

# The "Plastic Electronics" Revolution: Opportunities Based on Semiconducting and Metallic Polymers

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## **Abstract**

The physics and chemistry of conducting polymers have matured to the point where these novel materials are ready for use in a variety of electronic applications. High performance devices have been demonstrated, including light emitting diodes, light emitting electrochemical cells, photodiodes and lasers. Performance parameters have been improved to levels comparable to or better than their inorganic counterparts. A brief review will be given with emphasis on progress toward the commercialization of polymer emissive displays and image sensors based upon polymer photodiode arrays.

## **Biography**

Professor Alan Heeger and his colleagues at the University of California, Santa Barbara, have done pioneering research on semiconducting and metallic polymers. His current interests lie in the development of the fundamental physics and the interdisciplinary materials science that determine the electronic and optical properties of this novel class of materials with the goal of developing semiconducting and metallic polymers for use in technology. UNIAX Corporation, co-founded by Professor Heeger in 1990, is focused on bringing Plastic Electronics into commercial products.