



THE LONG ISLAND SUBSECTION
OF
THE NEW YORK AMERICAN CHEMICAL SOCIETY

Proudly presents

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Title of Talk: “Poly(diiododiacetylene): En Route to New All-Carbon Materials”

Synopsis: Poly(diiododiacetylene) (PIDA) is a polymer consisting entirely of carbon and iodine. Using a bis(nitrile) oxalamide / diiodobutadiyne host-guest scaffold, the polymer is prepared via a 1,4-topochemical polymerization. The PIDA polymer was found to be a contact explosive in its isolated state, and readily forms aggregates in solution. The isolated polymer strands were subject to deiodination using various Lewis bases to yield a disordered, but conductive graphitic product. A simple small molecule compound to model the vicinal diiodoalkene functional group of the polymer was chosen. The model compound showed the loss of iodine follows an E2-like mechanism and can be induced with a simple iodide salt. The model studies also showed the loss of iodine occurs most readily in aprotic solvent under mild conditions. These results show that PIDA can potentially serve as a precursor to making new carbon-rich materials under mild conditions.

All are welcome!

When: Thursday, April 1, 2021

Where: Zoom

Time: 6:00 pm – Seminar Start

Link: <https://stonybrook.zoom.us/j/93793496217?pwd=WWJVVVFQzRXdTZWZoNFprYlg5NThtdz09>
Meeting ID: 937 9349 6217 Passcode: 986555

