



SCTE - The Society for Broadband Professionals -

has pleasure in announcing its

AUTUMN LECTURE MEETING & AGM

**“THE NUTS AND BOLTS
OF BROADBAND”**

to be held on

WEDNESDAY 19th OCTOBER 2016

at

The Royal College of Surgeons of England (RCS)

Eleanor Davies-Colley Lecture Theatre (LT2)

35-43 Lincoln's Inn Fields

LONDON

WC2A 3PE

Registration at 9.00 am

“THE NUTS AND BOLTS OF BROADBAND”

09.00 **Registration**

09.30 **SCTE President’s Welcome**

09.35 **Lecture Chairman’s Welcome**

09.45 ***“Advances in Technology for High Power CATV Gain Blocks and the Related Challenges in Linearity Testing During Design and Volume Production”***

Rainer Hillermeier, Engineering Manager CATV Design
QORVO

This presentation will discuss the rationale behind the adoption of Si, GaAs and the GaN technologies for use in downstream output stage high power gain blocks. Innovation in this field has been driven by demand for wider bandwidth, higher linear output power capabilities and improved efficiency to help reduce power consumption. We will look at how new semiconductor and packaging technologies meet the current and future demands of DOCSIS 3.1 networks. The presentation will assess the qualitative and quantitative potential of new technologies and examine the challenges related to the development of distortion test systems to understand the impact of DOCSIS 3.1 testing up to 1.2GHz and beyond.

10.30 ***“Delivering Gigabit Speed to the Home – Next Evolution in Access Architecture”***

Tal Laufer, Director, Product Line Management for CMTS and CCAP
ARRIS

This presentation will cover the different ways in which an operator can deliver 1Gbps speed to its subscriber, using existing and future access and network equipment. It will review current architectures and future ones, as well as discuss possible migration scenarios. It will also review Integrated CCAP, Distributed CCAP architectures, DOCSIS 3.1 as well as Full Duplex DOCSIS updates and market trends.

11.15 ***“HFC Evolution from DOCSIS to FTTH”***

Jeff Finkelstein, CTO
COX COMMUNICATIONS

As exponential growth continues from 1982 to today, cable operators are being challenged to provide sufficient capacity to meet customer demands. This presentation will discuss technological and financial considerations for determining growth paths from DOCSIS 3.0 to DOCSIS 3.1 FDX, and cover facilities’ reduction potential for distributed access architectures.

12.00 **Questions**

12.10 **LUNCH**

13.30 ***“BSI’s Stance on BREXIT and the Creation of a Technical Specification for LTE Filters”***

Dave Hodges, Managing Director
BLAKEGLOW SYSTEMS LTD

A brief overview of the British Standards Institute attitude to BREXIT will be provided. This will be followed by details on the creation of Technical Specification TS50083-2-3, defining filter parameters to protect against the ingress of LTE signals.

- 14.15** ***“Networks Reshaped: 5G, Fronthaul and Fixed-Mobile Convergence”***
Vanesa Diaz, Market Development Manager - Access Networks, EMEA
CORNING OPTICAL COMMUNICATIONS
- An increasing need to offer premium services is fuelling mergers of mobile and fixed operators in the CATV and telecom industries. The result is stronger mobile-fixed-TV integrated operators who, for the first time, have the ability to adopt new market trends for both fixed and mobile networks to deliver a more cost-efficient network. This presentation explores some of the most relevant trends (5G, fronthaul, small cells, network convergence) and the impact that they can have on network design and costs.
- 15.00** ***“DOCSIS® 3.1 – An Overview (Part 1)”***
Ron Hranac, Technical Leader
CISCO SYSTEMS
- DOCSIS 3.1 is the latest Data-Over-Cable Service Interface Specifications. CableLabs® released version I01 of the new specification in late October 2013. DOCSIS 3.1 introduces a new physical layer, improved Forward Error Correction (FEC) and other features for high-speed data transmission on cable networks. Scalable to 10+ Gbps in the downstream and 1+ Gbps in the upstream, DOCSIS 3.1 supports services competitive with fibre to the home, but using cable’s HFC platform. Cisco’s Ron Hranac will provide an overview of DOCSIS 3.1 from a physical layer perspective. The presentation will include information on the following:
- Why DOCSIS 3.1?
 - Basic principles of Orthogonal Frequency Division Multiplexing (OFDM).
 - Spectrum allocation.
 - FEC performance enhancements.
 - New Proactive Network Maintenance (PNM) measurements.
- 15.45** **Break for Tea**
- 16.15** ***“DOCSIS® 3.1 – An Overview (Part 2)”***
Ron Hranac, Technical Leader
CISCO SYSTEMS
(see presentation description above)
- 17.00** **Questions**
- 17.10** **SCTE 2016 ANNUAL GENERAL MEETING**
- 17.30** **SCTE COCKTAIL PARTY**
The Royal College of Surgeons – The Surgeon’s Library
– an original 19th Century library steeped in history.

All attendees are very welcome to come along to the Cocktail Party.

PROGRAMME CORRECT AT THE TIME OF GOING TO PRESS

BOOKING FORM

SCTE Members

As usual, there is no charge for Members to attend the Lecture Meeting - just turn up. There is, however, an optional luncheon (with wine) at the RCS at the heavily subsidised rate of £15.00 plus VAT per person (ie £18.00). If you wish to reserve your place for lunch, it is essential that this is booked beforehand and so please complete the form below and return it together with your cheque* made payable to the SCTE.

Alternatively, bookings can be made online via the SCTE website:-

<http://www.thescte.eu/component/proforms/event-booking-form>

by telephone to the SCTE office on +44 (0) 1923 815500 or by email to office@theSCTE.eu

If you wish to bring any non-Member guest(s), please see the non-Member charges below and return the form to the SCTE office together with a cheque* for the appropriate amount.

Non-SCTE Members

The charge for attendance at the day's Lecture Meeting is **£50.00 plus VAT (ie £60.00)**, plus an optional charge of **£15.00 plus VAT (ie £18.00)** for luncheon at the RCS. For those of you who may subsequently wish to join the Society, we are pleased to announce that £20.00 of this fee is redeemable against your first full year's membership subscription provided that you apply by the end of October 2016.

If you wish to reserve places for the Lecture Meeting and/or luncheon, then please complete the booking form below and return it together with your cheque* made payable to the SCTE. Payments can also be made online through the SCTE shop at http://www.thescte.eu/acatalog/lecture_meetings.html

*** Payments may also be made by credit card - please contact the SCTE office.**

Please complete and return to: SCTE
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Tel: +44 (0) 1923 815500 Fax: +44 (0) 1923 8030203
Email: office@theSCTE.eu Website: www.theSCTE.eu

Name
Address
.....
Daytime Tel No Mobile Tel No
Email Address

SCTE Member YES*/NO* If NO, please send membership details YES*/NO*
* Please delete as applicable

1 Please reserve place(s) at the Society's Autumn Lecture Meeting on Wednesday 19 October 2016 in the names of the following person(s):
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Note: Non-Member charge for each attendee is **£50.00 plus VAT (ie £60.00)**.

2 Please reserve place(s) for the optional luncheon. Please note there is a charge of **£15.00 plus VAT (ie £18.00)** for each place booked.

I enclose a cheque for £ made payable to SCTE. All bookings will be confirmed.

Signed Date