



2016 NOBCChE National Science Fair Abstract

Category: **Physical Science**

Title: **CZT Ionization and Characterization**

Chance Mitchell

Senior Level (High School)

New Century High School

CZT or Cadmium Zinc Telluride is a semiconductor that directly converts x-ray or Gamma ray photons into electrons. CZT is unique compared to silicon and germanium detectors in that it operates at room temperature and is capable of processing more than one million photons per second per square millimeter.

The National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) National Science Fair is a poster competition in which students present an independent completed research project. Each contestant in the Science Fair must demonstrate their ability to conduct a research project by:

- Submitting an abstract of 150 words or less on an individual research project in one of the following **four categories: physical science, math & engineering, consumer science, or biological science.**
- Presenting the results of the research in a poster format, including answering questions from judges; and submitting a written report during the poster presentation.
- For more information, visit www.nobccheSTEMwkd.com.