

PhD Seminar

**SYNTHESIS AND BIOLOGICAL EVALUATION OF
5-ARYLCHALCOGENO-THYMIDINE DERIVATIVES**

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Abstract

Organochalcogenium compounds have currently been receiving special attention from the scientific community, especially due to applications of this class of compounds in the biological area. They have been reported to be effective agents against free radical species and to show antitumoral, anti-inflammatory and antiviral activities. On the other hand, nucleotides and nucleosides are crucial molecules which are present in a variety of biological processes and modulations. In this context, Zidovudine or AZT is one of the most usable synthetic nucleosides in medicine. In this presentation, synthetic approaches for combining the biologically active nucleoside zidovudine with a variety of organochalcogenium moieties in a single molecule will be explored, providing a new class of prominent bioactive chalcogenonucleosides.