

Environmentálne a biomedicínske aplikácie plazmy



Za účelom zníženia environmentálnych dopadov pri tvorbe rôznych chemikálií a materiálov je nutné vyvíjať nové environmentálne technológie. Patrí k nim aj procesy využívajúce elektrické výboje a nerovnovážnu plazmu (NP), ktorým sa venuje aj náš tím. Okrem toho sa venujeme aj aplikáciám NP v medicíne a poľnohospodárstve. Aby sme týmto technológiám mohli lepšie porozumieť a ďalej ich vyvíjať, venujeme sa aj základnému výskumu NP.

In order to reduce the environmental impact of the production of various chemicals and materials, it is necessary to develop new environmental technologies. These include processes using electrical discharges and non-equilibrium plasma (NEP), which our team is also working on. In addition, we are also engaged in applications of NEP in medicine and agriculture. In order to better understand and further develop these technologies, we are also engaged in basic research on NEP

AIR ANALYSIS

AIR CLEANING

Electrical discharge generation + Catalysts

WATER CLEANING

Optical & electrical diagnostics

Water & micropollutants analysis

GREEN AGRICULTURE

Nitrogen fixation

Plasma activated water

Biological & chemical decontamination

Plant growth

Deň 0

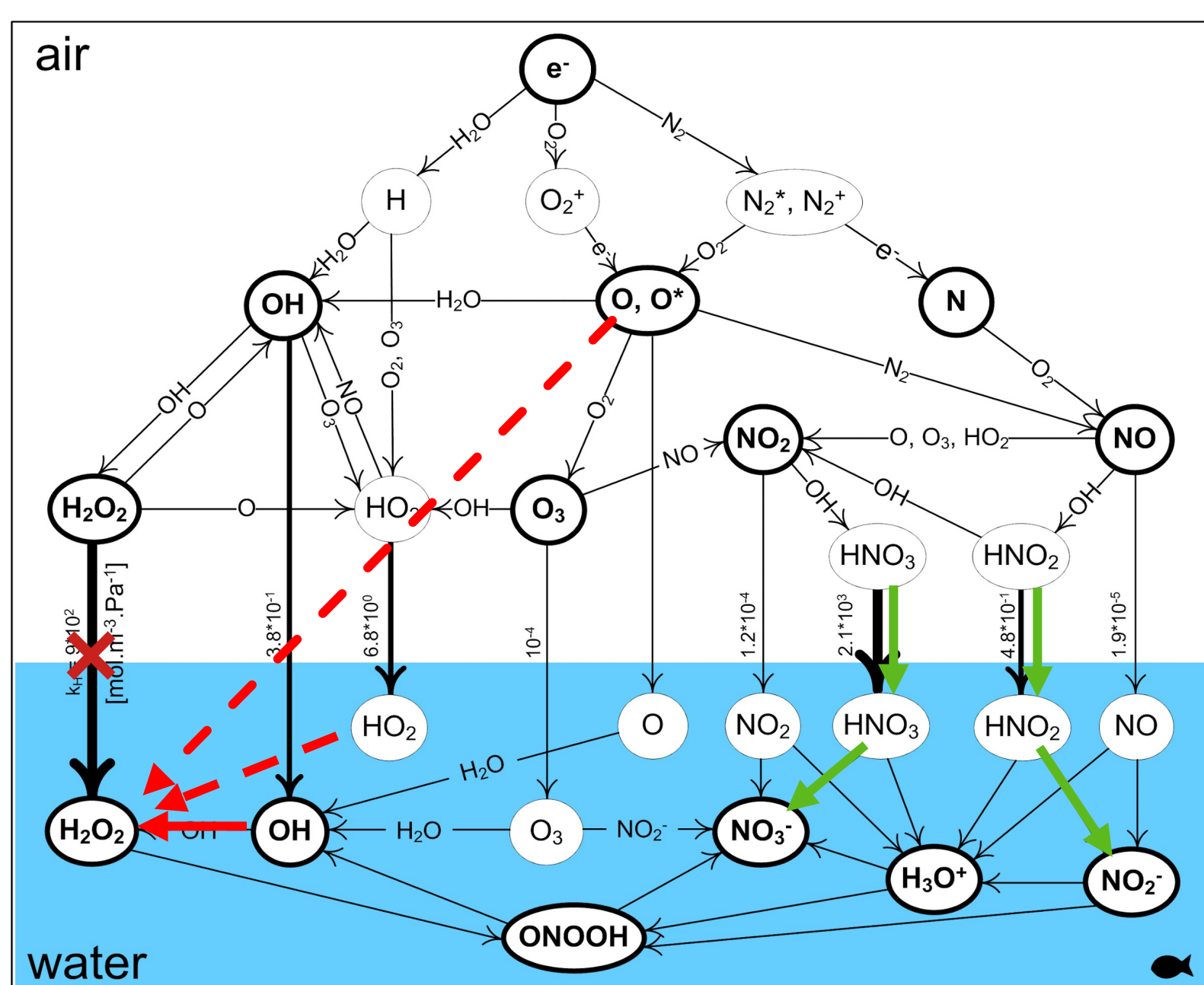
Deň 3

MCF-7 -kontrola

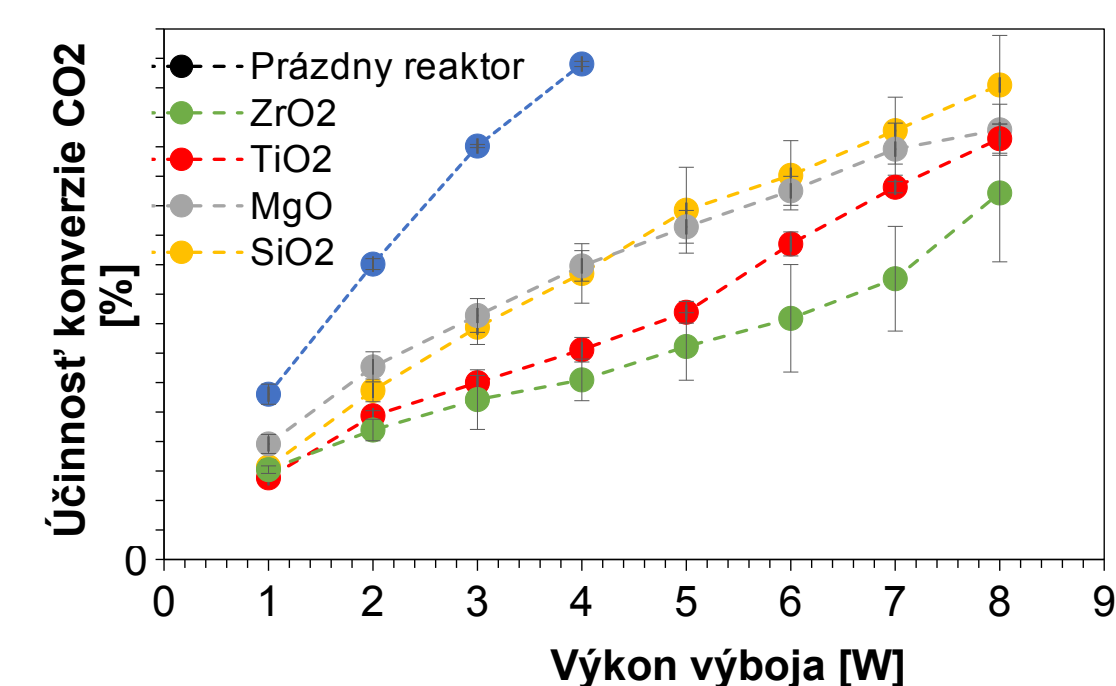
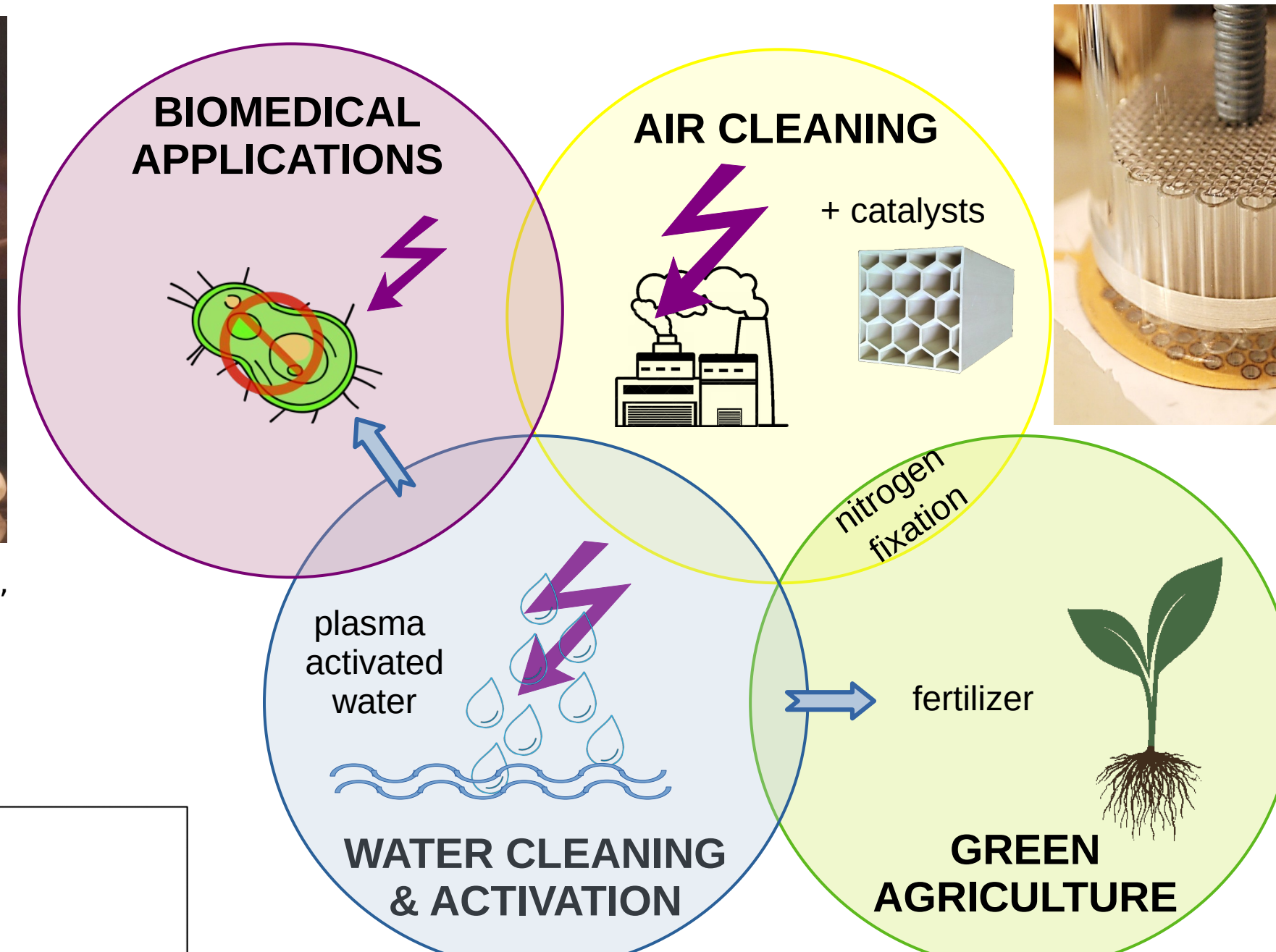
PAPBS 5 min

