The IEEE Ottawa, IEEE Ottawa Joint Chapter of Communications Society, Consumer Electronics Society, and Broadcast Technology Society (ComSoc/CESoc/BTS), IEEE Ottawa Photonics Society (IPS), IEEE Ottawa Computers Society (CS), IEEE Ottawa Microwaves/Antennas/Propagation Society (AP/MTT), IEEE Ottawa Joint Chapter of Reliability Society and Power Electronics Society (RS/PELS), and Algonquin College Student Branch in conjunction with School of Advanced Technology, Algonquin College are inviting all interested IEEE members and other engineers, technologists, and students to a technical seminar on

**Trends and Issues of FTTH and G-PON**

by

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**DATE:** Monday August 18, 2014.
**TIME:** Refreshments, Registration and Networking: 06:30 p.m.; Seminar: 07:00 p.m. – 08:00 p.m.
**PLACE:** Algonquin College, 1385 Woodroffe Ave., School of Advanced Technology, Building-T, Ciena-Optophotonics Lab (Room T129).
**PARKING:** No fee after 5:00 p.m. at the Visitors’ Parking Lots 8 & 9. Please respect restricted areas.
**Admission:** Free. Registration required. To ensure a seat, please register by e-mail contacting: Wahab Almuhtadi almuhtadi@ieee.org.
**More Info:** Ottawa ComSoc/BTS/CESoc Chapter website

**Abstract**

Thanks to the penetration of broadband access technologies for Internet, real-time applications like VoIP, streaming applications like IPTV and many other delay-sensitive applications are growing very fast.

FTTH is the key broadband technology and is replacing ADSL. It provides stable high throughput, realizing even Gbps class. It also plays a very important role in Next Generation Networks (NGN). The NGN is Carrier-grade network for the future and a converged solution after the legacy telecom networks by enabling QoS management and controls in IP network like in legacy telecom networks and by supporting economical, versatile multi-media applications like those on the Internet with secure manners.

In realizing FTTH, G-PON is widely adopted. International Standards on FTTH, G-PON in particular has been established and is being further developed.

This lecture consist of the following contents: Introduction to Access Networks, Fundamentals of FTTH, Requirements to FTTH, Regulatory Aspect of FTTH, Global Standards on FTTH and G-PON, Market Trends and Further Issues.
Speaker’s Bio

Koichi Asatani received his B.E.E.E., M.E.E.E. and Ph. D. degrees from Kyoto University in 1969, 1971 and 1974, respectively. From 1974 to 1997, Dr. Asatani was engaged in R&D on optical fiber communication systems, hi-definition video transmission systems, FTTH, ISDN, B-ISDN, ATM networks, IP Networks and their strategic planning in NTT. In 1997 he joined Kogakuin University as a professor, and in 1999 he joined, Graduate School of Global Information and Telecommunication, Waseda University as a visiting professor, both in Tokyo, Japan. He is currently a Professor, Nankai University, Tianjin, China and a Professor Emeritus, Kogakuin University. He is a Fellow of IEEE and a Fellow of IEICE. He was appointed as a distinguished lecturer of IEEE Communications Society for 2006-2009 and 2011-2012, 2013-2014.

He is a founder of Communications QoS, Reliability and Performance Modeling series symposium at ICCs and Globecom. He served as co-chair for this symposium at ICCs and Globecom for 2002-2004. He is Ex-Chair and Advisory Board Member of IEEE Technical Committee on Communication Quality and Reliability (CQR-TC), Feature Editor on Standards (1993-1999), Senior Technical Editor (1999-2005) of IEEE Communications Magazine. He also served as Executive Chair, ICC2011 in Kyoto. From 1988 through 2000, he served as Vice-Chairman of ITU-T SG 13 (formerly CCITT SG XVIII), responsible for digital networks including GII, IP networks, NGN and Future Networks. He serves as Chair for National Committee on Next Generation Networks in Japan. He is also serving as Chair, R&D and Standardizations Working Group, Next Generation IP Network Promotion Forum. He is serving as IEEE Communications Society Director, Member Programs Development for 2014-2015 term. He was also elected as Board of Governor, IEICE and Chair, IEICE Standardization Committee for 2014-2016.

He has published more than fifty papers, and gave more than 120 talks including keynotes and invited talks at international conferences. He is author or co-author of nineteen books including "Designs of Telecommunication Networks"(IEICE, 1993, in Japanese), "Introduction to ATM Networks and B-ISDN" (John Wiley and Sons, 1997), "Multimedia Communications" (Academic Press, 2001), "Introduction to Information Networks-Fundamentals of Telecom & Internet Convergence, QoS, VoIP and NGN." (Coronasha Publishing, in Japanese, 2007).

His current interests include Information Networks including Broadband networking, Internet Interworking, IP telephony, NGN, Future Networks and their QoS aspects.