## Call for interest Joint Chair Milano Bicocca - CNR

## Full Professor position in green chemistry at Milano – Bicocca University, Italy

In order to strengthen the collaboration between the National Research Council (CNR) and the University of Milano – Bicocca (Bicocca) a position of **full professor** will be established at the Bicocca campus in Milan, Italy.

CNR is the largest public research institution in Italy acting under the Ministry of Research (MUR) supervision and performs multidisciplinary research activities in many scientific domains. Mission of CNR is to carry out excellent research, to support the innovation and the competitiveness of the industrial system, to promote the internationalization of the national research system, to transfer technologies and solutions to public and private sectors, to advice the Government and other public bodies, to contribute to the qualification of human resources. The scientific network of CNR is composed by 88 research institutes organized in 7 Departments which represent the interdisciplinary macro-areas of the scientific and technological research activities. The Department of Chemical Sciences and Materials Technologies (DSCTM) is composed by 11 Institutes with researchers, laboratories and facilities present throughout Italy. DSCTM represents one of the major national scientific institutions focused on fundamental and applied research in the areas of molecular sciences, chemistry and advanced materials. The scientific activities of DSCTM are organized in the areas of Green Chemistry, Advanced Materials, Chemistry and Materials for Energy, Chemistry and Materials for Health and Life Sciences, Computational Modeling, Chemistry and Materials Science for Cultural Heritage. DSCTM and the whole CNR have developed an extensive network of collaborations with numerous and excellent national and international partners in green chemistry design, synthesis and processing.

Milano Bicocca University is a fast growing public university established in 1998 in Milano. Milano-Bicocca University has 1200 faculty members, nearly 39.000 bachelor and master students, and more than 700 PhD students. It is organized in 14 departments representative of 7 thematic areas: Economics and Statistical Sciences, Law, Medicine and Surgery, Psychology, Educational Sciences, Natural Sciences, Sociology. In 2022, eight departments of Milano Bicocca University have been awarded as departments of excellence by the Ministry of University and Research (MUR), among which the Department of Earth and Environmental Science. The Department of Earth and Environmental Science is characterized by high multidisciplinarity and includes 111 staff members (85 professors and 26 technicians), mainly chemists, biologists and geologists. One of the goals of the Department of Earth and Environmental Science is the study and the investigation of biodiversity as an interactive system, characterized by natural, human and technological components as well as their mutual relationships.

The position will be established at the Department of Earth an Environmental Science at Milano Bicocca University in collaboration with CNR, mainly with the Department of Chemical Sciences and Materials Technologies (DSCTM) through the Institute of Chemical Sciences and Technologies (SCITEC) and the Institute of Biomolecular Chemistry (ICB).

We are seeking expressions of interest for a full professor of Chemistry, specialized in experimental green chemistry (and its correlations with biodiversity).

Expressions of interest should include the CV, the list of publications and a statement of motivation.

*Professor of Chemistry, specialized in experimental green chemistry (and its correlations with biodiversity)* 

The successful applicant will cover research and teaching in the field of green chemistry. The professorship is situated within the *Department of Earth and Environmental Science at University Milano Bicocca in collaboration with CNR, mainly with the Department of Chemical Sciences and Materials Technologies (DSCTM)*. The research focus will be on issues related to biomass valorization exploiting the technology platform offered by modern green chemistry.

Applicants should have a distinguished international track record in research in the area of **experimental green chemistry**, with a focus on **catalysis**, **process intensification**, **atom economy** and **sustainable recovery** of natural products.

The **exploitation of natural biodiversity** should be also a requested expertise of the applicant, related to the utilization of biomass of different origins (i.e. agricultural wastes, wastes obtained from the industrial agri-food chain or from extraction processes of the active principle of medicinal plants, marine biomass, coastal resources such as algae or halophytes, fishery waste), discovery and isolation of new natural products for the development of new drugs, agrochemicals, cosmetics, fine chemicals and nutraceuticals, identification of novel biocatalysts, (meta)genome mining for the chemical space expansion into products and reactions not easily and currently accessible, exploration of biosynthetic toolboxes for the generation of small molecules.

The goal is the valorization of the biomass components (cellulose, hemicellulose, lignin, chitin, residual metabolites, natural products) in order to prepare small molecules of interest for the pharmaceutical, fine chemicals, agrochemical or food sectors, and to attain new functional materials for a safe, secure and clean environment.

The applicant should have experience in acquiring and conducting externally funded research projects, including projects conducted as part of collaborative research efforts. Previous experience in carrying out teaching responsibilities is desirable but not required.

Along with the regular official duties of professors, we expect the appointee to engage in the following activities:

- to contribute to existing and future subject-specific research focus areas and promote their development as appropriate.
- to participate, for example, in the scientific exploitation of the new chemistry labs under construction in the Bicocca campus, in the context of green chemistry in projects of the *National Recovery and Resilience Plan*.
- to participate in other research collaborations established within the CNR-Bicocca collaboration as well as to show interest in independently developing and establishing new collaborative research projects.

The appointed candidate should also be prepared to teach chemistry courses for all degree programs offered in Bicocca, which are taught in Italian or English. Sufficient proficiency to teach in at least one of the two languages is expected.