

## Method for Measuring Surface Viscosity

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**Categories:**

- Chemistry and Chemical Analysis
- Micro & Nanotechnologies

**Keywords:**

- Chemistry and Chemical Analysis
- Manufacturing
- Micro & Nanotechnologies
- Nanoparticle
- Particle
- Research Tool
- Surface Chemistry
- viscosity

Researchers at Purdue University have developed a new method to assist researchers and manufacturers quantify interfacial viscosity of surfactant solutions. The advanced manufacturing technique allows for better control of drops during jet breakup and bubble coalescence, which can enhance surfactant quality for a better manufactured product. Traditional techniques for probing and particle identification in surfactants are often expensive and invasive to samples. The approach created by Purdue researchers avoids inducing stress on a sample and uses elegant mathematics in corresponding software to illustrate intermolecular forces between particles and distinguish surface viscosity from bulk viscous stress.

**Advantages:**

- Accurate
- Cost-Effective

**Potential Applications:**

- Research
- Manufacturing

**Technology Validation:** Math models

**People:**

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**Intellectual Property:**

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**Country of Filing:** United States

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