

Apply today for a postdoc position  
**'Decoding the binding principles of small molecules to RNA'** with a triple chance of success (MSCA, MSCA CZ, ERA Fellowship)!

The diverse classes and transcription/translation nature of RNAs could dramatically expand the targetable human genome beyond the protein space, and present a great opportunity in drug discovery. Their highly polar character and flexibility however,

represents a formidable challenge to small molecule drug discovery. ***This exciting project aims to decipher the binding principle of small molecules to RNA.*** Using methods of RNA crystallography/EM, affinity biophysics, HT chemistry, and a growing inhouse RNA-directed library of small molecules we will shed light into RNA-small molecule interactions. Applications of the generated knowledge to RNA disease targets are envisioned. The dynamics of RNA small molecule interactions will be investigated with NMR methods in collaboration with the Technical University Munich. This project will also include collaborations with large international pharma companies. The research will be performed in the innovative chemistry group at CATRIN under the leadership of [Prof. Alexander Dömling, ERA Chair](#) at the University of Olomouc.

The successful, highly motivated candidate is experienced in either one or several of the techniques: large-scale RNA sample preparation, biomolecule crystallography (or cryo EM), and small molecule chemistry and has a strong desire to dive into complementary techniques. A deep interest in RNA medical biology and drug discovery is prerequisite. The candidate has excellent English language, and communication skills. Strong leadership qualities are required for the supervision of junior team members. The position can be used for career development to become a group leader in case of successful major grant funding. Other requirements: candidates should have a PhD degree at the time of the deadline for applications; Ph.D. holders (up to 8 years from the date of award); candidates have not resided in the Czech Republic for more than 12 months during last 3 years at the time of the deadline (September 2023).

The [Czech Advanced Technology and Research Institute](#) (CATRIN) of [Palacký University Olomouc](#) is a leading European research institute. Our mission is to carry out interdisciplinary research into emerging nanotechnologies, biotechnologies and biomedicine at the highest international level, alongside their further advancement and application. We offer a stimulating environment, internationally attractive salary, and a unique opportunity to join a well-known research group to perform forefront science. Beyond performing science there is the opportunity to translate inventions to innovations. **Applications should be sent to [alexander.domling@upol.cz](mailto:alexander.domling@upol.cz)**



Palacký  
University  
Olomouc

**Are you a progressive, ambitious and innovative postdoctoral researcher interested in joining a prestigious team of leading researchers in nanomaterial and biotechnology fields?**



**CATRIN**  
Czech Advanced Technology  
and Research Institute

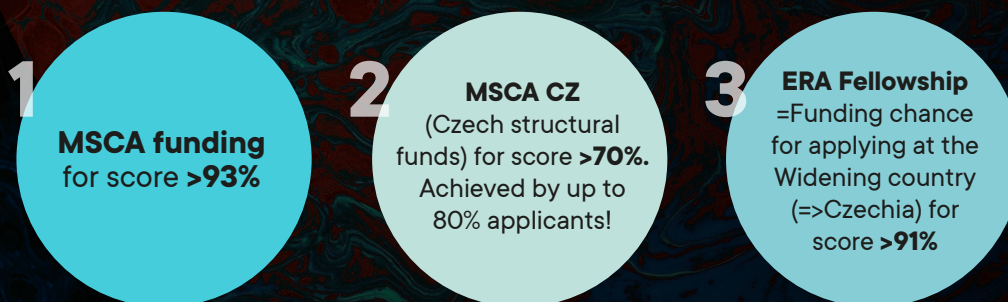
**CATRIN** - Czech Advanced Technology and Research Institute of Palacký University Olomouc, a prominent European research institute in nanotechnologies, biotechnologies and biomedicine, is looking for **candidates** to join its team under the European and Global Marie Skłodowska-Curie 2023 **Postdoctoral fellowship programme**.

We employ scientists who rank among the **top 1 percent** of the world's most Highly Cited Researchers. Our mission is **excellency** and interdisciplinary research at the **highest international level**.

### WHAT IS WAITING FOR YOU?

- **Research experience aiming at top rated publications** (CATRIN has four world ranked Highly Cited Researchers);
- **Collaboration with top scientists on projects creating the future of the nanomaterial and biotechnology fields.**

### UNBEATABLE COMPETITIVE ADVANTAGE OF CZECHIA! TRIPLE CHANCE TO RECEIVE FUNDING! HOW SO?



**=> One proposal, 3 chances to get funded!**

### WHO ARE WE SEARCHING FOR?

- Ph.D. holders (up to 8 years of from the date of award);
- Candidates that have not resided in the Czech Republic for more than 12 months during last 3 years at the time of the deadline;
- Researchers in the following nanomaterial and biotechnologies research areas are particularly welcome:
  - a) **New and emerging nanomaterials;**
  - b) **Nanomaterials for energy production and storage;**
  - c) **Magnetism of nanoparticles and sensing;**
  - d) **Sensing, environmental remediation and separation technologies;**
  - e) **Nanomedicine, drug delivery systems and imaging agents;**
  - f) **Recombinant protein engineering, proteomics;**
  - g) **Plant phenotyping and phytochemistry, plant genetics and engineering;**
  - h) **Molecular evolution;**

### HOW CAN YOU APPLY?

Submit an application including a CV, separate list with 5 most important publications of the 5 last years and a half-page long proposal of your project to: [martin.grepl@upol.cz](mailto:martin.grepl@upol.cz)

[www.catrin.com](http://www.catrin.com)