

Thermal Design of an RFQ Cell for the Radio Frequency Quadrupole under construction for ISIS, G.R. MURDOCH, Rutherford Appleton Laboratory; H. VORMANN (Johann Wolfgang Goethe Universitat) - A high duty cycle Radio Frequency quadrupole accelerator is being designed and constructed under a collaboration between the Johann Wolfgang Goethe Universitat, Frankfurt, Germany and the CCLRC, Rutherford Appleton Laboratory, UK. This paper discusses the design of the cooling of an RFQ cell, the finite elements analysis of a thermal model under predicted heat load conditions and experiments to confirm the validity of the model.