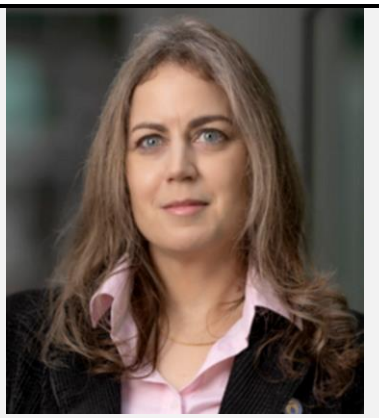

Dr. Ibolya E Kepiro

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Ibolya Kepiro obtained her PhD from Imperial College London (UK), where she studied *in vivo* high-resolution retinal imaging for clinical diagnostics. She was involved in several international projects leading the development of 3D structural imaging approaches combining fluorescence light microscopy with electrophysiology, drug delivery modelling in clinical administration and contributing to the design of nanotechnology strategies for the treatment of diabetic eye diseases.

Dr Kepiro then joined the National Physical Laboratory, the National Measurement Institute of UK. Her current research focuses on applying high-resolution and correlative imaging (including light- and electron microscopy with chemical imaging) and characterization of self-assembly model systems to support and promote the advancement of synthetic biology at the high metrology order. She develops reference materials for electron microscopy applications to improve measurements at the nanoscale. She is actively involved in VAMAS TWA 40 and CAWG (Cellular Analysis Working Group) in CCQM at BIPM coordinating international inter-comparison studies aimed at validating intra- and extra-cellular synthetic biologics which feed into new international standards for life sciences and diagnostics; the recent round robin study she led was a Covid-19 response project in support of viral diagnostics and vaccine development by electron microscopy. Dr Kepiro had a secondment at BIPM (France) in international collaboration with partner National Laboratories leading the Reproducibility for Experimental Sciences Project in the “Clinical and life sciences” field. She received the Emerging Alumni Leader Award (2026) from Imperial College London recognising her outstanding achievements in diagnostic healthcare.

Dr Kepiro is a fellow of Royal Society of Medicine (RSM), Pathology Council Section member at RSM, member ISO TC 229 Nanotechnology and ISO TC 334 - Reference Material, ISO TC 194 Clinical and biological evaluation of medical devices, British Society of Antimicrobial Chemotherapy, International Society of Amyloidosis, European Society of Biomaterials, Royal Microscopy Society and European Microscopy Society.