

Development of Automatic Frequency Controller (AFC) for Linac

The AFC control system keeps the magnetron frequency tuned to that of the linac tube within a narrow range of a few tens of KHz. This helps in keeping the dose rate constant within specified range. Linac tube cavity has very high Q with bandwidth of around 15KHz. Any change in the magnetron frequency due to push-pull effect or due to environmental effect will result in mistuning of magnetron frequency.

