SELECTIVE SYNTHESIS OF 12,13- AND 17,18-DIHYDROPORPHOLACTONES

<u>Jonas Zurauskas</u>¹, Gustautas Snarskis¹, Ana F.R. Cerqueira², Samuel Guieu², Filipe A. Almeida² Paz, Augusto C. Tome²

Department of Chemistry, Vilnius University, Vilnius, Lithuania
Department of Chemistry, University of Aveiro, Portugal jonas.zurauskas@chf.stud.vu.lt

Porpholactones are a class of pyrrole-modified porphyrins in which a pyrrolic unit is formally replaced by one oxazolone unit. These compounds have a very rich chemistry and may be converted into a number of other pyrrole-modified porphyrins [1,2]. However, the participation of porpholactones in cycloaddition reactions has never been reported. In this communication we report the reaction of *meso*-tetrakis(pentafluorophenyl)porpholactone with azomethine ylides and nitrones. Pyrrolidine-fused and isoxazolidine-fused dihydroporpholactones are formed site-selectively in these reactions.

Fig. 1. Synthesis of corresponding porpholactone cycloadducts

^[1] C. Brückner, Acc. Chem. Res. 2016, 49, 1080.

^[2] L.D. Costa, J.I.T. Costa, A.C. Tomé, Molecules 2016, 21, 320.