

**Title of the invention:**

A flow microreactor system and the way of conducting photocatalytic processes using it.

**Inventors:**

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**Field:**

Micro-structural and nano-technology  
Environmental technology

**Summary:**

The invention provides a method and an apparatus for microfluidic, photocatalytic and photobiological processes using LED light.

**Advantages / innovative aspects:**

- Power saving and the uniform light distribution.
- Possibility of miniaturization.
- Proper cooling system for LEDs.
- Liquids can be sterilized in the flow.

**Keywords:**

LED, capillary, photocatalyst, microreactor

**Use:**

Photocatalytic synthesis under light emitted by LEDs.  
Antibacterial purifier of water.

**State of the progress:**

Stage of development

**Intellectual property rights:**

Patent application P.430411 – 30.06.2019 - Poland

**Expected cooperation:**

Contract of sale, licence agreement, cooperation agreement