



RICH DENNISON



Christopher Geddes, Ph.D.

Institute of Fluorescence

University of Maryland, Baltimore County

Chris Geddes, a professor at the University of Maryland, Baltimore County, and the director of its Institute of Fluorescence, truly had a bright idea.

Geddes, who founded the institute in 2001, has pioneered a technology called Metal-Enhanced Fluorescence — a new way to store energy and release it in the form of light. The technology — which has wide applications for energy savings and safety — multiplies fluorescent “signatures,” allowing materials to emit light without using energy.

He is now applying the technology to plastics, using nanotechnology to create materials that store and then release light. The light, which Geddes says can be quite bright and long-lasting, can illuminate spaces without using electricity and therefore is especially suitable for signage and outside lights.

In addition, Geddes seeks to commercialize the technology for roadside safety wear and says it also could be useful in ceiling tiles — today many buildings are lit at night, a practice that is good for safety reasons but a waste of energy.

Geddes has formed a company called Plasmonix Inc., which is focused on commercializing the innovation. Meanwhile, he keeps improving the technology and materials: “We’re making it glow longer and longer and longer and brighter and brighter and brighter.”