

Abstract Submitted
for the OSS14 Meeting of
The American Physical Society

Talking to Molecules with Magnets PATRICK COOK, None — This research presents a method for mapping the x, y, and z components of magnetic fields using Hall Effect sensors and a computer interface. The data from this method is in agreement with methods obtained in literature and is used to study the behavior of magnets interacting with one another. The magnetic mapping data also shows how the shape of magnetic fields can be altered by combining magnets in geometric arrays. Next, research is proposed to test the possible applications of the “new” vs. “standard” magnetic field shapes. This research includes chemical reactions that involve the presence of an unpaired paramagnetic electron during the reaction mechanism. To place this research in a broader context, we outline the progress and ongoing research of applications for shaping magnetic fields.

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None

Date submitted: 21 Mar 2014

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