

EMC & Compliance International 2023

TWEXperts, their TOPICS, Biographies & Timetables *(Final, 28 Feb 2023)*



TWEX – Ten minutes **W**ith an **EX**pert – free 10-minute consultations!
A completely new type of activity at exhibitions and conferences

A wide variety of experts (we call them TWEXperts) will be offering their advice for free, for up to 10 minutes at a time, during the EMC & Compliance International event in the main grandstand at Newbury Racecourse, 16th and 17th May, 2023

To help you decide whom best to visit, see '[TWEX TOPICS](#)' on pages 1-3,
and '[TWEXpert BIOGRAPHIES](#)' on pages 4-8

Then, to help plan your EMC&CI 2023 visit, see the '[TWEX TIMETABLE](#)' on page 9

The TWEXperts

| | |
|-------------------|---|
| Andy Degraeve | EMC Consultant, an Associate of Cherry Clough Consultants Ltd |
| Geraldine Salt | BSI Standards Development Manager for EMC, Energy, Oil, Gas |
| Ian MacDiarmid | Visiting Professor in Applied Electromagnetics at University of Liverpool |
| Paul Wolstenholme | 3C Test Ltd |
| Jeremy Smallwood | Electrostatic Solutions Ltd |
| Min Zhang | Mach One Design |
| Neil Bonter | CE & FCC Compliance Consultant (TCFs), Member of the REDCA |
| Rod Macpherson | Radiosmith™ |
| Dai Davis | Percy Crow Davis & Co |

TWEX TOPICS

Andy Degraeve

The Limit Line, an Associate of Cherry Clough Consultants Ltd

- Quick and Easy EMC Education using low-cost test equipment
- Quick and Easy EMC Diagnostics using low-cost test equipment

Geraldine Salt

BSI Standards Development Manager for EMC, Energy, Oil, Gas

- The standards-making process
- BS Online
- How to participate in International and European standards
- How to join a BSI Committee
- Demonstration of BSI standards development portal



Ian MacDiarmid

**Visiting Professor in Applied Electromagnetics
at the University of Liverpool**

- Electromagnetic Hazards (e.g. HIRF, EMC, EMP, DEW)
 - design, development, verification, qualification
- Installed antenna performance – design, development, verification, qualification

Paul Wolstenholme

3C Test Ltd, EMC Technical Consultant

- Automotive EMC Test Requirements for Vehicles and Components (Inc. Type Approval and OEM Corporate Requirements)
- Guidance on the Vehicle Electrical Architecture Design for EMC (Inc. HV Systems).
- Vehicle-Level EMC Problem Resolution.
- eMachine and Inverter Design for EMC

Jeremy Smallwood

Electrostatic Solutions Ltd

- Static electricity and electrostatic discharges (ESD)
- Real world ESD: What they're like and how they happen
- Electrostatics and ESD standards

Min Zhang

Mach One Design, an Associate of Cherry Clough Consultants Ltd

- Design for EMC
- Motor Drive Related EMI
- Power Electronics Related EMI
- Shielding and grounding
- EMI in facilities
- Automotive, Home Appliance, Industrial, Multi-media and Medical

Neil Bonter

CE & FCC Compliance Consultant (TCFs), Member of the REDCA

- RED (Radio Equipment Directive) compliance (EU)
- EMC Directive compliance (EU)
- Machinery Directive compliance (EU)
- LVD & Electrical Safety
- Electromagnetic Exposure Safety
- Technical file construction
- RISK assessment
- On-site EMC Testing

Rod Macpherson

Radiosmith™ Ltd, an Associate of Cherry Clough Consultants Ltd

- RF, Microwave and EMC design and testing to 50GHz
- Functional Safety (EN 61508).
- Automotive lighting
- Medical electronics
- Capacitive sensing
- Radiometric imaging
- PCB layout (Altium)
- Embedded software (Microchip PIC/AVR)
- 3D mechanical modelling
- Climatic (thermal) testing

Dai Davis

Percy Crow Davis & Co,

- Brexit
- CE and UKCA marking
- Northern Ireland and UKNI marking
- EU law
- Intellectual property in IT products
- Data protection, open source, IT security and Cloud computing



