



MY9700739

RP2 – PHYSICS / RADIOGRAPHY

Application of EDXRF in the Study of Body Composition

D A Bradley

Asia Lab (M) Sdn Bhd, Cheras, Kuala Lumpur, Malaysia

Energy Dispersive x-ray fluorescence (EDXRF) is rapidly becoming established as a powerful tool in the study of body composition. Particular foci of attention are the monitoring of heavy metal exposure, either in the living environment or occupationally, biological processes, organ dysfunction and the efficacy of therapeutic regimes including chelation. The relative simplicity of the facilities which are required have allowed increasing interest to be shown in the development of portable in-vivo systems. This talk will attempt to review some of the important developments which have occurred. Efforts to enhance the ratio of measurement sensitivity to radiation dose will be highlighted. Examples will include monitoring of occupational Pb exposure and possibilities for the monitoring of iron overload which sometimes occurs in association with the treatment of thalassaemia.