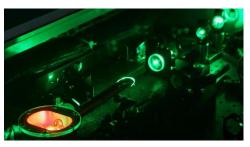




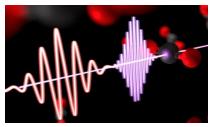
# Post doctoral position on UV-XUV transient absorption spectroscopy

The Institute of Photonics and Nanotechnologies (<u>https://ifn.cnr.it/</u>) of the National Research Council (CNR) invites applications for a postdoc position.

The selected applicant will join us at the Attosecond Research Center (https://www.attosecond.fisi.polimi.it/). Our activity is focused on the investigation of ultrafast phenomena in atoms, molecules and solids on timescales ranging from a few femtoseconds to a few tens of attoseconds. The current research is highly interdisciplinary: laser technology, extreme nonlinear optics, XUV optics, atomic, molecular and solid-state physics, molecular modelling, inorganic and organic chemistry, biophysics.



## **Research topic**



The position is funded by the PRIN project ASTRAL, "Novel ultrafast spectroscopies for the investigation of transition metal complexes". ASTRAL aims to push ultrafast spectroscopy and theoretical modelling significantly beyond the state-of-the-art in order to resolve with unprecedented temporal resolution the early stages of light-induced molecular dynamics on transition metal complexes. The research is highly multidisciplinary combining the efforts of three teams: ultrafast spectroscopy (Dr.

Borrego Varillas, CNR-IFN), quantum chemistry simulations (Dr. Artur Nenov, Università di Bologna) and chemical synthesis (Dr. Wojciech Mroz, CNR-SCITEC).

#### **Position requirements:**

- PhD in physics, chemistry or a related discipline. The candidate must not have more than 6-years of total post-doctoral experience, in academic institution or private companies. Applications will be considered also from candidates who are about to finish the Ph.D. (> 3 years).
- Proven experience with ultrafast laser systems and/or high-order harmonic generation and/or ultrafast spectroscopy and/or EUV/x-ray instrumentation.
- Good oral and written proficiency in English.
- Ability to work both independently and as part of a team.

#### **Responsibilities:**

- Lead the experimental activities (prepare samples, perform spectroscopy measurements, analyse data...) related to the project.
- Conduct independent research as well as in collaboration with other members of the group.
- Co-advise master degree projects and PhD students.
- Teaching (paid as an extra) may also be included, but up to no more than 20% of working hours.

# We offer

- Dynamic and international working environment.
- Training and access to a wide range of scientific facilities.
- Employment conditions:
  - The position will start with a renewable 1-year contract.
  - The salary follows the CNR standard scales and will depend on the experience of the candidate.
  - Starting date is flexible, but no later than March 2024.

#### Instructions on how to apply:

Applications shall be written in English and be compiled into a PDF-file containing:

- CV, including a list of publications
- Brief statement with scientific interests and/or reasons for applying
- Contact information of two references

Please send applications <u>before October, 31<sup>st</sup></u> to: rocio.borregovarillas@cnr.it Selected candidates will be contacted for an interview. We regard gender equality and diversity as a strength and an asset.

## Contact

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