

## **NEW APPROACHES IN RESPIRATORY CARE**

Despite a long term research in mechanical ventilation there is a still lot to improve. Technological advances in design of ventilators, development of new ventilatory techniques as well as monitoring of ventilation parameters or monitoring of patient biosignals contribute to an improved safety of the patients. The workshop deals with novel methods and approaches that could be used in the clinical practice to minimize the adverse effects of mechanical ventilation and also to increase a patient benefit from mechanical ventilation.

Workshop will be focused on measurement of biosignals in mechanical ventilation, modeling and simulation in respiratory care, controlling of ventilator parameters according to the end-tidal carbon dioxide concentration or saturation of blood by oxygen etc. Some of the topics are NIRS (near infrared spectroscopy) and EIT (electrical impedance tomography).

Moderators: Assoc. prof. Martin Rozanek, Ph.D. and Petr Kudrna, Ph.D.

Institution: Czech Technical University in Prague, Faculty of Biomedical Engineering,  
Department of Biomedical Technology