TITLE:

Diverse Stories of Electrochemistry

ABSTRACT:

Electrochemistry is a powerful area of analytical chemistry with plenty of opportunities for new discoveries. Using proteins, we demonstrated that fundamental biomolecular interactions can be monitored and targeted. The electrochemical sensors were developed for detection of various analytes, from health through forensic to environmental applications. Even carbon-carbon bond formation and electrosynthesis have been achieved as an alternative to the traditional synthetic methods. Our newest research efforts in electrochemistry will be also described.

Dr. Sanela Martic - BIO

Dr. Martic joined the Forensic Science Department at Trent University in January 2019. Prior to that, she was in the Department of Chemistry at Oakland University (USA) as an Assistant Professor (2012-2017) and Associate Professor (2017-2018). Dr. Martic received her Ph.D. degree in 2009 from Queen's University, under the supervision of Prof. Suning Wang and co-supervision of Prof. Gang Wu. Her Ph.D. dissertation was on the synthesis of the fluorescent nucleosides and their self-assembly. In 2009, she joined the research group of Prof. Heinz-Bernhard Kraatz (currently at the University of Toronto Scarborough, previously at Western University) as a postdoctoral fellow. Her PDF work was based on synthesizing redox active bioconjugates for bioelectrochemical analysis. Currently, Martic lab develops bioanalytical methodologies for health, environmental and forensic applications.