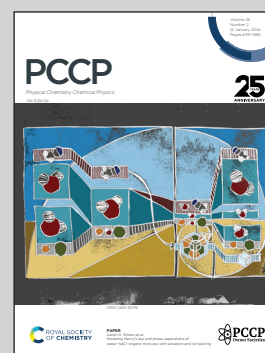


Showcasing research from workers in the Biophysics group at the Institution of Physics and Astronomy at Uppsala University, and from the Institute of Physics, University of Tartu.

Heavy element incorporation in nitroimidazole radiosensitizers: molecular-level insights into fragmentation dynamics

Radiation damage occurs on the molecular level. By analyzing the fragmentation of radiosensitizers with mass spectrometry and quantum mechanical calculations, one can get valuable physiobiological insights into their potential role in radiotherapy. We have studied the fragmentation of nitroimidazole-based sensitizers functionalized with heavy elements. The idea is to enhance the absorption cross-section of the nitroimidazoles to increase the generation of fragments important for DNA double-strand breaks.

As featured in:



See Pamela H. W. Svensson, Marta Berholts *et al.*, *Phys. Chem. Chem. Phys.*, 2024, 26, 770.