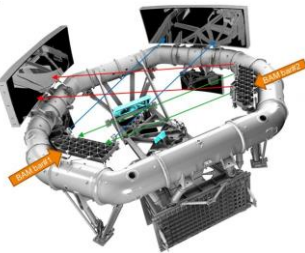


# Emerging Quantum Industry

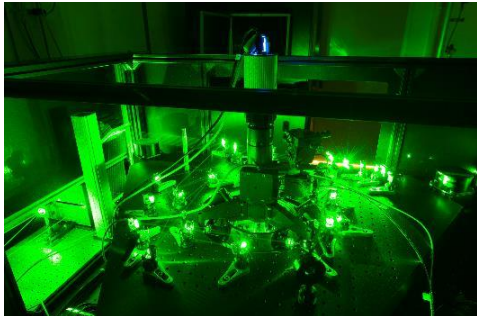
Dr R. (Rogier) Verberk

Director Semicon & Quantum



# TNO

innovation for life



# QuTech

Since 2014, 250 fte

# TU Delft

Delft University of Technology

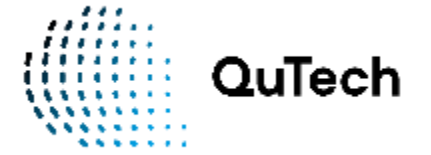


# Demonstrators

Europe's first quantum computer

Quantum Inspire

QUtech  
4 - 8 GHz Duplexer



Nodes for the Q-link demo network tested and shipped to 3 cities.

KPN PB400: node 2 location

KPN telephone exchange: detector location

15 km fiber

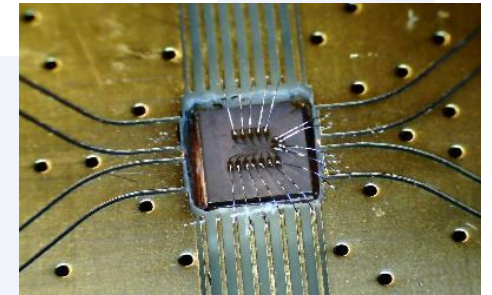
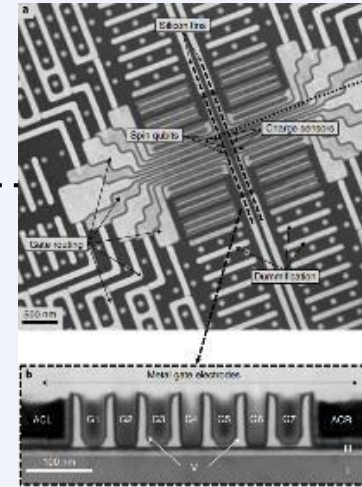
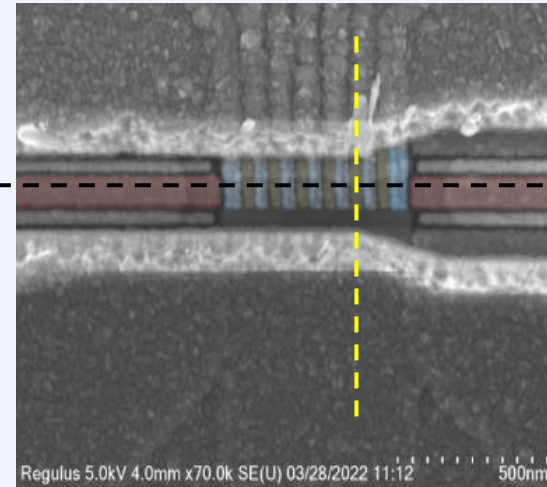
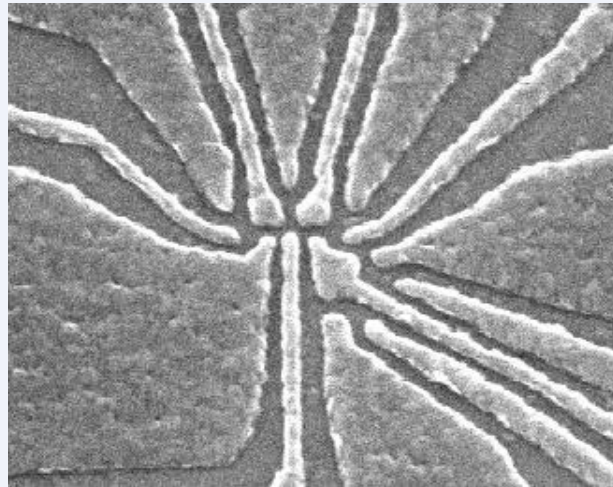
QuTech - node 1 location

# Semicon background & quantum chips

QuTech & Intel: world's first spin qubits manufactured in 300 wafer fab.



QuTech



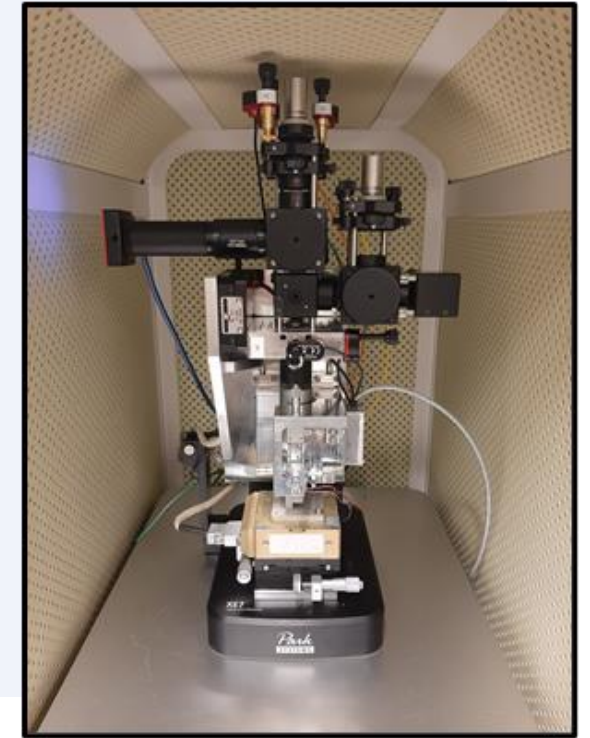
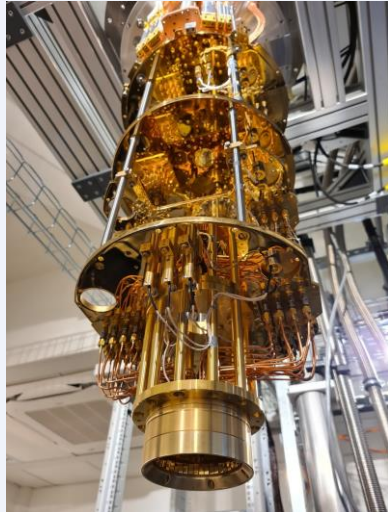
## Qu-Test, Qu-Pilot

TNO and VTT lead consortium of RTO's for pilot line nano-fabrication and testing sites



# Quantum Information Technology Testing facility

Europe's first quantum testing lab, easy access for SME



## Quantum Sensing

Demonstrations of sensing concepts, benchmarking, application development

# The ecosystem in NL



Universities

TNO

Foreign Corporate R&D labs

'Non quantum' partners

End users

House of Quantum / facilities

Start-ups

...

# QuTech & TNO spin-off companies

