

Advancing safety through color changing technology

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Nahid Mohajeri of UCF's Florida Solar Energy Center and Luke Roberson, Science Payload System Engineer with NASA's Kennedy Space Center, show some of the products HySense has produced with its proprietary hydrogen sensing tape. The work that led to the tape began with a NASA KSC grant for hydrogen research.

An intelligent tape that changes color in the presence of hydrogen has been licensed by the University of Central Florida to a faculty-led spinoff company.

HySense Technology, LLC of Rockledge, FL, licensed the technology that was co-developed by its founder, Nahid Mohajeri, a researcher at UCF's Florida Solar Energy Center. She co-developed the technology to detect hydrogen leaks wherever hydrogen is produced, stored or transported. Early detection of the highly flammable, invisible gas can prevent dangerous explosions and casualties. The technology was developed as part of a larger \$20M grant awarded to UCF from NASA's Kennedy Space Center for hydrogen research.

The specialty tape uses proprietary color changing pigments, Intellipigment, to alert users to the exact location of a [hydrogen leak](#). It can be wrapped around pipe fittings, flanges, valves, and storage and transportation vessels. Color change occurs in a matter of seconds when hydrogen is detected and in concentrations as low as 1% hydrogen.

HySense's Intellipigment tape has been tested and evaluated by chemical manufacturers and hydro-electric and nuclear power plants. The company hopes to begin US sales soon. Svetlana Shtrom, Director of UCF's Office of Technology Transfer commented, "We have received many inquiries for this [hydrogen](#) sensing tape for a variety of potential applications. Now, with the NASA – UCF – HySense partnership, the product will be brought to the marketplace. We anticipate a variety of opportunities ahead for improving the safety in handling this widely used gas."

More information: For more information or to request a quote, visit hysensetechnology.com

University of Central Florida

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