

# **Electrostatic Atomisation - Meniscus Deformation during Pulsed Electric Potential**

J. Li, A.I.Y. Tok & F.Y.C. Boey

*School of Materials Engineering, Nanyang Technological University  
Nanyang Avenue, Singapore 639798  
E-mail: jlli@ntu.edu.sg*

## **ABSTRACT**

The effects of pulsed electric potential on liquid meniscus deformation during electrostatic atomisation were investigated. The results show that both the amplitude and the width of the pulsed potential affect the behaviour of the spraying. Different amplitude or width of pulsed potential would lead to different deformation and different mode of spraying, dripping or jet.

**Key words:** Pulsed potential, electro-hydrodynamic spraying, cone-jet mode