







can exist (one which reacts with PBN to give a three-line species and one which reacts to give a four-line product), or that peptide structural considerations (i.e. the stereoelectronic environment about the PBN reaction site) determine the decomposition pathway. The structural features which influence reactivity towards PBN could also effect peptide toxicity (accompanying

pathways (e.g. reaction 4) could yield *tert*-butylhydronitroxide (four lines). Rearrangement of phenylperoxides similar to reactions 3–4 have been previously documented.<sup>8</sup> Other rearrangements not presented in Figure 5, including aryl-shift to the nitroxide center, may be possible. In particular, Janzen *et al* have proposed a variety of mechanisms by which PBN oxy-radical adducts may decompose to hydronitroxide

It is not possible at this point to identify the peptide

species.<sup>7,9</sup>

Further study of A $\beta$  solution chemistry, including