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# Response of Superheated Droplets to Electrons

Superheated Emulsion Detector (SED), a comparatively new radiation detector, takes an important place in radiation physics[1]. In SED, micron size superheated drops are dispersed inside the gel like medium known as Superheated Drop Detector[2] (SDD) or in a soft polymer matrix known as Bubble Detector[3] (BD). Superheated state is a metastable state of the liquid. It comprises a dynamic population of microbubbles scattered through out the liquid. Energy required to form such a microbubble of radius $r$ is given after Gibbs as