

Riboflavin, also known as B2 vitamine, has an important role in our body metabolism. It is a precursor for flavin mononucleotide and flavin adenin dinucleotide synthesis. Our body uses these substances in mitochondrial respiration or Krebs cycle. We can improve our health if we understand better quenching of singlet oxygen and effective quenchers themselves. We have measured absorption spectra of riboflavin in detail and were able to identify lumichrome and cyclodehydroriboflavin in them. I have studied the influence of riboflavin and sodium azide on lifetime of singlet oxygen and triplet states of riboflavin via time-resolved luminescence of singlet oxygen in those solutions. It was confirmed that riboflavin is photosensitizer of singlet oxygen. Quenching of singlet oxygen by riboflavin was not observed. Same result was observed, when different photosensitizer, Al(III) phthalocyanine chloride tetrasulfonic acid in our case, was used to produce singlet oxygen