

## PhD position description

We are looking for a motivated fellow for a PhD student position in the Laboratory of Applied Plasma Physics and Nanostructures ([www.prf.jcu.cz/plasma](http://www.prf.jcu.cz/plasma)) at the University of South Bohemia in the Czech Republic. We perform fundamental and applied experimental research focused on the growth and formation of functional surfaces with a primary focus on bio-applications and high-tech materials of high-added value. Thin films are preferentially prepared by PVD processes employing magnetron sputtering. Furthermore, nanoparticle production based on sputtering combined with gas condensation also belongs to the objective of our interest. We provide complex research which combines plasma sources construction, plasma diagnostics (Langmuir probe, optical emission spectroscopy, ion flux measurements etc.) and analyses and tailoring of deposited films.

## PhD position:

- PhD student in the Applied Physics program (4 years) at the University of South Bohemia,
- PhD topic research oriented on plasma surface engineering and nanoengineering,
- fabrication and further development of functional thin films, bio-interfaces, nanostructures,
- lab management including deposition of thin films, plasma discharges, analytical tools,
- cooperation with colleagues from biochemistry and structural chemistry,
- all the above in the frame of the PhD thesis according to the university rules.

## Expected:

- MSc. (or equivalent) in applied physics, plasma physics, material science, chemistry or equivalent which enables you to perform research on thin film deposition processes,
- knowledge of physics and/or mathematics and/or natural science and/or material engineering at MSc. (university level),
- fluent in spoken and written English (expected level B2, no certificate needed, to be able to study in English),
- team spirit, creativity, enthusiasm.

## Offer:

- PhD position for 4 years (scholarship, student benefits),
- opportunity to be employed on research projects,
- beginning as soon as possible, expected from July 2024.

## Information:

[www.prf.jcu.cz/plasma](http://www.prf.jcu.cz/plasma)

<https://www.prf.jcu.cz/en/study-at-the-faculty/information-for-phd-students>

<https://www.prf.jcu.cz/en/> , <https://www.jcu.cz/en/>

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