

Abstract Submitted
for the OSS10 Meeting of
The American Physical Society

***In vitro* decomposition study
of coated magnesium alloys**¹ TYLER PIERSMA, Kettering University, DE-
SIREE WHITE, XINGGOU CHENG, MONTSERRAT RABAGO-SMITH, DAVID
LECRONIER, MONTSERRAT RABAGO-SMITH COLLABORATION², XING-
GOU CHENG COLLABORATION³ — In the last decade, magnesium has resurged
as an important biomaterial. It's mechanical properties are very similar to natural
bone, and it degrades *in vivo* to non toxic substances. Unfortunately, corrosion of
pure magnesium *in vivo* is rapid, thus coated alloys that decrease it's corrosion could
be used as implants in orthopedics. This presentation will describe the degradation
results in a simulated body fluid (SBF).

¹Kettering, Southwest

²Kettering University

³Southwest Research Institute

Tyler Piersma
Kettering University

Date submitted: 09 Apr 2010

Electronic form version 1.4