

# Effective Method for Synthesizing Polysiloles and Polygermoles



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**The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing a method to synthesize polysiloles and polygermoles that have improved electrical properties.**

## OVERVIEW

Siloles and germoles are compounds that are of considerable commercial interest because of their unusual electronic properties. It has been proposed that they be used for electro-transporting materials and as light-emitting diodes; however, attempts at synthesizing these compounds have resulted in undesirable film-forming properties and the desired electrical properties such as fluorescence, electroluminescence or semiconducting have not been achieved. Additional compounds that possess these desired electrical properties are needed.

## THE INVENTION

UW-Madison researchers have developed more efficient methods of synthesizing polysilole and polygermole compounds. The silicon or germanium ring atoms from each polymer unit are directly linked to one another to achieve the important electrical properties of fluorescence and electroluminescence.

## APPLICATIONS

- Organic transistors where electron transporting materials are desired
- Single compound LEDs for flat panel displays
- Polysiloles, polygermoles and silole-germole copolymers

## KEY BENEFITS

- More efficient production
- Improved electrical properties

## THE WARF ADVANTAGE

Since its founding in 1925 as the patenting and licensing organization for the University of Wisconsin-Madison, WARF has been working with business and industry to transform university research into products that benefit society. WARF intellectual property managers and licensing staff members are leaders in the field of university-based technology transfer. They are familiar with the intricacies of patenting, have worked with researchers in relevant disciplines, understand industries and markets, and have negotiated innovative licensing strategies to meet the individual needs of business clients.



## ADDITIONAL INFORMATION

### Tech Fields

Materials & Chemicals - Polymers

## CONTACT INFORMATION

For current licensing status, please contact Mark Staudt at [mstaudt@warf.org](mailto:mstaudt@warf.org) or 608-960-9845.

