

POWER & ENERGY SOCIETY INDUSTRY APPLICATIONS SOCIETY LIFE MEMBERS AFFINITY GROUP NEW YORK SECTION



You are invited to a meeting of the PES & IAS NY Chapter and the NY LMAG on:

Communications: From There to Here and to There Again in the Future

Tuesday, September 29th, 2015

THE PRESENTATION:

This presentation is all about communication and networking. When did the mechanical communication between remote locations really take off? We examine the proverbial smoke alarms to semaphores and the birth of communications technologies! Remote communications gave rise first to relaying of messages and then to networking. In the modern times (late 1960'), campuses of the University of Hawaii in various islands developed the concept of wireless networking. That was the only way by which the campuses could communicate with each other in real time. Aptly, they called it the Aloha network. The development of this concept led to the invention of Ethernet. In a parallel path, the US DoD funded research for instant communications between its mainframe computers located in different parts of the country. The advent of personal computers jump started the networking as we know it today. Smart phones contributed to the growth. We have come a long way from the noisy telephone line modems. We now can brag of 5G and Gigabits connections. How do we support such growth in insatiable demand for bandwidth? How do we manage the radio spectrum for communications? What are the business and societal implications? What is in the near future: nanotechnology, flexible optical networks, fiber to the home? One size does not fit all. Many questions give rise to many more views on the super information highways. What is the future? Are we succeeding in the race to catch up with other industrialized countries? It is a fascinating tale of technology, money, and politics.

THE SPEAKER: Dr. Amitava Dutta-Roy



Amitava Dutta-Roy, IEEE Life Fellow. Amitava taught electronics and communications at the University of São Paulo and Brazil's National Institute for Space Research. Later, he consulted with the UN office of Science and Technology, International Telecommunication Union, AT&T, France Telecom and AT Kearney, and Brazil's Telebras. He started writing on technology for magazines in 1988. Since then he has written for the IEEE Spectrum (that led to an award from the American Society of Business Press Editors), IEEE Communications Magazine, IEEE Transactions of Professional Communications, Harvard University's Program for Information Resources Policy monographs and other lesser known magazines. Currently, Amitava is the editor of the IEEE NY Section Monitor, editor of RegiOne of IEEE Region 1 and a contributing editor of the Proc. IEEE. He is also the IEEE NY Section's historian and the acting chair of the Life Members' Affinity

Group. Amitava graduated in physics in India and later earned both BSc and PhD degrees in electronic engineering from Imperial College, London.

ALL ARE INVITED – PLEASE POST

RSVP:<u>https://meetings.vtools.ieee.org/m/35912</u> Chair Programs: Arnold Wong wongar@coned.com or (212) 460-4189

FOR SECURITY REASONS: NO WALK-INS!

When: 5:00 pm — Refreshments & Program

7:00 pm — Program Ends

Where:

Con Edison Edison Room, 19th Floor 4 Irving Place, New York, NY 10003 Nearest Subway: 14th St/Union Sq.

This program will be awarded IEEE Continuing Education Units.

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