



Europäische Forschungsgesellschaft Dünne Schichten e. V.  
European Society of Thin Films

**Workshop**

# Thin film technologies | Future applications of 2.5 D materials

- photovoltaics ▪ batteries
- flexible devices ▪ sensors

**SAVE  
THE DATE**

**November 14 – 15, 2023**  
Eindhoven | The Netherlands

**TNO** innovation  
for life

 **Holst Centre**  
powered by imec & TNO

**HIGH TECH CAMPUS**  
EINDHOVEN

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## Thin film technologies | Future applications of 2.5 D materials

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In this technology workshop, recent developments in **thin film technologies for future applications of 2.5 D materials** will be covered from the materials development, process development and process integrations point of view to provide a state-of-the-art overview of what is buzzing in this application.

New materials such as graphene and diamond are seen as hopefuls. However, their usage poses numerous challenges in the complexity of system integration technologies. They also require innovative processes and equipment. Which materials, for example, are capable of withstanding high temperatures and can thus be used for sensor applications in components subject to high thermal loads? Which materials can be used in harsh environments because they are protected against corrosion, for example? Are there materials with "memory" that prevent product piracy?

Among other things, new fields of application for MEMS in the area of mobility transformation are to be considered - what opportunities will arise in the future, for example, for energy storage, conversion application, H<sub>2</sub> economy and regenerative energy? Is there a link between the research landscapes for the semiconductor industry (i.e. also MEMS) and the hydrogen center that is currently being established?

This workshop offers you an optimal platform for professional exchange on these and other trends. Here, experts can exchange detailed information, share their experiences and present innovations.

This European workshop is jointly organized by TNO, Holst and European Society of Thin Films e.V..

## CONTACT

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