bold lines, while the internal negative discharge is seen in similarly bold arrows. The direction of the arrows indicates the direction of current flow.

Now, on the passage of the energising current, the material making up the chargeable source will store the energy in a way and a mode determined by that mineralisation. As the induced polarization effect is proportional to the *total surface area* presented to the passage of the energising current, very finely electrically continuous sulphides will store significantly more charge than will an equivalent value of coarsely disseminated material. Also should the grains be *finely* divided and/or *sharp grain boundaries*, or *platey* they will acquire the energy *rapidly* and on cessation of the energising current will discharge *rapidly*. Coarser grained material will take longer to charge and discharge than will fine grained material. Thus the speed at which the stored energy discharges can be a diagnostic feature. This is particularly true when mineralisation of markedly different form is required to be differentiated where other properties such as conductivity show no diagnostic difference.

As has been seen in Figures 2 to 5 the external (positive) chargeability above the body is characteristic of the internal current flow *within the body*. Thus the observed decay form is characteristic of the mode of the decay *within the body*.

In the case of electrical induced polarization, the energy stored in the body is observed on the surface *after it is discharged through the environment*. Thus as the discharge passes through the medium between the source and the surface the medium will, under normal circumstances, modify not only the amplitude of the signal but also the decay form thereof. In "normal" circumstances where the medium is both resistive and chargeable, the decay form observed via the electric mode