

JKU LINZ INSTITUTE
OF TECHNOLOGY

LIT LECTURES

13 SEPTEMBER 2017, 12:00-13:30, FESTSAAL A JKU

Thinking cars, subways on computer chips, atoms' fingerprints – if you want to know, what JKU research is all about, you are cordially invited to join the LIT Lecture Series!

Get a glimpse of the hottest research topics, think out of the box with interdisciplinary projects and get in contact with industrial partners.

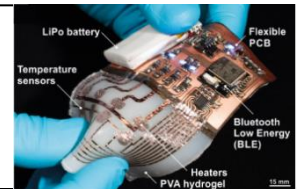
The first three topics are presented on 13 September 2017!

Finger food provided. Please register latest by 9 September (https://www.reglist24.com/lit_lecture)

“Soft Electronics and Machines with Tough Hydrogels”

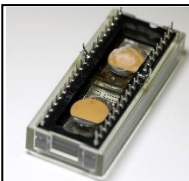
Martin Kaltenbrunner (LIT / Institute of Soft Matter Physics)

We introduce a universally applicable method for instant tough bonding of hydrogels to a wide variety of materials – from soft to hard – with unprecedented interfacial toughness exceeding the intrinsic fracture strength of the gels. We apply our approach to create a new set of soft machines and electronics from adaptive optics to soft actuators and generators.



“Sensing Arthritis with Integrated Novel Tools”

Erwin Reichel (LIT / Institute for Microelectronics and Microsensors)



Analyzing the physical and chemical condition of the synovial fluid comprises severe challenges due to the complex composition, low available sample volume, and instability in contact with air. Novel diagnostic methods using micro acoustic and microfluidic sensors are established and verified using model fluids and canine synovia.

“Smart Contracts and Hardware Oracles – Blockchain technology far beyond the cryptocurrency hype”

Bernhard Bergmair (Linz Center of Mechatronics GmbH)

Linz Center of Mechatronics GmbH and JKU are launching an open-foresight project to grasp the potential impact of the emerging Blockchain technology. Within the project, creative decision makers of several industries are joining forces to develop future use cases and anticipate potential disruptions of this game changer. First scenarios and pressing research challenges will be presented.



**UPCOMING
LIT
LECTURE:
15 NOV. 2017
12:00**

Projects to be presented:

Moritz Brehm: Electrically driven Ge Quantum dot lasers towards on chip applications

Andreas Springer / Bernhard Etzlinger: 5G Secure Communications in Industrial Production Environments

Bernad Batinic / Fabiola Gattringer: Wearable Insights: The potential of Tracking Technology to enrich Psychological Research