PennState Schuylkill

Faculty Research Profile

Dr. Lee J. Silverberg

Professor Tenure-Line

Chemistry

Title of your research project.

Synthesis of 2,3-Diaryl-2,3-dihydro-1,3-thiaza-4-ones

Description of research. Please provide a few sentences that explain the question and the methods employed in this research project.

We synthesize novel heterocyclic compounds with the aim of finding useful biological activity. Our compounds contain a central six or seven membered ring that includes a sulfur and a nitrogen, an we have discovered a novel reaction for preparing these. Our collaborators have tested a variety of these compounds for antiparasitic, antifungal and antibacterial activity. Some have shown promising activity.

Did this project include Penn State students as researchers?

Yes

If yes to the above question, please state where it was published.

Tetrahedron Lett. 2020, 61(18), Article 151836.
J. Heterocycl. Chem. 2020, 57, 1797-1805.
Acta Cryst. Sect. E: Crystallographic Commun. 2019, E75, 1689-1693.
Acta Cryst. Sect. E: Crystallographic Commun. 2019, E75, 1270-1273.
Acta Cryst. Sect. E: Crystallogr. Commun. 2018, E74, 1497-1499.
Acta Cryst. Sect. E: Crystallogr. Commun. 2018, E74, 454-457.
Acta Cryst. Sect. E: Crystallogr. Commun. 2018, E74, 363-366.
Arkivoc 2016, (vi), 122-143.
Acta Cryst. Sect. E: Crystallogr. Commun. 2016, E72, 1108-1112.
Int. J. Chem. (Toronto, ON, Can.) 2015, 7 (2), 150-162.

What problem do you address with your research?

Organic synthetic methods, treatments for human disease.