

Abstract Submitted  
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**Liposomes and Sonoporation** JUNRU WU, DI CHEN, JASON PEPE, BENJAMIN E. HIMBERG, MERCEDES RICÓN, University of Vermont — A method to prepare liposomes is presented. Liposomes made in our laboratory were characterized acoustically and optically. The phase velocity and attenuation of liposomes in suspension (concentration =  $10^9$ /mL) were measured ranging from 2 to 14 MHz using ultrasound spectroscopy. Using the liposomes, anti rabbit IgG conjugated with Alexafluor 647 was delivered into Jurkat cells in suspension by 10 % duty cycle ultrasound tonebursts of 2.2 MHz (the *in situ* spatial peak-pressure amplitude =  $80\text{W}/\text{cm}^2$ ) with an efficiency of 13 %. It has been experimentally shown liposomes may be an alternative stable agent to Optison<sup>®</sup> for delivering macromolecules into cells.

Di Chen  
University of Vermont

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