

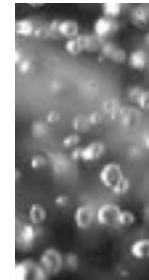
What is Soft Nano ?

The **Graduate School program Soft-Nanosciences** gathers **15 research labs and 6 master programs** in the fields of soft matter, biophysics, chemistry and applied mechanics, to set up an innovative research-driven curriculum. Students should first be enrolled in one of the Master programs listed below.

In addition to the Master's curricula, the Graduate School program offers a selective training of excellence through research. Our program covers the wide spectrum of soft nanosciences.

MASTER PROGRAMS

Nanobiotechnologies
Nanochemistry
Soft Nanosciences
Nanomedecine
Environmental fluid Mechanics
Polymers for Advanced Technologies



*Bubble nucleation in thin layers of polymers.
(E. Lorenceau, LIPhy)*

Every master student belongs to a laboratory and performs a **2-year-long research work** under the guidance of a research director.

INTERNATIONAL POSITIONING

- International recruitment forum at the Bachelor's level,
- All courses in English,
- Double-degree programs,
- Participation to the European school ESONN included in the master curriculum.

More information
➤ www.esonn.fr

Soft-Nano
GS@UGA

Training through and for research

A FIRST PROFESSIONAL EXPERIENCE

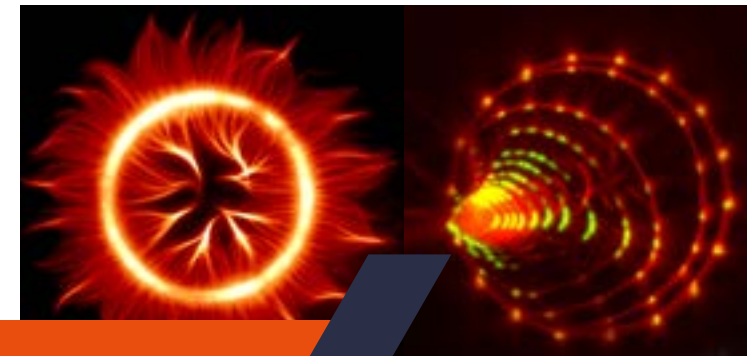
The Graduate School program Soft Nanoscience provides students with the opportunity to be immersed in a highly demanding scientific environment where the innovation of the future is in gestation. It also gives students a first professional experience. From the beginning of their master, students become a member of a laboratory or research institute, take a full part to the life of the lab according to their time of presence, have access to high-tech facilities after having received appropriate training.

A FORMATION FOR RESEARCH

The training through research covers all aspects of leading a project. In the fall semester of the 1st year students are trained to write and to defend a research proposal. They devote to this activity up to 2 days a week, confronting their progress with other students in regular meeting of the whole group (Research Methodology).

Students develop their research project during the three subsequent semesters, in parallel to course work, or full time. At the end of the 2nd year, they are evaluated through the submission and defense of a Master Thesis.

Cytoskeleton Self-organization (L. Blanchain, Cytomorpholab/LPCV/IRIG)



Admission & Curriculum

The Graduate School Soft Nano is fully appropriate to students having completed a 4-years Bachelor's of science or engineering in physics, physico-chemistry, mechanics, chemical engineering. Three-year's Bachelors who have excellent academic results can also be admitted to the GS Soft Nano.

Admission to the Graduate School Soft Nano requires:

- Academic admission in an M1 major (M1 Applied Mechanics, M1 Nanochemistry, M1 Soft Matter and Biophysics, Phelma Biomedical Engineering 2nd year)
- A favorable evaluation by the program admission commission
- Admission in a research team participating to the program.

SCHOLARSHIPS

The Graduate School of UGA offers Master scholarships on a competitive basis to students who have obtained their high-school degree outside from France and are enrolled in one of the Thematic Program of the GS.

INTERNSHIPS

During their research internship students receive a stipend of an amount set by the French law.