TWEXpert BIOGRAPHIES



Andy Degraeve **The Limit Line**, an associate of Cherry Clough Consultants Ltd

Andy Degraeve (IEEE Member) was born in Ghent, Belgium, on June 6, 1980. He received the M.S. degree in electronics and computer engineering from the KU Leuven, Technology Campus Ostend, Belgium, in 2014. In June 2014 he received a nomination for the best master thesis by the ie-net engineering association. From 2014 till 2018, he was a Research Assistant at the KU Leuven Campus Bruges, Research group ReMI, Reliability in Mechatronics & ICT (now called “M-Group” standing for “Mechatronics Group”). His main research interests included electromagnetic compatibility, immunity and functional safety in life or mission critical situations. In May 2018 he was a Technical Session chair at the joint IEEE EMC and APEMC symposium in Singapore, Singapore. From 2019 till 2020 he was the Technical and Product Manager at Schlegel Electronic Materials, a member of eMei group, in Belgium, with a focus on shielding, absorbing and thermal management materials. From 2020, he is focussing on EMC education and diagnostics using low-cost test equipment, and became an Associate of Cherry Clough Consultants Ltd to help provide independent expertise in good, cost-effective EMC design, worldwide.



Geraldine Salt

BSI Standards Development Manager: EMC, Energy, Oil, Gas,

Geraldine is a Standards Development Manager at the British Standards Institution (BSI). Part of her role involves managing a number of national committees which are responsible for UK input to ISO/IEC Standards and CEN/CENELEC ENs.

The committees which she manages are mainly in the electrotechnical area and cover subjects including:

- Electromagnetic Compatibility (EMC)
- Safety of household and similar electrical appliances
- Electrotechnical technical policy

Geraldine has previously been Secretary to the international committee responsible for standards on Lighting and the European Committee responsible for standards on Automatic Controls for Household Use.

She is also Committee Manager to the BSI Committee responsible for industrial valves, steam traps, actuators and safety devices against excessive pressure.



Ian MacDiarmid

Visiting Professor in Applied Electromagnetics at University of Liverpool, 35 years in aerospace electromagnetic engineering. The final twelve years as Head of Electromagnetics at BAE Systems

Ian worked at BAE Systems from April 1978, starting as an EMC Test Engineer, then becoming the Company Specialist in EMC in 1980. As the subject broadened to include Low Observability, Installed antenna performance and EW installed systems, Ian became a Company Consultant in Electromagnetics, ultimately becoming Head of Electromagnetics in 2002. In 2007 Ian was appointed as a Company Engineering Fellow. Ian retired from BAE Systems, reluctantly, due to ill-health, in September 2013.

Ian has been actively involved with the IET for many years, including Chairman of three specialist groups over the years and continues to be a member of the TPN, also a regional PRA, Registration Assessor and Fellow Assessor and interviewer and referee for two journals.

Ian has been a Visiting Professor at the University of Liverpool, Department of Electronic Engineering since 2012.



Paul Wolstenholme EMC Technical Consultant, 3C Test Ltd

Paul started in the industry in 2011 as an EMC Test Engineer, before developing through various roles within a test lab environment and more recently working for a UK based automotive OEM. Experienced in both component and vehicle-level automotive EMC test requirements, test methods and problem resolution techniques. Paul has worked with a number of global OEMs, and their suppliers, delivering EMC compliance for multiple vehicle programmes.

Specialising in resolving the EMC issues associated with electrified vehicles and High Voltage components, Paul actively encourages and supports automotive manufacturer's with ensuring greater EMC engagement in the early design phases of these components and new vehicle electrical architectures to ensure that EMC best practices are instilled into the design of both the components and vehicles.



Jeremy Smallwood

Electrostatic Solutions Ltd

Jeremy designed electronic instruments before completing his PhD in electrostatic discharge ignition studies.

In 1998 he formed Electrostatic Solutions Ltd, providing electrostatics consultancy, training and R&D services.

He works with British and IEC standards and was awarded the 2010 ESD Association Industry Pioneer Award and 2017 International Fellow Award at Electrostatics 2017.



Min Zhang

Mach One Design, an Associate of Cherry Clough Consultants Ltd

Dr. Min Zhang received his PhD within Newcastle University's Electrical & Electronics Engineering department in 2013. His research was in novel power switching schemes to reduce EMI emissions, and his research papers have received many citations.

Since then, he has worked as an EMC specialist on milestone projects with Dyson Technology, UK. With a proven track record designing state-of-the-art electronics and electric machines with minimal EMC issues, Min then established the EMC capability for the Dyson Electric Vehicle project.

Following the closure of that project, Min started Mach One Design and became associated with Cherry Clough Consultants Ltd to provide independent expertise in good, cost-effective EMC design, worldwide.

Min's in-depth knowledge in power electronics, digital electronics, electronic machines and product design is sure to benefit your product's design, helping you win the race against time and cost.



