

## Postdoc position in the plasma-assisted deposition of functional thin films

We are looking for a highly motivated Postdoc (or a PhD student with an expected defence within a few months) to join 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.

### Your job:

- fabrication and further development of functional thin films with application potential in bio-medicine areas (films doped by antibiotics, antimicrobial surfaces etc.),
- nanostructured surfaces acting as sensor transducers,
- fabrication of nanostructured and protective hard coatings,
- cooperation with colleagues from biochemistry and structural chemistry,
- lab management including maintenance and service of vacuum systems and the related infrastructure,
- reporting of research activities in the form of papers and reports.

### Your qualification:

- PhD in plasma physics, material science, chemistry or equivalent which enables you to perform research on thin film deposition processes,
- experiences with PVD, magnetron processing, nanoparticle gas aggregation, low-temperature plasma, vacuum systems, and surface analyses (FTIR, SEM, ellipsometry, MALDI, Raman spectroscopy etc.) are strongly appreciated,
- publication activity in the field relevant to the length of the carrier,
- fluent in spoken and written English (to be able to publish in scientific journals and to communicate),
- team spirit, independence and enthusiasm.

### We offer:

- temporary position guaranteed by the 30 months running project (up to 2026),
- contract for 12 months + another 2 years; prolonged upon both side agreement and positive results
- full-time job (8 hours per day) at the University of South Bohemia in Ceske Budejovice, Czech Republic,
- employment as soon as possible.

### Information:

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

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

### Contact:

Vitezslav Stranak

+420 387 776 269

[stranak@prf.jcu.cz](mailto:stranak@prf.jcu.cz), [stravn00@centrum.cz](mailto:stravn00@centrum.cz)