

Hybrid Photovoltaic Cells Based on Biologic and Polymeric Materials

Stelea, Ioana (School: Keelung Municipal Jian De Junior High School)

Vlad, Miruna (School: Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Sul (IFRS) - Campus Osório)

Considering recent climatic changes, renewable energy has become an increasingly attractive option to scientists. Therefore, the synthesis of polymeric conductors has been approached, leading to breakthroughs regarding organic photovoltaic cells. Combining two organic materials with distinct electrical properties, P3HT and PCBM, the current study aims to determine the spectral response's variation once Chl-a, extracted from spinach leaves in the laboratory, has been added. The prepared samples have been analysed using both atomic force microscopy (AFM) and scanning electronic microscopy (SEM), and for future, more precise researches, further approaches for optimising the results will be made.