Neil Bonter **Independent CE & FCC Compliance Consultant (TCFs), Member of the REDCA**

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. Many clients now require more extensive support into other world markets and TCFs assists with compliance into many other countries such as North America, Australia and many Asian countries.

For many years the manager of the regulatory and Notified Body department at RFI and a long-standing member of the REDCA and supporter of SRCG. 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.



Rod Macpherson **Independent Consultant: RF, EMC, and much more!**

Rod is a Chartered Engineer having 32 years industry experience, with special interests in RF, Microwave and Functional Safety (EN 61508).

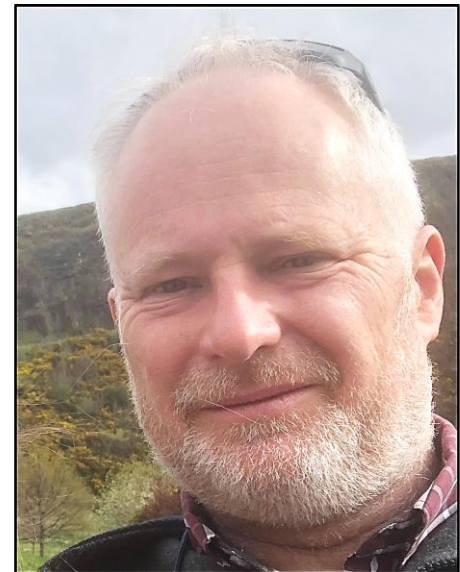
For 13 years he has provided independent consultancy services through Radiosmith™ Ltd, working on diverse projects including the design and development of:

- RF and Microwave products
- automotive lighting
- medical electronics
- capacitive sensing
- radiometric imaging at 23GHz
- etc...

Rod is experienced in PCB (Altium) and with embedded software (Microchip PIC/AVR).

Radiosmith™ has facilities for:

- 3D mechanical modelling
- Testing RF and EMC to 50GHz
- Climatic (thermal) testing



Dai Davis Percy Crow Davis & Co

Dai Davis is a Technology Lawyer. He practices as a solicitor but is also a qualified Chartered Engineer and Member of the Institution of Engineering and Technology. Dai has consistently been recommended in the Legal 500 and in Chambers Guides to the Legal Profession for over 25 years. He has two master degrees: one in Physics, the other in Computer Science.



Having been national head of Intellectual Property Law and later national head of Information Technology law at Eversheds for a number of years, Dai has for the past decade been a partner in his own specialist law practice, Percy Crow Davis & Co. Dai advises clients throughout the country on intellectual property, computer and technology law subjects. A third “super specialism” that Dai has practised for over two decades is high-tech product safety, including advising on the CE, UKCA and UKNI Marking and product recall.

He is primarily a non-contentious lawyer, advising clients on technology-related commercial agreements. Being a technologist, Dai often works with clients who are involved in cutting edge technologies. He has recently been elected as a trustee of the UK Cyber Security Centre.

Dai is a non-executive director of FAST (The Federation Against Software Theft) and a Liveryman of the City of London through the WCIT (Worshipful Company of Information Technologists). He is a trustee of the UK Cyber Security Council. He has been a Council member of the Licensing Executives Society of the United Kingdom, a body of professionals dealing in intellectual property licensing, for more than a decade. He is widely published and an experienced public speaker and writer. He can be contacted on 07785 771 721 or mail@daidavis.com.



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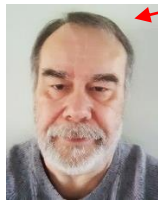
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TIMETABLE for EMC & Compliance International

Please turn up for the session(s) you want, and wait for your TWEXpert to become free



| | Tuesday 16 th | | | Wednesday 17 th | | |
|-------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Session 1 09:00 - 10:30 | Session 2 11:00 - 12:30 | Session 3 14:00 - 15:30 | Session 1 09:00 - 10:30 | Session 2 11:00 - 12:30 | Session 3 14:00 - 15:30 |
| Andy Degraeve | | | | | Yes | |
| Geraldine Salt | | Yes | Yes | | | |
| Ian MacDiarmid | Yes | | | | | Yes |
| Paul Wolstenholme | | | Yes | | Yes | |
| Jeremy Smallwood | | Yes | Yes | | | |
| Min Zhang | | | | Yes | | Yes |
| Neil Bonter | Yes | Yes | | Yes | Yes | Yes |
| Rod Macpherson | | | Yes | | Yes | |
| Dai Davis | | | Yes | | | Yes |