

East Lansing



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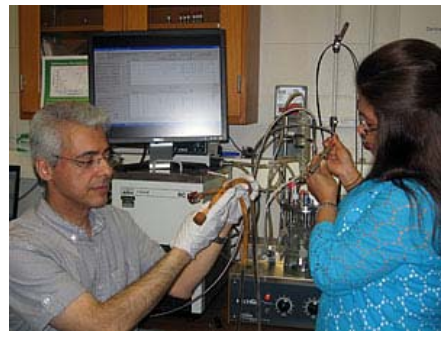
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East Lansing - MSU Professor develops groundbreaking oxygen sensor to aid biologists and breweries

CAPITAL GAINS, 4/20/2011

MSU Research Associate Professor with the Department of Physics & Astronomy Ruby Ghosh figured out how to build an oxygen sensor that could revolutionize the work of biologists, fisheries, breweries and more years ago. The problem was, it included a fairly impractical \$10,000 laser to function.

"It is an idea that has been around for a long time, even before I began working on it," says Ghosh of her 15-year-long endeavor to create an oxygen sensor that could take continuous, real-time measurements while being portable and durable. "The trick was developing the materials to make it work."



Thanks to Ghosh's research, the assistance of her colleague Reza Loloee and a small, inexpensive LED light, the groundbreaking oxygen sensor is now reality. Ghosh presented her research at the Bio-Optics: Design and Application Conference at Monterey, California earlier this month.

While the oxygen monitor has the potential to benefit an array of industries, in practice Ghosh has tested it in two Michigan fisheries with funding help from the [Michigan Economic Development Corporation](#).

"For fisheries applications we've demonstrated that it works," says Ghosh. "There is still some R&D that needs to be done for making an instrument for each specific application."

Though there's plenty work ahead for Ghosh and [MSU Technologies](#), Ghosh expects the sensors to be made available commercially in less than five years.

In addition to the MEDC, Ghosh's research is also funded in part by the National Science Foundation, the U.S. Department of Energy.

Source: Ruby Ghosh, Michigan State University

Writer: Natalie Burg, News Editor

Courtesy photo

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