

**Sofia University "St. Kliment Ohridski" – Faculty of Chemistry and Pharmacy** is searching for experienced researchers interested in submitting a joint application for the following types of Marie Skłodowska-Curie Individual Fellowships (Call H2020-MSCA-IF-2018):

- ✓ MSCA-IF-EF-ST (ST Standard European Fellowships)
- ✓ *MSCA-IF-EF-CAR* (*CAR Career Restart panel*)
- ✓ *MSCA-IF-EF-RI* (*RI Reintegration panel*)
- ✓ MSCA-IF-GF (Global Fellowships)

The Faculty of Chemistry and Pharmacy (FCP) of SU is a leading research and educational organization in the field of Chemistry in Bulgaria. Most of the academic staff members are active researchers in all areas of contemporary chemistry and work on joint research projects with leading research centers in Europe, USA and Japan. In the Sofia University, the FCP is the leader in number (and total income) of research projects as well as industrial projects (*ca.* 30 per year). FCP has recently been coordinator of three EC-funded projects in the field of advanced materials.

https://www.uni-

sofia.bg/index.php/eng/the\_university/faculties/faculty\_of\_chemistry\_and\_pharmacy

The following leading scientists express interest in being supervisors of MSCA fellows in the described thematic areas of research.

- 1. Prof. Anela Ivanova (aivanova@chem.uni-sofia.bg) Computational Chemistry; classical (Molecular Mechanics and Molecular Dynamics) and quantum (DFT, HF, and post-HF) methods for modelling properties and phenomena at the molecular level. Current research areas are focused on the structure and mechanism of action of drug-peptide complexes conjugated to targeting ligands, on self-organization of amphiphiles at interfaces, and quantum chemical studies on optical properties of organic light-emitting molecules and magnetic properties of molecular hybrid-spin complexes. The Laboratory of Quantum and Computational Chemistry is equipped with server cluster with 236 CPU cores (Xeon Silver 4116, Xeon E5420, X5650, Intel5060), 2 GPUs VGA GTX 1080 Ti, 1056 GB RAM and 24 TB of disk space. Additional information:

  https://www.uni-sofia.bg/index.php/eng/the university/faculties/faculty of chemistry and pharmacy/s tructures/departments/physical\_chemistry/lecturers/prof\_anela\_ivanova
- 2. Prof. Alia Tadjer (tadjer@chem.uni-sofia.bg) Computational Chemistry; modelling of properties of various materials by quantum (DFT, HF, and post-HF) methods; establishment of structure-properties relationships for novel organic or hybrid materials conducting polymers, extended conjugated (graphene-like) systems, metal-organic complexes, multi-state molecules and molecules with different types of bio-activity. The Laboratory of Quantum and Computational Chemistry is equipped with server cluster with 236 CPU cores (Xeon Silver 4116, Xeon E5420, X5650, Intel5060), 2 GPUs VGA GTX 1080 Ti, 1056 GB RAM and 24 TB of disk space. Additional information: <a href="https://www.uni-sofia.bg/index.php/eng/the\_university/faculties/faculty\_of\_chemistry\_and\_pharmacy/structures/departments/physical\_chemistry/lecturers/prof\_alia\_tadjer">https://www.uni-sofia.bg/index.php/eng/the\_university/faculties/faculty\_of\_chemistry\_and\_pharmacy/structures/departments/physical\_chemistry/lecturers/prof\_alia\_tadjer</a>



- 3. Assoc. Prof. Stoyan Karakashev (<a href="mailto:fhsk@chem.uni-sofia.bg">fhsk@chem.uni-sofia.bg</a>) Theoretical Chemistry, Surface Chemistry and Physical Chemistry. Current project is 'Ion-Specific Effects on Foam Stability, Smart Foams and Emulsions'. Additional information: <a href="https://www.researchgate.net/profile/Stoyan\_Karakashev">https://www.researchgate.net/profile/Stoyan\_Karakashev</a>
- 4. Assoc. Prof. Yulian Zagranyarski (<a href="mailto:ohjz@chem.uni-sofia.bg">ohjz@chem.uni-sofia.bg</a>) Synthesis and optical properties of naphthalene and rylene dyes and pigments. Synthesis and properties of graphene, graphene oxide and graphene nanoribbons (GNR's). Additional information:

  <a href="mailto:https://www.uni-sofia.bg/index.php/eng/the\_university/faculties/faculty\_of\_chemistry\_and\_pharmacy/structures/departments/organic\_chemistry/lecturers/assoc\_prof\_dr\_yulian\_zagranyarski</a>
- 5. Prof. DSci Sonia Ilieva (e-mail: <a href="mailto:silieva@chem.uni-sofia.bg">silieva@chem.uni-sofia.bg</a>) Physical organic chemistry: mechanism and reactivity in organic reactions; Vibrational spectroscopy: development of theoretical methods for interpretation of intensities in vibrational spectra; Computational Chemistry/Biochemistry/Biochemistry/Biophysics; Molecular Modeling. The main research efforts are in the field of theoretical description of chemical reactivity by applying quantum mechanical methods. The computational work is supplemented by experimental kinetic measurements. Additional information: <a href="mailto:http://www.chem.uni-sofia.bg/depart/otchem/LabCCS/group-members-silieva.html">http://www.chem.uni-sofia.bg/depart/otchem/LabCCS/group-members-silieva.html</a>

If you are interested in preparation of a project proposal together with **Sofia University "St. Kliment Ohridski" – Faculty of Chemistry and Pharmacy** in response to the H2020-MSCA-IF-2018 Call, **please contact the supervisor in your thematic field** by submitting CV and a brief description of your project idea until **15.07.2018**. Selected candidates will be contacted until **20.07.2018**, and will be invited to prepare a joint proposal together with the respective supervisor in the given field.

## **IMPORTANT** – apply with us and increase your chances for success:

As of 2018, not funded applications for MSCA Individual Fellowships with a host organisation from Bulgaria have the chance to be funded under the Widening Fellowships Call ("Spreading Excellence and Widening participation"). Not funded MSCA proposals for European Fellowships from 'widening countries' (all panels) will be automatically transferred to the Widening Fellowships Call and will therefore be ranked in one single list according to the scores and evaluation of the MSCA-IF call with an additional budget of 5 M€ for 2018.

More information on the specific conditions and types of MSCA-IF application you can find at the official web-site. The deadline for submission is 12.09.2018.

 $\underline{https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/msca-\underline{if-2018.html}$