complex and dynamic networks. These include but are not limited to the development of multi-agent, intelligent optimization technologies; next-generation optimization for the design of future intelligent power grids; computational tools and algorithms for deregulated/restructured power economies; and advanced power management strategies for stressed power systems with uncertainty, dynamics and stochasticity of parameters. He has also led research and education outreach and collaborations in information technology, environment, energy and human capacity building to involve the United States and other countries worldwide. This has led to a number of international conferences, workshops and seminar series, and research and education in engineering programs that are sponsored by NSF, Howard University and several universities and public-private agencies.

He has developed interdisciplinary research and education programs in power, economics and environmental adaptive systems. The goal is to build cross-disciplinary partnerships among engineering, economics and other related disciplines that address socioeconomic issues, environmental issues, new teaching pedagogy and curricula to prepare the workforce of the future.

Momoh's research and professional activities have led to over 225 technical papers in refereed journals, transactions, proceedings and also production of several textbooks in his areas of expertise. These papers are presented at conferences, workshops, seminars, tutorial sessions and several other IEEE events to benefit the wider community of engineers, students and policy makers. He has contributed to and is engaged in the development of specialized computational applications of classical optimization, intelligent systems and advanced optimization techniques for the new tools needed by terrestrial, naval and space power systems. In particular, he has been developing special topical contributions in the area of Dynamic Stochastic Optimal Power Flow (DSOPF) using Adaptive Dynamic Programming (ADP) methods. His activities also extend to the development of Multi-Agent Systems (MAS) for coordination and control of complex power systems. His work continues to impact the research and innovations needed in optimization for planning and operational security, efficiency, reliability and stability, and autonomous control of sustainable energy systems.