

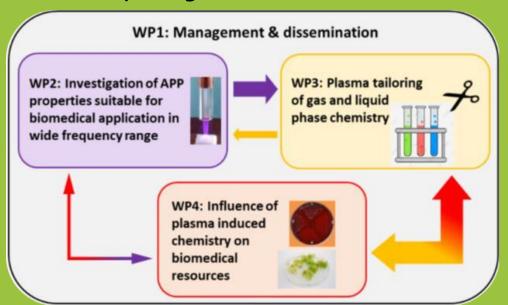
## Atmospheric pressure plasmas operating in wide frequency range – a new tool for production of biologically relevant reactive species for applications in biomedicine

Newsletter Issue #1 July 2022

The main idea of APPerTAin-BIOM project is to tailor rich plasma chemistry to be effective green technology for treatment of drug-resistant bacteria or plant cells for production of chemical compounds needed in pharmacy or cosmetics. With this in mind we have started to assemble laboratory pilot Atmospheric Pressure Plasma (APP) systems that will be characterized and optimized for application during the APPerTAin-BIOM project.

In order to be able to set the guidelines for technology transfer at the end of the project we need to know in great detail plasma chemistry in gas phase and its interaction with liquids. This first period was used for further literature search and procurements of necessary equipment and consumables. Also, the first aseptic in vitro carrot calliculture is set up and it will serve as source of plant material during the project.

## Work packages of APPerTAin-BIOM



## Project Partners - Science and Research Organizations (SRO)



Institute of Physics Belgrade, University of Belgrade (IPB)



School of Dental Medicine, University of Belgrade (STOMF)



Faculty of Medicine (School of Medicine), University of Belgrade (MFUB)



Institute for Biological Research Siniša Stanković, University of Belgrade (IBISS)

## News:

- March 2<sup>nd</sup> 2022 APPerTAin-BIOM Kick-off meeting
- May 2022- the new UV-VIS two-line spectrophotome ter has arrived
- June 2022 –
   Dr Puač had two invited lectures at ICPM9 in Utrecht, the Netherland
- July 6<sup>th</sup> 2022 –
   APPerTAin BIOM
   2<sup>nd</sup> meeting
- July 2022 Fluoroskan™
   Microplate
   Fluorometer
   delivered and
   installed
- July 2022 –
   Dr Malović had poster presentation at ESCAMPIG in Paris, France



APPerTAin-BIOM Kick off meeting was held on March 2<sup>nd</sup>, 2022 at the Institute of Physics Belgrade

The new UV-Vis two line spectrophotometer was delivered and installed at the Institute of Physics





The new member of the team - Fluoroskan™ Microplate Fluorometer was delivered and installed at the Faculty of Medicine, University of Belgrade

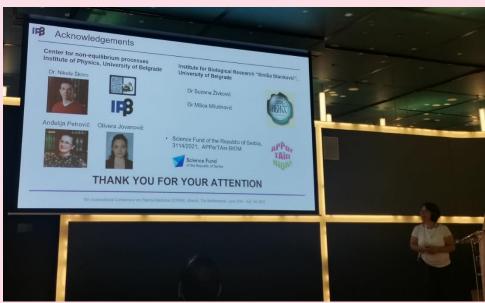
Morphologically, they look almost the same; nevertheless here are presented three different varieties of carrot (Daucus carota). Calli of orange, white, and black carrot grown on the basal medium are ready for plasma treatment.





The 2<sup>nd</sup>
APPerTAinBIOM meeting –
Institute of
Physics Belgrade

Dr N. Puač gave two invited lectures at the ICPM9 introducing APPerTAin-BIOM to the scientific community.





Interdisciplinary team of APPerTAin BIOM conquering new heights after ICPM9 conference day in Utrecht.

Dr G. Malović had a poster presentation at ESCAMPIG in Paris, France.

