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UTRC Press Release

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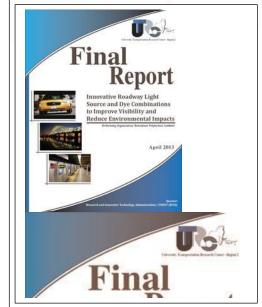
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The University Transportation Research Center Publishes the Final Report for the Research Project Titled: "Innovative Roadway Light Source and Dye Combinations to Improve Visibility and Reduce Environmental Impacts"

UTRC has released a final report for the research titled: "Innovative Roadway Light Source and Dye Combinations to Improve Visibility and Reduce Environmental Impacts", funded by the Research and Innovative Technology Administration (RITA/USDOT). The principal investigator was **Dr. John Bullough**, a senior research scientist at the Lighting Research Center (LRC), Rensselaer Polytechnic Institute.

In this report, the authors investigated the feasibility of a system consisting of a specialized LED streetlight and a dye based roadway surface coating that would reduce sky glow, but still provide adequate illumination of objects in the road. As envisioned, the streetlight would produce white light with narrow-band LEDs of red, green, and blue wavelengths. The roadway surface coating would use three dyes that would selectively absorb the specific wavelengths produced by the streetlight. This investigation examined the optical properties of green and blue absorbing dyes. The dyes, when in their liquid states, did selectively absorb light at the expected wavelengths. However, the dyes did not selectively absorb light when applied as a surface coating, so appropriate encapsulants would need to be developed for subsequent implementation.

The full report is available for a free download at the UTRC website: http://www.utrc2.org/publications/innovative-roadway-Final



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About The University Transportation Research Center

The University Transportation Research Center (UTRC) is a USDOT Regional Transportation Center addressing surface transportation operations, management, design economics and planning. The Region 2 University Transportation Research Center is one of ten original National Centers, established in 1987, in recognition that transportation plays a key role in the nation's economy and in the quality of people's lives. Located at the City University of New York, the Center is a Consortium of 17 major Academic Institutions in New York, New Jersey, and Puerto Rico. Through the Grant supporting the Center, the mission incorporates research, education and the transfer of technology in the field of transportation. Academically based, the work of Faculty and Students – graduate and undergraduate provide a critical link in resolving our national and regional transportation problems while training the future and current professionals who address our transportation system and their customers on a daily basis. For more information, visit www.utrc2.org.