

Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

Effect of Environment on Single-Photochromic-Molecule SATOSHI YOKOJIMA, Mitsubishi Chemical Group Science and Technology Research Center, INC. and CREST-JST, YASUTAKA FUJIU, MASANORI TACHIKAWA, Quantum Chemistry Division, Graduate School of Science, Yokohama-city University, JUN-WEI SHEN, QI GAO, PAUL TCHOUBE, TAKAO KOBAYASHI, AKINORI MURAKAMI, MITSURU YONEYAMA, KATSUYA KANDA, SHINICHIRO NAKAMURA, Mitsubishi Chemical Group Science and Technology Research Center, INC. and CREST-JST, TOSHIKAZU EBISUZAKI, Riken, TUYOSHI FUKAMINATO, MASAHIRO IRIE, Department of Chemistry and Biochemistry, Graduate School of Engineering, Kyushu University — Recent experimental results on the photochromic reactions of diarylethene derivatives at the single-molecule level by using a fluorescence technique [T. Fukaminato, T. Sasaki, T. Kawai, N. Tamai, and M. Irie, *J. Am. Chem. Soc.* **126** (2004) 14843; M. Irie, T. Fukaminato, T. Sasaki, N. Tamai, and T. Kawai, *Nature* **420** (2002) 759.] is analyzed by the quantum chemical calculations and the molecular dynamics calculations.

Satoshi Yokojima
Mitsubishi Chemical Group Science and
Technology Research Center, INC. and CREST-JST

Date submitted: 25 Nov 2006

Electronic form version 1.4