HOW TO APPLY

Study in France by applying for no EU

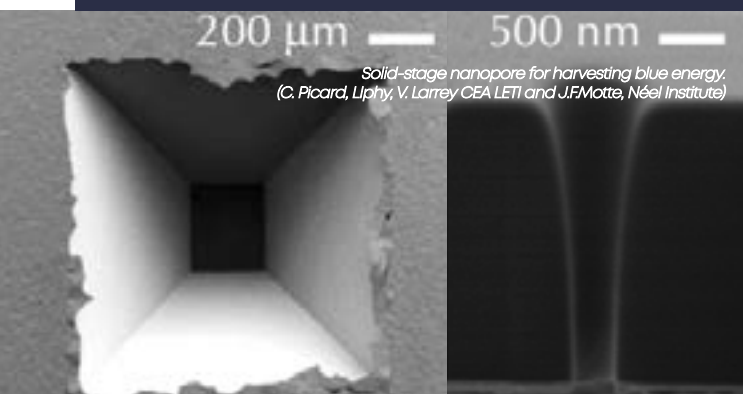
➤ tinyurl.com/24bjphy4

Apply via ecandidat for EU students

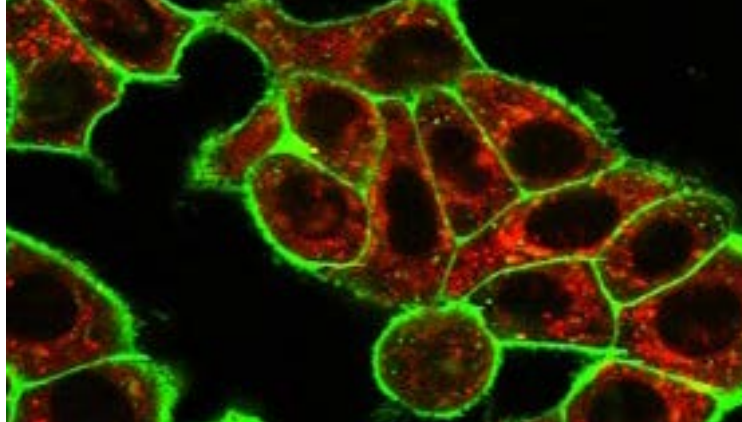
➤ ecandidat.univ-grenoble-alpes.fr

Apply to Graduate schools scholarships

➤ tinyurl.com/2p8shnev



Solid-stage nanopore for harvesting blue energy.
(C. Picard, Liphy, V. Larrey CEA LETI and J.F.Motte, Néel Institute)



Confined nucleation and growth of molecular nanocrystals for biophotonics: fluorescence imaging and photodynamic therapy. (X. Catton, F. Dubois and A. Ibanez, Néel Institute)

In parallel to the compulsory courses of their respective master, students undertake their research project related to soft and complex matter at the nanoscale. They validate the Soft Nanoscience Thematic Program modules:

- Research Methodology
6 ECTS / 1st year 1st semester
- Graduate School Soft Nano internship
12 ECTS / 1st year 2nd semester
- European School on Nanosciences and Nanotechnologies (ESONN part B)
6 ECTS / 2nd year 1st semester
- Master thesis
30 ECTS / 2nd year 2nd semester

A significant amount of time is devoted to these research credits (from 2 days a week to full time). As a consequence students in the Soft Nanosciences program take less elective courses than in the standard master curriculum.

At the end of the 2nd year, **students obtain a Master degree** in one of the 6 specialities Nanobiotechnologies: Nanochemistry, Soft Nanosciences, Nanomedicine, Environmental Fluid Mechanics, Polymers for Advanced Technologies.

They can **pursue in PhD** in the Doctoral School of Physics, Chemistry and Life Sciences, or IMEP2 (Industrial, Materials, Mechanics, and Process Engineering) of the UGA, or they can choose to quit the Graduate School at the level of the Master and pursue a professional life and/or a PhD in another university or abroad.

LABORATORIES (UGA, CNRS, CEA)

Néel Institute
CERMAV
IAB Advanced Biosciences
LEPMI
LIPhy Interdisciplinary Physics
LMGP Materials Physics Eng.
LNCMI High Magnetic Fields
LRP Rheology and Processes
LTM
Pulp & Paper Science LGP2
Soils Solids Structures Risks
TIMC-IMAG
Biotech for Health Lab.
SyMMES

EUROPEAN FACILITIES

Laue-Langevin Institute (ILL)
European Synchrotron Radiation Facility (ESRF)

More information about Soft-Nano

➤ tinyurl.com/4syj9cyz



Cell Capture at a Blood Vessel Wall. (M. Tilquin, Tec21)

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