

Invitation to Webinar

EMC AND ESD TESTING AND SIMULATION

23-24. November 2021

Webinar language is English.

Join the webinar and together with experts explore EMC and ESD implications and challenges in real-world scenarios, testing, and simulation to assure product compliances to EU, UK, US, Canada, and other markets.

The seminar is aimed specifically for industry professionals and is useful for designers, manufacturers, and users of electric and electronic products.

The seminar is organized in cooperation between Centria University of Applied Sciences (TRAIN-ECO project) and KOTEL Ry. KOTEL is an association for cooperation in the fields of research and development of electronics in Finland. It aims to advance the quality, reliability, and economy of the electronics industry. The cooperation includes the whole life cycle of a product: development, production, delivery, use, and service.

Webinar registration fee is 30 € incl. vat (24%), includes both days and is non-refundable.

Click [HERE](#) to register for the event

For more information about the webinar and in case of problems with registration contact antti.takalo@centria.fi

EMC implications and challenges for future
23rd November, 2021 8:45-14:00 (EET)

Key speakers from Eurofins E&E UK

- 9:45 *Webinar channel opens*
- 10:00 Welcome and KOTEL introduction (*Pasi Välimäki, Sami Lehtonen*)
- 10:15 Online training courses for industry (*Egidija Rainosalo, Centria UAS*)
- 10:30 Introduction - Eurofins E&E UK (*Nick Wainwright*)
- 10:45 Implications of adding Wireless functionality to a product for sale in UK/EU and USA & Canada (*Neil Bonter*)
- 11:15 Medical EMC EN60601-1-2 A1:2020 (*Dr Didier Bozec*)
- 11:45 *Lunch break (45 min)*
- 12:30 EMC for the Maritime environment (*Andy Coombes*)
- 13:00 Implications of the updates to ICNIRP standard (*Dr Rob Armstrong*)
- 13:30 Effects of Brexit in 2022 for UKCA and CE marking (*Nick Wainwright*)
- 14:00 *Break (15 min)*
- 14:15 Global Market Access for wireless products (*Alex Branton*)
- 14:45 Combining Standards (*Dr Rob Armstrong*)
- 15:15 *Seminar closing and final words*

ESD and ESD/EMC simulation misconceptions, lessons and challenges
24th November, 2021 8:45 – 14:00 (EET)

Key speakers: Toni Viheriäkoski, Cascade Metrology Ltd and Pasi Tamminen, Danfoss Ltd

- 8:45 *Webinar channel opens*
- 9:00 Welcome and opening words for day 2 (*Pasi Välimäki, Egidija Rainosalo*)
- ESD scenarios in real life by Toni Viheriäkoski**
- 9:15 Definitions and common misconceptions
- 10:00 Real world ESD and challenges in system level testing
- 10:45 Q&A
- 11:00 *Lunch (45 min.)*
- EMC and ESD simulation in real life and theory by Pasi Tamminen**
- 11:45 EMC simulation
- 12:30 ESD simulation
- Q&A
- 13:15 Online training experience discussion (*Egidija Rainosalo*)
Next seminars by KOTEL and final words (*Pasi Välimäki*)
- 14:00 *Seminar closing*

Meet the speakers!

Mr. Toni Viheriäköski

Mr. Toni Viheriäköski established electrostatics laboratory services for Nokia in 2001. He received iNARTE ESD engineer certification in 2004. He moved on to his own company, Cascade Metrology Oy in 2008. Currently, he is working in the field of electrostatics and ESD risk analysis for healthcare, medical, electronics, automotive and process industries.

Toni has written more than 30 publications related to electrostatics or ESD. He has been a chair of the Finnish STAHA Association since 2006. He was nominated a chair of the Finnish Standardization Committee SK101 in 2016. He received specialist qualification in business management in 2018.

Toni received 1906 award of International Electrotechnical Commission (IEC) in 2019. He is a member of WG17 and WG25 of EOS/ESD Association and WG5 of IEC TC101. He was nominated a convenor of WG 16 of TC101 in 2021.

D.Sc. (Tech.) Pasi Tamminen

Pasi received the M.Sc degree in Electronics Engineering from Oulu University, Finland in 1997 and continued to work in NOKIA Networks with automated production technologies, testing, machine vision, process control and design for manufacturability.

