

PAEN Committee 2023

Chair



Professor Graeme Burt

Graeme is an international expert in the development of RF systems for particle accelerators covering RF amplifiers and RF cavities for a range of applications from high energy physics, light sources and medical accelerators. He teaches electronic & electrical engineering at Lancaster University as well as being a member of the Cockcroft Institute. He is currently the technical coordinator for HL-LHC-UK and has co-authored a textbook on accelerator science. He is the co-founder of the particle accelerator engineering network. Graeme is also very passionate about student mental health and increasing awareness about this subject.

Committee



Rita Morgado da Silva

Rita is a Mechanical Engineer by background currently working in Elekta Limited as the Hardware Systems Engineering Manager for Linac Solutions. She joined Elekta back in 2013 as a Graduate Mechanical Engineer straight after completing her Mechanical Engineering studies in University of Surrey. A highlight has been working as part of the team that successfully released Unity, Elekta's MR-Linac solution.

Rita says "I have been attending the PAEN annual meeting for a few years (and even contributed as a speaker twice now). As a key attendee, I understand and appreciate the importance of this network and I wish to be a more active contributor. As such, I am thrilled to be a committee member of the UK Particle Acceleration Engineering Network and looking to bring a fresh approach and different point of view to PAEN due to my Mechanical and System Engineering background in the world of Accelerators".

Technical areas of expertise and areas of interest:

- Beam Generation (SME in Mechanical and System integration)
- Mechanical Engineering
- Reliability
- Sustainability
- Particle accelerators in medical devices application (Radiotherapy)

Out of work, Rita loves playing competitive volleyball (indoor and beach), travelling the globe, snowboarding, cooking (and eating J), hiking, reading and listening to music.



Martin Court

Martin is currently an Electronics Engineering Manager at Elekta leading a team developing medical linear accelerators. Martin originally joined Elekta as a team member of the Beam Generation team and contributed to the development of High Voltage and RF generation solutions. Before Elekta, Martin designed high voltage power supplies to power travelling wave tubes used in radar as well as high voltage low noise solutions used in mass spectrometry and industrial X-Ray applications. Martin is very passionate about STEM outreach teaching young people about the possibilities of engineering and also about continuous professional development of Engineers whatever stage of their career.



Alan Letchford

Alan joined the Rutherford Appleton Lab. in 1987 as an electrical technician on the operations crew of the ISIS accelerator. He subsequently spent periods as a technician in the Synchrotron RF and Linac Groups before completing his engineering degree. Following his degree Alan spent two years in Germany, first at FZJ Julich studying beam dynamics and designing the linac for the original ESS project, then at Frankfurt University learning about the design and construction of RFQs. Back at RAL he led the ISIS Pre-injector Upgrade project before becoming the Linac Group Leader. Alan is currently head of Linac R&D



Dan Faircloth

Low Energy Beams Group Leader at ISIS

Electrical Engineer with a background in High Voltage Engineering

Over 20 years working in ion sources

Special Interests are:

- Ion sources
- Particle accelerators
- Ion thrusters
- Plasmas
- High voltage design
- Magnetic design
- Large scale particle-in-cell plasma simulations
- Research and development
- 24x7 facility operations

Author of over 100 published papers

International advisory committee for CERN, IPAC, ICIS, NIBS

Chair of NIBS2016 and NIBS2020

Delivered hardware to CERN, CSNS, ESS Bilbao, FNAL

Founder of the Particle Accelerator Engineering Network

Lecturer for John Adams Institute, Cockcroft Institute and CERN Accelerator School



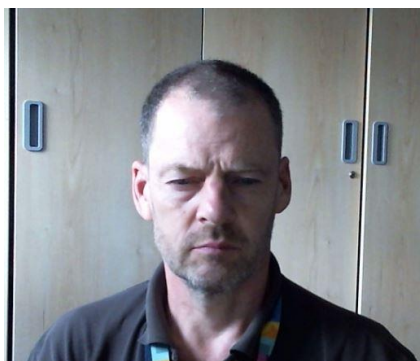
Mike Glover

Mike is a chartered engineer who is currently responsible for the ISIS Neutron and Muon facilities electrical distribution, magnet power systems and the accelerator controls. During his time at ISIS Mike has gained experience in the design and operation of accelerator magnets and their power supplies, synchrotron RF ferrite resonant cavities and low power RF controls. Mike is the lead division head within ISIS for ensuring the facility operates to meet its environmental sustainability targets aimed at achieving net zero operation. As an ex-member of the graduate training program Mike is an active graduate mentor and supporter of the STFC apprenticeship training scheme.



Laura Corner

Dr. Corner is a lecturer in laser accelerator science in the School of Engineering, University of Liverpool, and also works at the Cockcroft Institute of Accelerator Science and Technology based at Daresbury Laboratory. She studied theoretical physics at Imperial College and after completing her PhD in photorefractive materials there she moved to Oxford to carry out research in many areas of laser science, including novel diode sources for ultrasensitive spectroscopy and attosecond pulse generation, before moving to the John Adams Institute for Accelerator Science. She was appointed as lecturer at Liverpool in Jan 2018 and her current research interests include the application of lasers to all areas of particle accelerator science, especially novel high gradient techniques.



Steve West

Steve is an electrical engineer in the Magnet Power Supplies Group at Rutherford Appleton Laboratory where he is responsible for the 'White Circuit' that runs the main magnets on the ISIS accelerator. His work spans both operational support and development of new equipment for the main-magnet power supply system. He is also involved in the graduate scheme and organises mentoring for the IET graduates across the organisation. Other work interests include sustainability and reliability; a strong motivation for the latter being a wish to reduce the need to come in out-of-hours to fix problems.



Rebecca Seviour

Rebecca Seviour is a research Professor, Director of the Ion Beam Centre, Head of Accelerator Research at the University of Huddersfield, and non-executive Technical Director for Alceli Ltd. Prior to joining Huddersfield she held the prestigious Lise Meitner Professorship at Lund University (Sweden). Primarily her research focuses around charged particle and EM wave interactions mediated by novel materials and subwavelength structures, for RF generation, amplification and particle acceleration.



Imran Tahir

Imran Tahir received the B.Eng. (Hons.) degree in Electrical & Electronics Engineering from the University of Engineering and Technology, Lahore, Pakistan, in 2000. He pursued his career in digital phase locked loops for wireless communications before joining Lancaster University Engineering Department in 2003, to conduct research work on frequency and phase locking of CW Magnetrons for super conducting Linac applications and received the Ph.D. degree in 2009. His parallel research work was on low level RF control for phase synchronisation of crab cavities during this time. He joined Rapiscan Systems in 2010 where he worked on X-ray control systems and evolution of Linac systems specific to cargo scanning to meet needs of the industry. In 2018 he joined Teledyne e2v and continues to work on optimisation and enhancement of Magnetron based RF systems for radiation oncology Linacs, in light of current and future demand. His interests include Linac RF applied engineering, Magnetrons & modulators, phase synchronisation and feedback control systems.