Radical Dynamic Digital Twin

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Gamification, Internet of the Lab Tools, Digital Twins, Machine Learning / Artificial Intelligence combined with automation and quality data / data integrity are pivotal tools to move chemical R&D processes and operations into the digital age.

Presented concepts and solutions highlight that digital twins are disruptive for each and every lab and evolutionarily enable the AI / ML pipelines in the future combined with ready-to-apply and quality assured catalysts, reagents, building blocks (SMOLE). The presentation shows Chemspeed’s top-down and bottom-up digitalization approach (ARKSUITE SOFIA) combined with its proprietary globally synchronized protocolling and smallest operational increment based, versatile workflow design that is uniquely and sustainably shaping the R&D sphere in e.g. organic chemistry.