Research Groups taking part in PANTHER at Budapest University of Technology and Economics

Thematic Field	Group name/subject	Web	Contact person	Contact email	PhD topics
Aeronautics and astronautics	Federated Innovation and Knowledge Centre (EIT) / Pico-sattelite experiments and developments	www.eit.bme.hu	Dr. Kálmán Kovács	kovacsk@mail.bme.hu	1. New electro-thermal and logi-thermal simulation techniques of electronics in vacuum to assure development of reliable pico-sattelite platforms. 2. On-line thermal health monitoring of batteries and electronics on board of pico-sattelites. 3. Experiments on cubesats. Design problems of cubesat platforms. 4. Remote sensing applications.
Automation and control systems	Control Engineering and Robotics group / Control of mechatronics systems, multi-agent cooperation	https://www.iit.bme.hu/en/department	Dr. Bálint Kiss	bkiss@iit.bme.hu	1. Multi-agent cooperation and distributed sensing in robotic teams 2. Model based control of underactuated, nonholonomic mechanical systems
Sensing Technologies	Sensors and microfluidocs laborator	http://www.ett.bme.hu/laboratories/sensorics	Prof. Gabor Harsanyi	harsanyi@ett.bme.hu	Development of biosensors and sensors for biomedical applications and related microfluidic systems
	Spectroscopic measurement techniques (NIR and LIBS)	https://www.fat.bme.hu/content/research_eng.php	Assoc. Prof. László Kocsányi	kocsanyi@eik.bme.hu	Quantitative analysis of liquid samples
	Biomechatronics Group	http://www.mogi.bme.hu/?p=department&c=specialty&lang=en	Prof. Rita M. Kiss	rikiss@mail.bme.hu	Development of different motion analysis method for gait and equilibrium modelling
Power engineering and renewable energy technologies	Dep. Energy Engineering / Renewable technologies, renewable fuels in heat engines and CHP application	http://remotelab.energia.bme.hu/solar/	Ass.Prof. Gyula Gróf	grof@energia.bme.hu	1. Multi source - multi output renewable system optimization by soft computing 2. Renewable fuels utilization in CHP application
	Department of Electron Devices / Multi-domain characterization of solar cells. Thermal reliability of power semiconductor components.	www.eet.bme.hu	Ass.Prof. András Poppe	poppe@eet.bme.hu	1. Development of characterization and modelling techniques to consider thermal effects and different illumination conditions influencing the efficiency of photovoltaic cells. 2. Investigation of detecting different failure modes during thermal stressing by means of stucture function analysis and other aging indicators for conventional and wide bandgap semiconductors.