



# NKT PHOTONICS

## Innosuisse projects



# NKT Photonics

## Ultrafast:

- Picosecond and femtosecond duration lasers for micro-machining



## Supercontinuum:

- ‘White-light’ lasers for microscopy, lithography and spectrometry



## Single frequency:

- Narrow linewidth lasers for sensing and detection, and quantum



# Why Innosuisse?

- Multi-national collaborations are difficult to establish – entering existing value chains
  - A trusted institution can bridge the trust gap
  - Partial funding can make commercially risky projects more attractive to companies
  - Government support also allows collaboration with research institutes and universities
- NKT can gain access to state-of-the-art research in Switzerland
  - We have limitations in expertise and appropriate facilities



# What is the plan?

- NKT has a bilateral agreement between NKT CH and KIMM to research efficient methods for **laser lift-off on semi-conductor materials**
  1. CSEM will build a breadboard solution based on NKT's standard products
  2. NKT will ruggedise the solution
  3. KIMM will test the laser on the target application
- NKT gains a valuable relationship in East-Asia

