



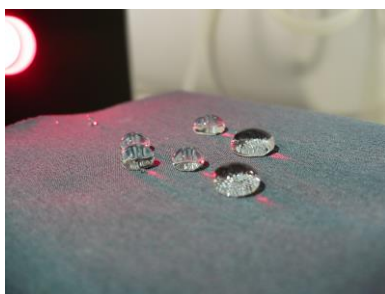
# Lodz University of Technology

Faculty of Process  
and Environmental Engineering



**Division of Molecular Engineering**  
Department of Chemical and Molecular Engineering

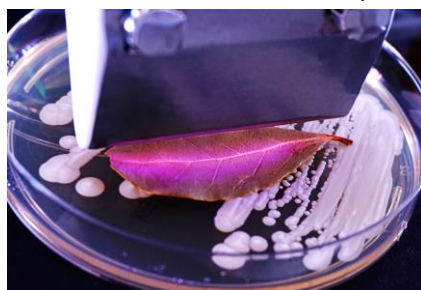
## APPLICATION OF COLD PLASMA IN MATERIALS ENGINEERING



### Modification of material surface properties

(e.g., synthetic and natural polymers, textiles, leathers, ceramics)

- superhydrophobic and hydrophilic surfaces
- improvement of adhesive and adsorptive properties (e.g., bonding ability)

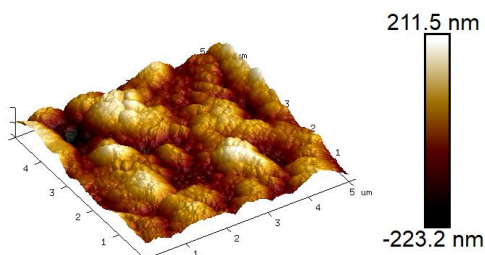
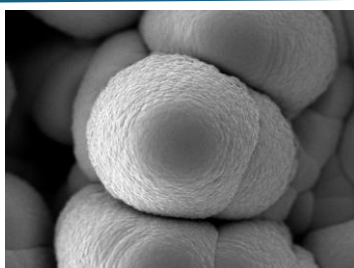


### Medicine and biotechnology

(e.g., medical biology, food technology, agriculture)

- deactivation of pathogenic microorganisms
- decontamination of food products
- enhancement of seed germination

## STRUCTURAL AND MORPHOLOGICAL ANALYSIS



X-ray Photoelectron Spectroscopy (XPS)  
Fourier-Transform Infrared Spectroscopy (FTIR)  
Scanning Electron Microscopy (SEM/EDX)  
Atomic Force Microscopy (AFM)

### CONTACT

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