

### Atomically precise surface cleaning



- The proposed technology is based on on-Surface synthesis of nanographene
- Scheme of the proposed technology:

Efficient cleaning (at atomic level) from halogens. Proven by LT-STM and XPS measurements







# **Original/Potential Field of Application**



- For the original field of application, the technology was developed in the on-surface synthesis of nanographene.
- This is a tool for surface cleaning from byproducts of reactions (halogens: Br, Cl, F, I)
- The technology could have the following fields of application :

electronics, pharmacy, optics





## **Proposal SWOT Analysis**



#### Strengths

- Atomically precise cleaning from halogens
- Simple (thermal cracking of the molecular hydrogen)
- Very efficient

#### Opportunities

Powder cleaning? Is it possible?

#### Weaknesses

- Up to now, tested only on the surface
- UHV/HV conditions needed

#### Threats

• It is limited only for on surface?





## **IPR Status & Contact Information**



• The IPR status of the technology is under patent application

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