

TOWARD A MINIATURIZED INSTRUMENT FOR DETERMINATIONS USING QUANTUM DOTS AND SELECTED ENVIRONMENTAL SAMPLES. **Vassili Karanassios**, U. Dayal and M. J. W. Thiessen, University of Waterloo, Waterloo, ON, Canada.

Quantum Dots (QDs) have been receiving significant attention due to their scientific interest (e.g., they were awarded the Nobel Prize in Chemistry in 2023) and their technological applications (e.g., television displays). In this paper, the application of Quantum Dots (primarily) for detection of metal ions in water samples or in biological samples (e.g., blood serum) will be described in some detail and future directions will be discussed.