

Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Induced Interaction of NH_4NO_3 With Poly(p-phenylene vinylene) by means of Zeolite Y JIRARAT KAMONSAWAS, ANUVAT SIRIVAT, The Petroleum and Petrochemical College — Conducting polymers are unique among the sensing materials known to us at present. They have many advantages over conventional metal sensors. Poly(p-phenylenevinylene) (PPV) can serve as the active material in sensor devices because PPV possesses good optical and electrical properties, and it can be synthesized by a relatively simple technique. Zeolite is chosen as inorganic filler to be introduced into the conductive polymer matrix in order to increase electrical sensitivity toward ammonium nitrate vapour. The objective of our work is to investigate the effects of Si/Al ratio and cation type on the gas electrical conductivity sensitivity towards ammonium nitrate and corresponding interactions.

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Date submitted: 01 Dec 2007

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