



ACM MSWiM 2014

Montreal, Canada - September 21st - 25th, 2014

17th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems

Prof. A. Boukerche

Reginald A. Fessenden

(1866 - 1932)



The Radio-scientist

The Father of Radio Broadcasting

Reginald A. Fessenden



▶ Education

- ▶ Trinity college school at Port Hope, Ontario, 1877
- ▶ Bishop's college at Lennoxville, Quebec, 1879

▶ Work

- ▶ Principal position at a Whitney Institute in Bermuda at the age of 18
- ▶ Collaboration with Thomas Edison at the Edison Invention Factory, New Jersey
- ▶ Collaboration with Westinghouse Electric and Manufacturing Company, 1890

Reginald A. Fessenden



▶ Work (continued)

- ▶ Professor of electrical engineering at the Purdue University, Indiana, 1892
- ▶ Professor of electrical engineering at the Western University of Pennsylvania (now the University of Pittsburgh), 1893
- ▶ U.S Weather Bureau - adapt radio telegraphy to weather forecasting and storm warning (1900 ~ 1902)
- ▶ General manager, National Electric Signaling Company, Pittsburgh, 1902

Reginald A. Fessenden



- ▶ **Known for**
 - ▶ First wireless transmission carrying human sound
- ▶ **Major/Famous Invention**
 - ▶ Apparatus For Signaling By Electromagnetic Waves
- ▶ **Some of Contributions**
 - ▶ Over 200 additional patents, including
 - ▶ a version of microfilm and
 - ▶ an early form of sonar (fathometer or depth finder)
 - ▶ Barretter detector, followed by the electrolytic detector
 - ▶ Development of the heterodyne principle basis of almost every radio today
 - ▶ Alternator machine operating at 75 kHz with output power of 500 watts
 - ▶ Perfecting a new means of sending Morse code
 - ▶ Discovery of amplitude modulation (AM)

Now ... Who is this guy ?

Dr. Ian F. Akyildiz. FIEEE, FACM

Professor at Georgia Institute of Technology, Atlanta, US

- ▶ Ken Byers Chair Professor
- ▶ Director of the Broadband Wireless Networking Laboratory
- ▶ Director of N3Cat (NaNoNetworking Centre in Catalunya, Spain)
- ▶ Editor-in-Chief of Computer Networks (Elsevier) Journal
- ▶ Founding Editor-in-Chief of the Ad Hoc Networks Journal
- ▶ Physical Communication (PHYCOM) Journal
- ▶ Nano Communication Networks (NANOCOMNET) Journal



Who is this guy ?

Dr. Ian F. Akyildiz. FIEEE, FACM

Professor at Georgia Institute of Technology, Atlanta, US

- ▶ Well known in our community for his **numerous outstanding scientific contributions** in the area of wireless communication and mobile networking including cellular network, wireless sensor network, mesh network, just to mention a few.
- ▶ 2003 Best Tutorial Paper Award at IEEE ICC
- ▶ 2009 Best Paper Award at IEEE ICC
- ▶ 2010 Best Paper Award IEEE Globecom
- ▶ 2010 IEEE Communications Society Ad Hoc and Sensor Networks Technical Committee (AHSN TC) Technical Recognition Award (For pioneering contributions to wireless sensor networks and wireless mesh networks)
- ▶ 2011 IEEE Computer Society W. Wallace McDowell Award
- ▶ 2011 TUBITAK (Turkish National Science Foundation) Exclusive Award
- ▶ etc





Dr. Ian F. Akyildiz



Reginald A. Fessenden



Association for
Computing Machinery



ACM Special Interest Group (SIG) on Simulation and Modeling (SIM)



R. A. Fessenden (1866 – 1932)
The Father of Radio Broadcasting

ACM SIGSIM MSWIM 2014 REGINALD A. FASSENDEN AWARD

Presented to

Prof. Ian F. AKYILDIZ

**For pioneering contributions for modeling and analysis of cellular and multihop wireless
communication systems**