Multifunctional, Hybrid Electrocatalityc Systems Active Towards Electroreduction of Oxygen

Solnicki, Maciej (School: II Liceum Ogolnoksztalcace z Oddzialami Dwujezycznymi im. Stefana Batorego)

The objective of the project was to create new nanostructural catalytic systems capable of effective electroreduction of oxygen, which can be used in the construction of low-temperature fuel cells. Carrying out the project included the preparation of hybrid systems consisting of nanoparticles of gold, silver and platinum immobilized on a well-conducting layers composed of carbon nanostructures, red-ox mediators improving charge transfer. The next part of the project involved the characteristics of created systems using microscopic, spectroscopic and electrochemical methods.

Awards Won: Fourth Award of \$500