

# A glimpse into smart tribology lab

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## Abstract:

*Smart tribology lab* is a futuristic lab concept developed by Ducom Instruments, that can drive productivity of professionals in tribology research and teaching. As it encompasses the value generators such as *connected tribometers and related services, remote access to continuous real-time data stream, data centralization, data analytics - predictive maintenance and optimization of R&D processes*. All of this will aid the creation of *digital twin* of materials, lab spaces and tribometers.

Learning objectives:

1. Experience the *3 D digital technology like Augmented Reality*, discover its use in the tribology lab.
2. Demonstrate the use of *smart sensors and its enablement in tribometers using Internet of Things (IoTs)*
3. Cloud based *data analytics and lab management tools*.

Key benefits:

1. Understand the infrastructure required for a *smart tribology lab*
2. Introduce *digital transformation* as a course component in tribology curriculum

## Biography:

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Deepak received his PhD from University of Groningen and Diploma in Digital Transformation from Rotterdam School of Management. He is the Head of Global Marketing and Sales at Ducom Instruments. Currently, he is heading the operations of Ducom Digital, focused on IoT, AR and Deep Learning.