

Open position at Università di Bologna, department of Chemistry, in the group of [Luminescent Nanomaterials for Health and Environment](#), within the framework of the PRIN research project on Responsive AIE Materials.

https://bandi.unibo.it/ricerca/assegni-ricerca?id_bando=67442

Responsive molecular materials based on a combination of redox and photochemical triggers

- ◆ Supervisor: Prof. Damiano Genovese
- ◆ Duration of the fellowship: 12 + 8 months fully funded
- ◆ Starting Date: February / March 2024
- ◆ Salary: 26.000 EUR/year gross salary (ca. 1700 eur/month net salary)

Research project:

Aggregation-induced-emission (AIE) is a recent tool in the field of responsive materials, with implications in various fields, from sensing to nanomedicine and to functional materials. The research fellow will investigate a new concept in AIE probes, which involves orthogonal redox and photochemical triggers to switch on and off the aggregation and, therefore, the luminescence. In the research project the rationalization of redox-triggered AIE of organized (bio)polymeric structures will be further applied in mechanochromic materials and in super-resolution imaging methods.

Techniques and skills to be developed: The research fellow will investigate the complex chemistry of AIE biopolymers with bulk and microscopy techniques based on luminescence. Dynamic measurements based on FCS, particle tracking, spectral kinetics will be a core of the proposed project.

Candidate profile: we are looking for a highly motivated young researcher with Master degree (or equivalent) in Chemical Sciences or Materials Chemistry, and a solid background in photochemistry of molecular probes and materials. The candidate will be working in a collaborative and multidisciplinary research group, with primary interest in learning new skills and processes and with a curiosity-driven, problem-solving attitude.

Good communication skills (written and spoken) in English are required. Knowledge of Italian is not essential.

The following skills and knowledge will be considered a plus:

- photochemistry and photophysics of organic and metallorganic dyes
- fluorescence microscopy techniques
- redox chemistry and electrochemical techniques

How to apply: candidates that meet the profile description are welcome to apply to the formal call that [can be found here](#) (deadline 7th January 2024). Applicants may also preferentially send a CV and a letter of interest to the contact email

address: prof. Damiano Genovese damiano.genovese2@unibo.it, and arrange that at least one reference letter is sent directly to this address.