

## SERMACS 2018

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View Abstract

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**SUBMISSION ROLE:** 2018 Southeast Regional Meeting

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**ABSTRACT SYMPOSIUM NAME:** Inorganic Chemistry (Poster)

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**TITLE:** Acquisition of a Single Crystal X-Ray Diffractometer for Structure Determination and Diffuse Scattering on Small Molecules, Macromolecules, and Materials

**ABSTRACT BODY:**

**Abstract:** With NSF MRI support, we have recently purchased a dual source single crystal diffractometer equipped with a high resolution detector. The purpose of this presentation is to publicize the new instrument and we seek users in the Southeast to maximize the positive impact of this instrument on research efforts in the Southeastern US. Users at primarily undergraduate institutions and historically black colleges and universities are particularly encouraged to use this new resource. In general, an X-ray diffractometer allows accurate and precise measurements of the full three-dimensional structure of a molecule, including bond distances and angles, and provides accurate information about the spatial arrangement of a molecule relative to neighboring molecules. The studies described here impact many areas, including organic and inorganic chemistry, materials chemistry and biochemistry. This instrument is an integral part of teaching as well as research and research training of graduate and undergraduate students in chemistry and biochemistry at this institution and at partner institutions. This poster will describe some examples of how the new diffractometer will enhance research in inorganic chemistry, materials chemistry (via diffuse scattering), and biochemistry.

(No Image Selected)

**Reason for Submitting:** I am contributing this paper in response to the Call for Papers.

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**Presenting Author Registration:** I agree.

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