PhD in X-ray Astronomy 1983 Leicester University. Developed CCD detectors for various space astronomy missions. Program Manager for Space Missions, Penn State University 1990-1994. Instrument Team Leader for XMM Science Team, European Space Agency 1994-2002. Advanced Technologies Office ESA, Instrument Scientist developing sensors and high energy optics 2002-2007. Study Manager and Payload Development Manager for EUCLID and PLATO 2007-2009. Study Scientist for IXO, Athena, LOFT and AstroH missions 2009-2013