Developing a Practical Microbial Fuel Cell for Industrial Setting

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The use of innovative devices for renewable energy is setting a pivotal role in the electrical industry. Several devices have been created, especially in the fuel cell and battery field, that has caused a rise in the demand for electrochemical energy technologies, especially for research and development for utilization around the world. For an easier access to electricity, a developed portable microbial fuel cell was created to aid today's electrical industry needs. In the first part of this development, two different designs were tested to determine which design gave the greatest power generation. Based on the experimentation, the design with the highest electrical power was used to further develop its design. In the second part, an electrical wireless energy tower/coil was then built to connect it to the MFC. An electrical resonant transformer circuit was designed to use the MFC as the battery power source to test the electrical power of the source to assess the electrical output, while comparing the MFC Coil to the original Tesla Coil for electrical advances.

Awards Won: