

# Institute Lecture



## Oleg A. Kabov

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### ***Evaporation, Levitation and Self-Organization of Liquid Micro-droplets over Solid and Liquid Surfaces and Contact Line Region***

@ 6:15 pm | Jan 17, 2019

Venue: L17, LHC



#### About the talk:

Levitating droplets of liquid condensate are known to organize themselves into ordered arrays over hot liquid-gas interfaces. We report experimental observation of this behavior over solid and liquid surfaces as well as in the contact line region. There are quite some similarities and differences in their behavior over solid and liquid surfaces. A simple model is developed that predicts the mechanisms of both droplet levitation and inter-droplet interaction leading to pattern formation; the model is shown to be in good agreement with the experimental data. Using the insights from the new experiments, we are able to resolve some long-standing controversies pertaining to the mechanism of levitation of droplets over liquid-gas interfaces.

**All are invited to attend**  
Dean of Research and Development

#### About the Speaker:

Prof. Oleg A Kabov graduated from the Tomsk Polytechnic State University, Russia in 1978 and received the doctoral degree from the Institute of Thermophysics, Siberian Branch of Russian Academy of Sciences in 1987. In 1999, he also received the degree of Doctor of Sciences in Physics and Mathematics (Habilitation) from the same institute. Presently, he is the Head of the Laboratory involved in activities related to Thermophysics of Phase-Change Phenomena at the Kutateladze Institute of Thermo-physics, Novosibirsk, Siberia, Russia. Prof. Kabov has over 200 publications to his credit in refereed international journals and has 15 patents. He is also the Editor-in-Chief of the Journal 'Interfacial Phenomena and Heat Transfer'