## **Diagnostics via Biophysical Resistotrons**

Authors : Matt Vellkorn, Mara Sarinski

**Abstract :** The field of advanced diagnostics is a very rapidly changing one. A new technology that has not been fully used yet are resistotrons. A resistotron is a physical device thatis used to detect the presence of low energy alpha particles. It has been used for many years in nuclear physics as an alpha particle detector. Since they are used in nuclear physics, they have to be accurate. They have to be able to differentiate between alpha particles and other types of radiation. The resistotrons are primarily used for safety. They are used in areas where people or animals can get exposed to radiation. A typical example is in the treatment of nuclear waste. As it is with any nuclear physics instrument, a resistotron has to be very accurate and reliable. In the past, the instrument was very expensive because they were made out of copper. Today, they are made out of brass. The main difference is that brass is much less expensive than copper.

Keywords : biosensors, resistotrons, biophysics, diagnostics

Conference Title : ICBBM 2022 : International Conference on Biosensor and Bioelectronic Materials

Conference Location : Singapore, Singapore

Conference Dates : March 28-29, 2022