In 2001-2005 he was at VTT Technical Research Centre of Finland and worked with risk management, EMC/ESD and cleanroom control methods. He received the NARTE ESD Engineer certification in 2005.

Between 2005 and 2012 Pasi worked at NOKIA Mobile Phones by managing cleanroom technology and ESD/EMC/EMI control & design related projects globally in manufacturing and supported R&D, sourcing, and quality.

He joined Tampere University of Technology 2012 and received a Doctor of Science and Technology degree in January 2017. During 2015 he worked at Microsoft R&D on product EMC designs. In parallel, Pasi has worked with IEC and ANSI standardization bodies since 2006, done research on electrostatics, RF, EMC/ESD failures, IC and system EMC/ESD/RF qualification, and control methods with more than 50 publications.

Between 2017 and 9/2021 Pasi worked in EDR & Medeso with a focus on high frequency electromagnetics simulation methods and business development. Currently, he is working at Danfoss with EMC simulation methods.

Nick Wainwright

Nick is the National Business Line Leader, Industrial Electrical & Electronics Product Testing for Eurofins E&E UK, and also the CEO of Eurofins York. He is responsible for leading the development, implementation and execution of Eurofins strategy in the UK and sits on its European Management Committee.

Nick has over 30 years' experience in the TIC industry starting his career as an EMC test engineer. Today he is responsible for 4 businesses, consisting of 6 laboratories across the UK covering, EMC, electrical safety, radio and hazardous location testing as well as a calibration laboratory. He is also

chair of the Eurofins Working Group which co-ordinates the EMC and RF activities globally and is also a member of the equivalent working group on quality aspects. He is involved as a technical adviser to all Eurofins EMC laboratories and occasional auditor.

Nick has a BEng (Hons) degree in electrical and electronic engineering and an MSc with distinction in Electromagnetic Compatibility. He joined the York Electronics Centre, out of which York EMC Services (YES) grew, in 1990, becoming the Laboratory Manager when the laboratory moved from York to Castleford in 1996 and was instrumental in gaining accreditation for the laboratory for the first time.

Nick takes an active role in delivering training courses – both online and face-to-face - and has presented at exhibitions and peer reviewed conferences both in the UK and overseas. He is also a leading authority on UKCA marking.

Nick is passionate about service delivery, quality and customer satisfaction which is a constant focus in the E&E UK business.

As a Chartered Engineer Nick is a member of the Institution of Engineering and Technology (MIET), a member of the Institute of Directors (MIOD) and a senior member of the Institute of Electrical and Electronics Engineers (SMIEEE) where he is also on the Executive Committee in the UK.

Alex Branton

Alex is a Compliance Professional with a BSc in Physics and 8 years' experience in Quality Control & Product Compliance.

He has held a number of positions over the years including Compliance Manager at a well-known UK manufacturer, responsible for the compliance and safety of over 200 products.

Alex currently manages Eurofins UK Global Market Access team – who have extensive knowledge of approval requirements in all countries and markets.

The team specialise in Radio, EMC and Safety approval in: Asia, Africa, South America and more.

Alex also Chairs the Eurofins Global Market Access Working Group, which brings together GMA Professionals and Experts from all continents.

Dr Rob Armstrong

Rob has a PhD in Electronics from the University of York which he gained in 2013. Rob also holds a Master's degree and a Bachelor's degree in Physics.

On completing his PhD in 2013, Rob joined our Expert Services department full time as an EMC Engineer, having worked part-time on European funded York EMC projects while writing up his PhD.

Rob has worked on projects for customers in rail, automotive and industrial sectors. He has experience of bespoke and novel measurement systems, rail and automotive regulations and standards, EMC management and reverberation chambers including a specialisation in shielding effectiveness techniques.

Rob became a Senior Engineer in 2014 and took on the role of Consultancy and Training Manager in 2015.

As Expert Services Manager, Rob is responsible for the day to day running our internationally and UK focused Expert Services business. He manages our team of highly experienced EMC Engineers in all aspects of EMC management, bespoke testing, research, EMC risk analysis and Training. Activities are

mainly in the Rail Environment but also encompasses Nuclear, Industrial, Defence, Automotive, and Research and Development sectors

Andy Coombes

Andy has been working in the field of EMC since 1995. After completing a Diploma in Electrical and Electronic Engineering, he spent 12 years working for RFI Global Services (now UL) with 8 years as an EMC Test Engineer and Senior Engineer, in both the UK and USA, testing and managing EMC projects for a wide base of customers, including IT, Medical, Marine, Industrial, Cellular (Base Station and Mobile Handsets) and Microwave manufacturers. He spent the remaining 4 years there as Laboratory manager, running the ISO 17025 accredited lab.

