

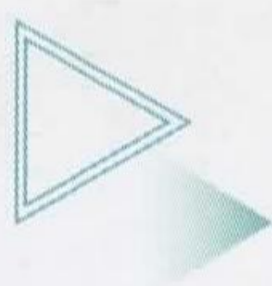


**BALTICUM
ORGANICUM
SYNTHETICUM 2022**

In memory of Prof. Victor Sniečkus

July 3-6, 2022
Vilnius, Lithuania

PROGRAM AND ABSTRACT BOOK



**HYBRID
EVENT**

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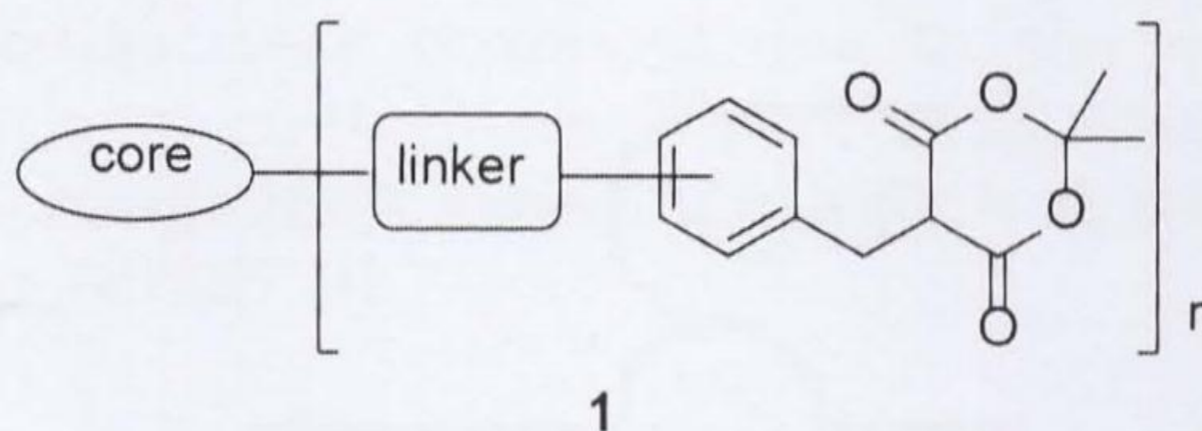
DENDRIMER ANTIOXIDANTS WITH MELDRUM'S ACID AS SURFACE GROUP

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Oxidation processes cause the degradation of various products¹ and can lead to oxidative stress, which causes conditions like Parkinson's disease, Alzheimer's disease, and cancer.² To regulate oxidation processes, antioxidants can be used. However, their effectiveness is often limited by low solubility, bioavailability etc.³ One of the ways to solve these issues is binding the active molecules to dendrimers. Dendrimers are highly branched polymers with a very precise structure. Besides modified physical properties, they have also shown improved antiradical activity in some cases.^{4,5}

Arylmethyl Meldrum's acids previously demonstrated significant antioxidant and antiradical activity.⁶ Herein, we present dendrimeric antioxidants **1** with Meldrum's acid as surface groups. The impact of aromatic and aliphatic cores and aliphatic and heterogenic linkers is studied.



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References:

1. Amaral A.B.; Solva M.V. Da; Lannes S.C.D.S. *Food Sci Technol.* 2018, 38, 1.
2. Pham-Huy L.A.; He H.; Pham-Huy C. *Int J Biomed Sci.* 2008, 4(2), 89.
3. Hu M. *Mol Pharm.* 2007, 4(6), 803. 4. Matsuura S.; Katsumi H.; Suzuki H.; et al. *Pharmaceutics.* 2018, 10(4), 251. 5. Sowinska M.; Morawiak M.; Bochyńska-Czyż M.; et al. *Biomolecules.* 2019, 9(3), 89. 6. Mierina I.; Jure M.; Zeberga S.; et al. *Eur J Lipid Sci Technol.* 2017, 119(11), 1700172.