## **Experiments in Fluid Mechanics 2015**

Warsaw, 26-27.10.2015 Institute of Aeronautics and Applied Mechanics Nowowiejska 24, 00-665 Warsaw, Poland

**Title of presentation:** Dynamic contact angle measurements

**Authors** Michał Remer <sup>1</sup>, Konrad Gumowski <sup>1</sup>, Grzegorz Sobieraj <sup>1</sup>, Jacek Rokicki <sup>1</sup>, Maryna Kaliush <sup>2</sup>, Daniel Pawlak <sup>3</sup>, Maciej Psarski <sup>3</sup>, Grzegorz Celichowski <sup>3</sup>

**Organisation(s):** <sup>1</sup>- Institute of Aeronautics and Applied Mechanics, Warsaw University of Technology, Nowowiejska 24, 00-665 Warsaw, Poland

- <sup>2</sup> Institute of Energy Saving and Energy Management, National Technical University of Ukraine
- <sup>3</sup> -Department of Materials Technology and Chemistry, University of Lodz, Pomorska 163, 90-236 Lodz, Poland

## Abstract:

The work describes fresh attitude to droplet contact angles measurements. Authors presents new method of contact angle measurement, which may lead to thesis, that dynamics of phenomena during droplet impingement does matter in very first moments of contact while considering changes of contact angles. Work presents results obtained on three types of surfaces, recorded with fast camera and processed by in house software. Obtained values of changes of contact angle and velocities of droplet contact line may lead to conclusions related to obtaining criteria for bouncing and jetting. Authors also have obtained interesting results for spreading factor which changes in very first moments of impingement.