





The cover photo for this issue was taken from the annual report of General Electric Developments in Research. This photograph illustrates some of the research which is going on in developing a transparent phosphorus coating for television picture tubes in an effort to improve contrast and sharpness. According to the report, two disadvantages of the present powdered phosphorus screens now used in Television tubes are an overall haze limiting obtainable contrast, and a loss of sharpness caused by light scattering within the phosphor screen.

To counteract these effects, developmental screens are made by a process involving the chemical reactions of vapors at the surface of the glass backing plate. Developmental screens produced thus far lack some of the brightness of conventional screens, but are said to yield superior contrast and sharpness. In the photograph above, on the left, the contrast and sharpness of the new type screen is shown. On the right, above, appears the contrast and sharpness of a conventional television picture tube.