Abstract Lecture 1:

Engineering ISoCPS. Digitalizing and Networking an Industrial Eco-System using the DIN SPEC 91345 / IEC PAS 63088 RAMI4.0

Industry 4.0 is a collective term for technologies, concepts and novel business approaches of the whole value chain organization, combining Cyber-Physical Systems, the Internet-of-Things and the Internet-of-Services into ISoCPS. After presenting the scientific and technical background behind Industrial Systems-of-Cyber-Physical-Systems (ISoCPS), the audience/participants of the Lecture will get a deep view about:

- Digitalization and Networking of the economy. Principles.
- > Building industrial eco-systems of digitalized and networked things/assets. Industry 4.0.
- > Formalizing the digitalization and networking principles with the 3D RAMI4.0 DIN SPEC 91345
- ➤ Understanding why and how to navigate the 3D RAMI4.0 fulfilling the major requirements for an adequate industrial digitalization, engineering and operation of ISoCPS?
- ➤ Understanding how to migrate from Industry 3.0 to Industry 4.0 environments. Analysis and discussion of results of exemplary innovation projects.