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Professor Archie Howie, CBE, FInstP, FRS

Cavendish Laboratory, University of Cambridge.



For his major contributions to physics through his pre-eminent research in the field of electron microscopy and his service to the Institute of Physics

Archie Howie's research has been highly influential in the field of electron microscopy for more than 50 years. He pioneered the use of transmission electron microscopy in the 1960s and his papers from the period, along with his co-authored book *Electron Microscopy of Thin Crystals*, defined the field.

Since then he has continued to develop theoretical ideas to allow investigations in systems ranging from amorphous materials to zeolites. He has made substantial contributions to the underlying theories of electron scattering, including important contributions to inelastic scattering theory. He has received numerous awards for his research, including the IOP's Guthrie Medal in 1992 and a CBE for services to electron microscopy. He was elected as a Fellow of the Royal Society in 1978 and awarded its Royal Medal in 1999.

Howie has also made a substantial contribution to the Institute of Physics and the wider physics community. He has served as a member of the IOP Council and has also been a member of both the CPhys Accreditation Panel and its successor, the Degree Accreditation Committee, where he was influential in developing the accreditation scheme itself. In total he served as an accreditation assessor for 10 years.