**UESTC DUAL PHD – RESEARCH LEADERS**

**Research Areas**

Professor Muhammad Imran

Dean University of Glasgow, UESTC

Fellow IET, SMIEEE, DIC, Senior Fellow HEA

5G and Beyond Communication

Block chain

https://www.gla.ac.uk/schools/engineering/staff/muhammadimran/

Dr Qammer Abbasi

Dr Abbasi is the Program Director for the Dual PhD

RF and non invasive sensing.

Biomedical applications of millimeter and terahertz communication.

Wearable and Implant sensors and communication.

Antenna design for 5G and beyond.

RF design and radio propagation.

Antenna interaction with human body.

Body centric wireless communication issues.

Agritech.

Intelligent reflective surfaces for 6G

<https://www.gla.ac.uk/schools/engineering/staff/qammerabbasi/>

Professor Asen Asenov

Leader of the Device Modeling Group.

Development of advanced drift diffusion, Monte Carlo and quantum transport simulations tools focused on atomic scale CMOS statistical variability and reliability.

Statistical compact model extraction.

Statistical circuit simulations.

Development of nano-bio simulation tools.

<https://www.gla.ac.uk/schools/engineering/staff/asenasenov/>

Professor Jon Cooper

Non invasive RF Sensing/Quantum Sensing –

Remote modelling for healthy living and smart homes.

Biomedical devices.

<https://www.gla.ac.uk/schools/engineering/staff/jonathancooper/>

Professor David Cumming

Medical sensors and systems.

CMOS integrated circuits and biosensors.

VLSI design for sensor applications.

Lab-in-a-pill.

Imaging technology for visible, mid-IR and terahertz applications.

Nanotechnology and photonics, including metamaterials and surface plasmon resonance.

<https://www.gla.ac.uk/schools/engineering/staff/davidcumming/#researchinterests>

Professor Daniele Faccio

Photonics.

Optical devices, nonlinear optics and ultrafast optics.

Imaging and quantum technologies applied to both imaging and sensing.

Quantum sensing devices.

<https://www.gla.ac.uk/schools/physics/staff/danielefaccio/>

Professor Richard Hogg

Light sources – communications and sensing.

UV

Laser diodes and super luminescent diodes.

<https://www.gla.ac.uk/schools/engineering/staff/richardhogg/>

Professor David Hutchings

Photonics and integrated photonics.

Non-linear optics.

Quasi phase matching.

<https://www.gla.ac.uk/schools/engineering/staff/davidhutchings/>

Professor Anthony Kelly

Single frequency semiconductor lasers with communications applications.

Next generation transmitters.

<https://www.gla.ac.uk/schools/engineering/staff/anthonykelly/>

Professor Martin Lavery

Optical communications and sensing.

Free space optics.

Currently working on optical and wireless interface technology with Huawei.

Sensing – currently has an active project developing new imaging sensors.

<https://www.gla.ac.uk/schools/engineering/staff/martinlavery/>

Professor John Marsh

Semiconductor laser technology and integrated optics.

Photonic integrated circuits.

THz devices.

<https://www.gla.ac.uk/schools/engineering/staff/johnmarsh/>

Professor Marc Sorel

Integrated optics.

Silicon photonics.

Semiconductor lasers.

Ultrashort pulse laser diodes.

Coupled ring resonators on silicon-on-insulator.

InSb-based midIR LEDs for gas sensing.

<https://www.gla.ac.uk/schools/engineering/staff/marcsorel/#researchinterests>

Professor Roy Vellaisamy

Photonic based sensing.

Intelligent devices and systems for sensing application.

Wearable thermoelectric and piezoresistive devices.

Neuromorphic devices.

<https://www.gla.ac.uk/schools/engineering/staff/royvellaisamy/>

Professor Edward Wasige

 GaN device technologies for power electronics and for microwave electronics, and on indium phosphide (InP) based device and integrated circuit (IC) technologies for microwave, mm-wave and terahertz (THz) electronics

<https://www.gla.ac.uk/schools/engineering/staff/edwardwasige/>

Professor Jonathan Weaver

Sensor fabrication for nanotechnology.

Thermal characterisation for materials and devices.

Low temperature measurements.

<https://www.gla.ac.uk/schools/engineering/staff/jonathanweaver/>

Professor Martin Weides

Cryogenic microwave circuits.

Low temperature measurements.

Superconducting quantum circuits.

<https://www.gla.ac.uk/schools/engineering/staff/martinweides/>

Professor Huabing Yin

Single-cell analysis.

Portable devices for diagnosis.

Engineering cellular microenvironments.

Microfluidics.

Optical biosensors.

Surface patterning.

Interfaces and biomaterials characterisation.

Atomic Force Microscopy on biological samples.

<https://www.gla.ac.uk/schools/engineering/staff/huabingyin/#researchinterests>