Krikor B. Ozanyan, MSc PhD

SMIEEE FInstP FIET FHEA(rp)
Head of Sensors, Imaging and Signal Processing

School of Electrical and Electronic Engineering
Faculty of Engineering and Physical Sciences
The University of Manchester

Degrees:
MSc in Engineering Physics (Semiconductors)
PhD in Solid-State Physics

Membership of learned bodies:
- Institute of Electrical and Electronic Engineers, IEEE (USA), Senior Member.
- Institute of Physics, IoP (UK), Fellow. Chartered Physicist.
- Institute of Engineering and Technology, IET (UK), Fellow
- Higher Education Academy (UK), Fellow and Registered Practitioner.

Professional:
- IEEE Sensors Council AdCom Member and representative of the IEEE Photonics Society, 2009-pres.
- Associate Editor and Member of the Editorial Board of IEEE Sensors Journal (USA), 2005-pres.
- Lead Guest Editor of IEEE Sensors Journal Special Issue "Sensors for Industrial Process Tomography"
- Member of the Optical Group committee of the Institute of Physics (UK) 2006-pres.
- Organiser and chair of special sessions of IEEE, IoP and VCIPT conferences
- Organising and advisory committees of a number of leading international conferences
- Referee for research funding bodies (EPSRC, EC) and major scientific publishers (IEEE, AIP, IoP, Elsevier, etc).
- Consultant for *Ciba Speciality Chemicals* (UK) and *Dynavisel ARBEXA Industrier AB* (Sweden).

Research Interests, Funding and Output:

Sensors:
- Portable instruments for fluorescence monitoring (EPSRC, The Royal Society)
- Controlled receive aperture sensing with optical/gamma detectors (Johnson Matthey/VCIPT)
- Semiconductor devices and materials for optical sensing (UV-VIS-IR-THz)
- Optical measurements, incl. tomography, in chemical reactors (British Petroleum/VCIPT)
- Fibre-optics sensors for Tomography
- Multi-modality sensors

Imaging:
- Spectroscopic Optical Tomography with scanning sources (NIR-MIR)
- Guided-Path Tomography (DC/AC low frequency, optical)
- Temperature Tomography for industrial applications (EPSRC, Rolls-Royce; NIR toTHz)
- Optically Excited Fluorescence Auto-Projection Tomography (UV-VIS)
- Multi-channel THz tomography with portable sources
- Image reconstruction from a limited number of views

Signal processing
- Multi-channel Digital Signal Processing (DSP) system architectures for hard-field tomography
- Measurement modalities (lock-in detection, balanced ratiometry, etc.) for reconfigurable multi-channel DSP systems with programmable logic
- Tomography reconstruction software for dedicated multi-channel DSP systems.

- Total number of publications: 217