From 2007 to 2018 Andy was UK, Ireland and Benelux EMC Product Manager for Rohde & Schwarz, where he managed the Sales, Technical Support and Training for their EMC Portfolio including EMI Test Receivers and Test Systems. This role involved working very closely with EMC professionals across many industries, from accredited EMC test labs, to global aerospace and defence companies and automotive manufacturers.

He joined Eurofins Hursley in 2018 as Technical Manager and has been Managing Director since March 2020.

At Eurofins Hursley, Andy combines his EMC technical, commercial and management experience, to help Hursley continue to deliver the highest levels of customer service, efficiency and quality to Eurofins customers.

Dr. Didier Bozec

Didier Bozec is Laboratories Director at Eurofins York, responsible for the management, operations and development of our UKAS accredited testing laboratories.

In addition to being one of our Executive Directors with overall responsibility of our Bristol, Leeds and Grangemouth laboratories, Didier also assumes the role of Laboratory Business Manager for our Grangemouth laboratory conducting its day to day management.

Background

Didier has more than twenty years' experience in the field of regulatory compliance as a company director, manager and consultant. His areas of expertise include electromagnetic compatibility (EMC), electrical safety, electromagnetic fields (EMF) and radio approvals for a wide range of electronics and associated industries.

Didier is passionate about delivering results, in conjunction with his teams, and being "hands-on" to achieve them. His approach has been a key success factor in the development and completion of two of our state-of-the-art and subsequently highly reputable test laboratories for the business; from project inception to delivery.

Didier prides himself on being known by, and accessible to, all of our customers and has built many strong and positive relationships over the years. He strives for excellence in all aspects of customer service, prioritising customer needs in terms of their product approvals' priorities above all else in his day-to-day responsibilities.

Didier has a unique blend of technical and managerial qualifications, in that he is a Chartered Engineer with a PhD in Solid State Physics and an MBA.

Neil Bonter

Neil Bonter has been an independent consultant running his own business for the past 12 years.

Specialising in the Radio Equipment Directive, EMC and Safety for CE compliance with testing, documentation and assisting customers with their compliance.

For many years the manager of the Regulatory and Notified Body department at a large UK test laboratory, Neil has a huge breadth of knowledge of global requirements for all industries.

Neil is a long standing member of the REDCA and supporter of SRCG. Neil is a regular speaker at TIC based events in UK.

A wealth of experience has been gained from more than 40 years in the electronics industry, commercial control systems, military fire control and domestic sound and vision.

Eurofins as organisation

Eurofins E&E

Eurofins E&E (Electrical and Electronics) is part of the Consumer Product Testing Division of the Eurofins Group and specialises in the testing, certification and compliance of electrical and electronic products.

Eurofins E&E currently operates 17 laboratories and offices in 9 countries and offers a global presence to manufacturers and retailers.

Key services lines include electrical safety, electromagnetic compatibility, radio and wireless testing, medical device certification, environmental and mechanical testing, hazardous location certification and well as global market access services, training, expert guidance, compliance support, performance and fit-for-use testing, reference noise sources and test equipment calibration.

Eurofins E&E UK

Eurofins E&E UK is part of the wider Eurofins E&E group based in the UK and spread across four businesses and 7 locations. The group consists of Eurofins York, Eurofins Hursley, Eurofins ETC and Eurofins CML.

Whilst the group provides services across a wide range of E&E sectors such as EMC, Radio/Wireless and Electrical Safety, some of the locations specialise in specific areas.

Eurofins CML is one of the leading providers of Hazardous Location certification services; Eurofins ETC is an ISO 17025-accredited test equipment calibration laboratory and specialises in military EMC testing and Eurofins Hursley provides extensive military and consumer EMC capabilities. Eurofins York, across four sites, provides EMC, Electrical Safety and Radio/Wireless testing and delivers training, expert services, compliance support and guidance, and reference noise sources.