

Abstract Submitted
for the MAR10 Meeting of
The American Physical Society

Smart Capsules: Engineering New Temperature and Pressure Sensitive Materials with Microfluidics LAURA ADAMS, JAMES WILKING, ANDERSON HO CHEUNG SHUM, SEBASTIAN SEIFFERT, SHMUEL RUBINSTEIN, YUANJIN ZHAO, DAVID WEITZ, Harvard University — New smart materials that are responsive to external stimuli such as pressure and temperature can be carefully designed using microfluidics with double emulsions as building blocks. Here we introduce the synthesis of new smart core-shell structures with two different aqueous drops in the interior. By triggering the capsules with pressure and temperature, coalescence and mixing of the interior drops occurs and is studied with high speed video imaging techniques.

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Date submitted: 20 Nov 2009

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