



Chemo- and Bio- Sensors based on a Chromatic Polymer

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Research

Prof. Jelinek's lab has been working in the past few years on the development of color and fluorescence sensors based on *polydiactylene* (PDA), a unique chromatic polymer. Different PDA matrices (films, gels, solutions) undergo color and fluorescence transformations induced by the interactions of different analytes. This PDA technology can be used for detection of water contaminants, heavy metals, pathogenic bacteria and more.

Goals and Benefits

- Commercially available polymer that can be easily molded into varied configurations.
- Generic technology that can be implemented for detection of varied analytes.
- Sensing platform that employs both visible color changes and fluorescence transformations.

Applications & Products

- Color sensors for water pollutants
- Bacterial sensors
- Sensors for heavy metals in water