

## Meet the new Technical and Professional Network Communities Committee (TPN-CC)



### Professor Ferdinando Rodriguez y Baena (TPN-CC Chair)

Ferdinando Rodriguez y Baena graduated with a First Class Honours degree in Mechatronics and Manufacturing Systems Engineering from King's College London in 2000. He then joined the Department of Mechanical Engineering at Imperial College, where he gained a PhD in Medical Robotics. He is now Professor of Medical Robotics within the Department of Mechanical Engineering, where he leads the Mechatronics in Medicine Laboratory.

His past research has focused on development of intra-operative registration methods suitable for minimally invasive knee replacement surgery with a hands-on robot. His work, which was carried out in collaboration with an Imperial College spinout, the Acrobot Company Ltd. (which was acquired by

Stanmore Implants Worldwide in 2010, and the rights for which were sold to Mako Surgical in 2013), has been presented widely in both journal publications and peer reviewed conferences, and contributed to the world-first robotic assisted intervention in unicompartmental knee arthroplasty. Prof Rodriguez y Baena's current research interests lie in the application of mechatronic systems to medicine, in the specific areas of clinical training, diagnostics and surgical intervention. [Find out more.](#)



### Bridget Morgan

Bridget is a professional chartered electrical engineer with a rare blend of technical and substantial regulatory knowledge and experience. She had a successful career at Ofgem with lead roles in the development and implementation of energy policy changes including offshore electricity transmission and smart metering.

In 2010, Bridget set up her own company – Bridge-it Advisory Services Ltd – offering regulatory framework advice and analytical support, compliance assessment and impartial, dispute resolution services on a consultancy basis. Bridget has a sound understanding of technical factors relevant to electricity networks and proven ability to clearly convey information to and also gather information from, different audiences (e.g. wider public, industry experts).

Bridget volunteers as a STEM Ambassador and enjoys working with schools at one-off events and as a mentor for small team project work. She continues to seek opportunities to share honest, positive information about her experiences as an electrical engineer with pupils that are studying STEM subjects.



### Dr Chris Mann

Chris is an enthusiastic, driven, professional Physicist/Engineer and entrepreneur. He has held the position of Chairman on the IET RF and Microwave TPN Executive panel for the past two years.

He has worked in the start-up environment, industry and academia in the UK and abroad. He was co-founder of ThruVision Ltd, a hi-tech start-up company spun out of the Rutherford Appleton Laboratory (RAL) in Oxfordshire and the European Space Agency. In 2002 he co-conceived and was co-project manager for the ESA StarTiger programme.

He has spent the early part of his career working in Space science at RAL developing space instrumentation. Being innovative, he is listed as single or joint inventor on over ten patents and patent applications.

In taking a high technology start up from two people to over forty employees he gained considerable experience in both product development, manufacturing, commercial exploitation and raising hi-tech investment.

He is currently the Scientific Advisor to Digital Barriers: ThruVision, the supplier of a unique person screening product. He provides technical direction to the Engineering team and is instrumental in carrying out the future product development programme. [Find out more.](#)



### Garreth Freeman

Garreth is an Electrical Power Engineer with experience in delivering projects in both the UK and Ireland. His previous experience includes system design and senior planning engineer within a national Distribution Network Operator. Both roles have given him experience in strategic network planning, budgeting, financing and regulatory standards with the current scope of his role requiring budgetary governance on approximately 17 million pounds worth of capital expenditure per annum.

The committee is of particular interest to Garreth due to the focus on technical aptitude, strategy writing and implementation, financial consideration and communication between the different TPN's through appropriate stakeholder engagement and networking.

The next steps in his career are the attainment of engineering chartership, undertaking exams with the Association of Project Management, and undertaking an MBA.



### Dr Ivor Morrow

Ivor gained his BSc (Hons) in Physics and his MSc in Electronics from Queens University of Belfast in 1988 and 1989 respectively. After a period in industry with BAE at Warton Aerodrome he joined Cranfield University in 1993 to undertake a PhD graduating in 1996. He was then a Research Fellow at Stellenbosch University in 1997 before taking up a Senior Research Fellowship at Delft University in 1998. He re-joined Cranfield University as a Lecturer in 2002 and was promoted to Senior Lecturer in 2006.

Ivor has given undergraduate courses and currently teaches master level in the following subjects; antennas, propagation and electromagnetic devices, developments in communication and radar sensors and computational electromagnetic techniques.

You can find out more about Ivor's professional activities, active areas of research, clients, and publications [here](#).



### Mark Curtis

Mark is electro-mechanical design engineer and has enjoyed a career in engineering spanning more than 35 years. Starting with an apprenticeship in pressure vessel and heat exchange manufacture, he has worked for small, medium and large enterprises designing and engineering such products as tobacco machinery, professional audio equipment, domestic housewares and much more. He led a management buyout to form a design consulting and software firm now in its 25th year, and that is regarded as a world-leader in the efficient design of durable goods through innovative approaches and counts firms such as JCB, BMW, Ford, Thales, NCR, BAE, and Whirlpool amongst the firm's clients.

Concurrently with his engineering career, Mark also spent over a decade in the NHS as a board director including more than 6 years as Chairman of the board. During his tenure, his roles and responsibilities varied and included Chairman of the Audit Committee, member of Finance and Performance Committee, Governance Committee, and IM&T Strategy Committee.



## Ronan Haddow

Ronan is a Project Engineer for Scottish Power Energy Networks working in Transmission Operations Department. He gained a Bachelors Degree in Mechanical Engineering and then went on to study for his Masters Degree in Applied Economics, with a focus on the energy industry. This peaked his interest in working in the Energy industry to help shape its future.

In 2013 he joined Scottish Power Energy Networks where he spent 12 months on the IET accredited Graduate Training Scheme, involving a series of placements through the business ranging from system design to field operations..

He is currently working within the Transmission Operations team focussing on the management and delivery of their RIIO-T1 investment programme. This involves delivering overhead line, maintenance and capital work programmes on 132kV, 275kV and 400kV networks. From his time spent working on the network he has gained deep knowledge and experience of circuit breakers, transformers, substation design and network protection.

Ronan is looking forward to helping to develop the TPN communities and as a result increase learning and development opportunities across the IET.



## David Houssein (IET staff)

David is the IET's Communities Strategic Development Manager. David has overall responsibility for the strategic development of the IET's entire portfolio of 20+ Technical & Professional Networks, 100+ Local Networks, and six member-led governance boards. Additionally, he has responsibility for the leadership of a staff team of two Local Network Managers, two International Community Managers, three Community Managers and three Senior Community Managers. Collectively, they will deliver a portfolio of over 1,700 world-class activities around the globe for over 125,000 delegates every year, and support around 1,500 volunteers to help

achieve this.