
OPEN PhD STUDENT POSITION IN “WAVEFRONT ENGINEERING USING LIQUID CRYSTAL DEVICES FOR ADVANCED APPLICATIONS IN HOLOGRAPHY AND PHOTONICS” (GRISOLIAP/2021/106)

The [Research Group on Holography and Optical Processing](#) (GHPO) at the [Universidad de Alicante](#) (UA) (Spain) offers a four-year PhD position on “**Wavefront engineering using liquid crystal devices for advanced applications in Holography and Photonics**”. The student contract will be funded by the [Santiago Grisolia program](#).

The GHPO belongs to the [University Institute of Physics Applied to Sciences and Technologies](#) (IUFACyT). This is a multidisciplinary center with more than 60 members, whose principal aim is to pursue both basic and applied research in the fields of Physics. The GHPO has excellent infrastructures for research in holography and its applications, holographic recording materials, and wavefront engineering with liquid crystal spatial light modulators.

GOALS AND ACTIVITIES.

In the PhD Thesis the student will work on the modelling and application of spatial light modulators and photosensitive organic materials (photopolymers) to programmable diffractive elements and digital holography, optical communications reconfigurable interconnects, and information multiplexing and codification on holographic memories. This work will combine both experimental and computational activities in different areas of optics, photonics and material science, providing the student with a very valuable experience as a researcher.

ELIGIBLE CANDIDATES

- Candidates must hold a degree (obtained after January 1st 2016, from an institution outside of the European Union) in physics or in a related Science and Engineering study, and a master degree which qualifies to enter a PhD program (the selected candidate will enroll in the “[Doctoral Programme](#) of Physics Applied to Sciences and Technology” in the UA.
- Candidates must not hold a previous PhD degree.
- Knowledge of spoken Spanish or English appropriate for the research activity.

RECOMMENDED EXPERIENCE

- Strong English communication skills.
- Lab experience in optics and photonics and chemistry are welcome.
- Programming abilities in Matlab, Mathematica, COMSOL, or Labview are welcome.

JOB CONDITIONS

- Duration: Four years (renewable every year), starting September 16th 2021.
- Annual gross salary: 22192.80€/year during the first three years and 27300€ the fourth year.
- Travel/accommodation expenses: 1600€ (first year).

Interested candidates should contact by email Prof. Andrés Márquez Ruiz (andres.marquez@gcloud.ua.es) during the first weeks of June 2021, to receive more instructions on the documentation to be provided and the procedure for the application. Please, in the email include the following documentation:

- Updated curriculum vitae.
- Copy of official academic records including the academic title and grades obtained, together with dates.
- One motivation letter stating the candidate’s interest in the project.
- One or two letters of recommendation.