

## Model 1 – PROFILE (Cod.Ud'A 2024/068)

a comparative assessment procedure by qualifications and public discussion for the recruitment of one **Researcher with fixed-term employment is hereby announced pursuant to art. 24 paragraph 3 letter b) of the Italian Law 240/2010 (SENIOR)** with full-time commitment, G.S.D. 03/CHEM-05 ORGANIC CHEMISTRY (EX S.C. 03/C1) S.S.D. CHEM-05/A ORGANIC CHEMISTRY (EX S.S.D. CHIM/06), activated for the needs of study and research of the Department of Farmacia

- **date of the resolution of the Department** which identified ssd and s.c.(competitive exam sector) for fixed-term full time researcher under art. 24 , paragraph 3, letter . b) of Law no .240/2010: cdd (resolution of Department) of 03/07/2024 Prot.n. 52342/2024 of 03/07/2024;
- **Date of the resolution of the Department** which identified the profile according to art. 4 paragraph 4 of the University Regulations: cdd (resolution of Department) of 03/07/2024 Prot.n. 52342/2024 of 03/07/2024 + Urgency Measure prot. n. 71145/2024 del 18/09/2024;
- **Date of the resolution of the Department** which identified weights of elements subject to evaluation: no specific resolution were taken; please refer to the ranges identified in the procedure;
- **Date of the resolution of the Department** which identified minimum eligibility score: no specific resolution were taken;
- **Academic Recruitment Field:** G.S.D. 03/CHEM-05 ORGANIC CHEMISTRY (EX S.C. 03/C1);
- **Profile:** S.S.D. CHEM-05/A ORGANIC CHEMISTRY (EX S.S.D. CHIM/06);
- **Specific functions required to the research assistant:**
  - **Teaching appointments:** Teaching, supplementary teaching and student support activities, of the disciplines of the scientific-disciplinary sector CHEM-05/A activated for the degree courses provided by the Department of Pharmacy and the University, including the Masters and and PhD courses;
  - **Scientific appointments:** The research activity will concern the preparation and physicochemical characterization of graphene-based catalysts for organic reactions and nanostructured, supramolecular organic materials and functionalized recovered materials for the separation/upgrade of gaseous mixtures for environmental and energy applications. The researcher will deal with extractions, with innovative, eco-sustainable and/or easily reusable solvents, of organic molecules from food waste and agricultural processing residues. The research will also be aimed at the study (design, synthesis, characterization) of heterocycles, organic molecules and macromolecules/supramolecules at various degrees of complexity, the combination/self-assembly of which will be developed for applications in the energy field (clathrate hydrates, photoconversion of light, alternative energies), in the pharmaceutical, agricultural (innovative fertilizers, biostimulants) and environmental fields (recovery of waste materials and gaseous mixtures);.
- **Rights and obligations:** as laid down by the provisions in force for the legal status of fixed term research assistants, and by the current Code of Ethics of the University;
- **Duration:** 36 months non-renewable;
- **Salary:** Euro 44.640,92 with application of the 20% increase equivalent to the remuneration due to the permanent researchers confirmed class high of 20%increase;
- **Maximum number of publications:** 12 (twelve);
- **Foreign language** whose adequate knowledge will be assessed with reference to the multi-lingual profile of the University, namely the academic teaching needs in foreign language degree courses: English;
- **Mean of assessment of knowledge of the foreign language, or knowledge of Italian for foreign candidates:** interview;
- **Funding:** University Staff Recruitment Extraordinary Plan of 2024 (M.D. 795/2023);
- **The specific research activity will focus on the following project:** "Graphene-based Nanostructured, Supramolecular and Recycled Organic Materials for Gas Mixture Upgrade for Sustainable Energy Applications";
- **The scientific production objectives:** will be finalized to the publication, over the three-year period, of at least 3 papers in international peer-reviewed journals;
- **Mean of assessment of scientific qualification:** by assessment of qualifications, curriculum, scientific production and an interview, under and for the purposes of Art . 24 of Law no. 240/2010