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TITLE: γ-ray absorption changes in graphitized carbon as effect of a pressure applied

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TEXT: It is investigated how the absorption of γ-radiation in a lump of graphitized carbon depends on an external pressure. The pressures applied varied from zero to 26.8 kg/cm$^2$. $Cs^{137}$ is used as radiation source and a Geiger-Müller counter as radiation detector. The measured result is given in figure 2. It is shown that the absorption capacity also depends on whether the sample had been exposed to pressure before the measurement. This is explained by irreversible deformations inside the sample caused by the preceding compression stress. There are 2 figures.

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Figure 2. Intensity of the radiation as function of the applied pressure.

Legend: Fullline curve: Measuring without preceding pressure. Broken line curve: Measuring after applying a pressure of 26.8 kg/cm$^2$.