3D model nádoru prsníka

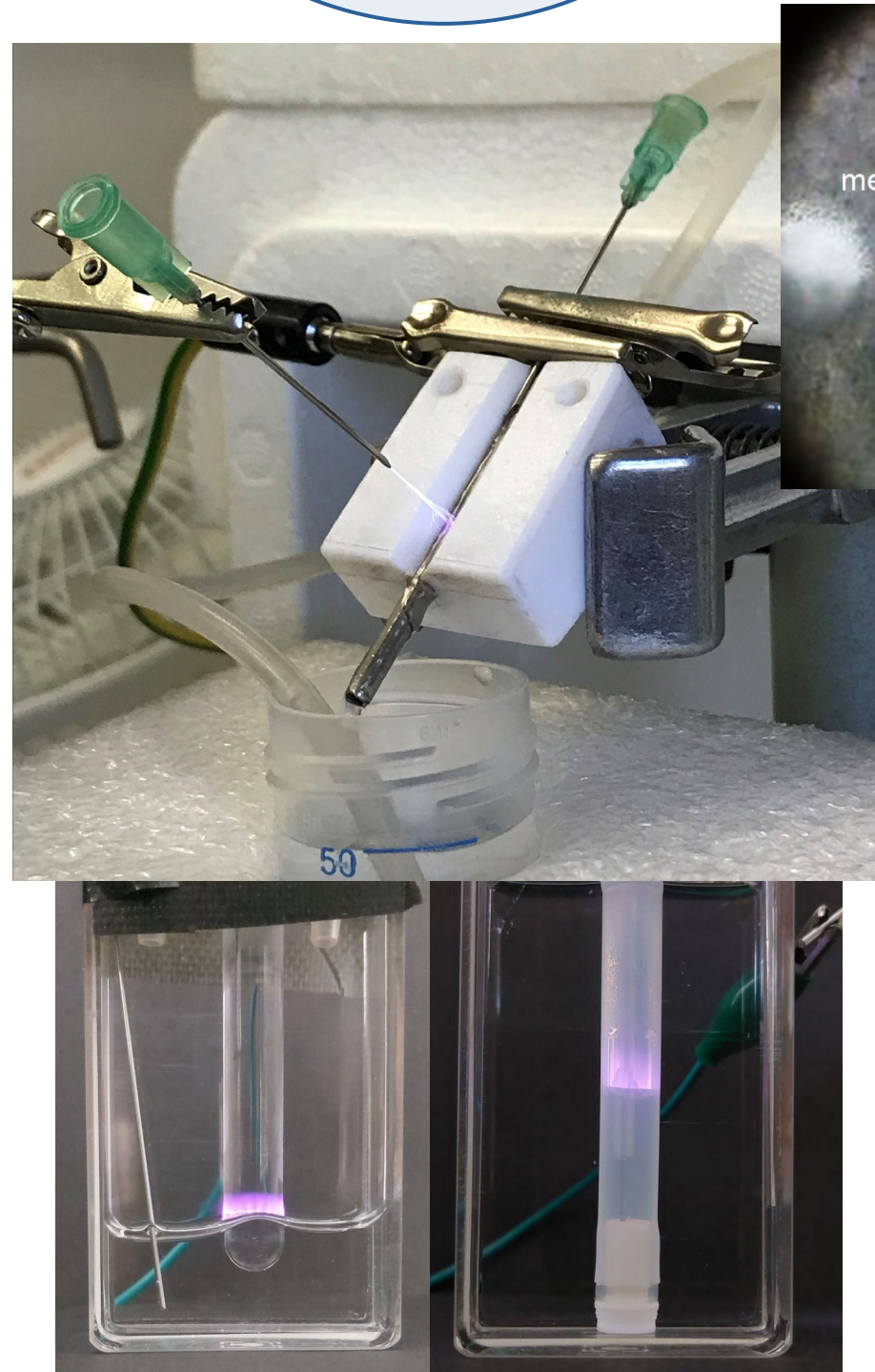
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