



**23.05.2017 (вторник)** в 15.00 часов в 237 аудитории Института Химии состоится лекция директора фотохимического центра Bowling Green State University Малькольма Форбса «**Not so free radicals**».

По окончании лекции планируется провести встречу для студентов, на которой Малькольм Форбс расскажет о возможностях получения степени PhD для выпускников СПбГУ, а также прохождения летней стажировки для невыпускных курсов.

#### Abstract.

In this lecture I will give an overview of time-resolved and steady-state electron paramagnetic resonance (TREPR and SSEPR) spectroscopies describe and their application in the study of radical structure, dynamics, and reactivity. I will emphasize the use of these techniques in probing chemical systems experiencing restricted translational or rotational motion. Examples of such systems include polymer coatings, structured fluids, microbubbles, nanocrystals, reverse micelles, and vesicles.

The TREPR technique is useful because it detects the primary photochemical events rather than rearrangements or secondary photolysis products. Examining radicals on the sub-microsecond time scale also allows us to examine the interplay between spin wave function evolution and diffusion in confined spaces (“spin chemistry”).

In the second part of my talk I will demonstrate use of TREPR and SSEPR in polymer degradation chemistry, the topology of singlet oxygen production in heterogeneous structures such as vesicles and micelles, the photochemical “skunking” of beer by sunlight, biocompatible photopolymerization reactions, and the photoreactivity of sunless tanning lotions.

