

COURSE TITLE:

## RADIATION PHYSICS LABORATORY

COURSE DESCRIPTION:

Electrosmog, Measurements of 50 Hz electromagnetic field of usual devices, spatial distribution of the intensity,

Batteries useful for storage of renewable energies, charging and discharging curves, battery charging using solar radiation

Alpha-radiation measurements using liquid scintillation spectroscopy, radium, radon content of water samples

Beta-radiation, energy spectrum of beta decay, Fermi Kurie plots of Sr and Cs sources.

Cerenkov radiation, TriCarb device operation in Cerenkov mode, potassium content determination, self absorption measurements.

Gamma-spectroscopy using High Purity Germanium Detectors, natural samples, concentrations of radium, thorium and uranium

Pozitron Emission, Detecting the annihilation radiation, and source position determination in a sample.

TEACHER:

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associate professor