radiochemistry

That part of chemistry which deals with radioactive materials. It includes the production of radionuclides and their compounds by processing irradiated materials or naturally occurring radioactive materials, the application of chemical techniques to nuclear studies, and the application of radioactivity to the investigation of chemical, biochemical or biomedical problems.

Source:
PAC, 1994, 66, 2513 (Nomencature for radioanalytical chemistry (IUPAC Recommendations 1994)) on page 2524