

PERFORMANCES ON NUCLEAR ACTIVATION
ANALYSIS BY TRIGA MARK II REACTOR

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Progresses in methodological research and connected applications in the field of activation analysis are introduced.

Some peculiar characteristics on the TRIGA MARK II reactor have enabled the possibility of obtaining interesting results.

The particular, the rotating radiation device Lazy Susan, with a capability of 40 positionings, permits homogeneity in neutron flux and energy spectrum stability within .15%.

High level of precision and accuracy are obtained in analytic.

Applications of major interest have been:

- _ reference material certification;
- _ forensic applications;
- _ electrolytic cell productivity evaluation.

The TRIGA MARK II reactor is equipped with a thermal column throughout a D₂O diaphragm with a thickness of 70 cm.

The available neutron flux has no fast and epithermal components.

Via this facility a method has been tested for the instrumental determination of Al in Si metal of solar and electronic degree.