



PhD in FISICA / PHYSICS - 37th cycle

THEMATIC Research Field: STUDY OF THE BIO/ORGANIC INTERFACE

Monthly net income of PhDscholarship (max 36 months)

€ 1300.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field	The overarching goal is to induce light sensitivity in living cells in order to control biological functions. One major objective will be the understanding of the coupling mechanism at the abiotic/biotic interface using light actuators in a variety of shapes, from thin films to nanoparticles or molecular probes.
Methods and techniques that will be developed and used to carry out the research	We apply a variety of photophysical tools for investigating the phenomena occurring upon illumination at the abiotic/biotic interface. Time resolved and steady state spectroscopy, microscopy, electrochemistry and electrophysiology will be used in order to assess the coupling at the abiotic/biotic interface.
Educational objectives	To provide a background in physics, materials science and bio physics. To provide problem solving skills and teach team work. The project will be carried out within a broad interdisciplinary collaboration that involved chemists, biologists, neuroscientists and medical doctors.
Job opportunities	R&D positions in high tech companies operating in the bio medical field.
Composition of the research group	1 Full Professors 0 Associated Professors 4 Assistant Professors 3 PhD Students
Name of the research directors	Guglielmo Lanzani

Contacts

Guglielmo.lanzani@iit.it;



silvia.matti@iit.it
 +39 2399 9877/67
 - <http://cnst.iit.it/>

Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	564.01 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

Educational activities per year :

1st year: 0
 2nd year: 1534 euros per student
 3rd year: 1534 euros per student.
 or 1022 euros per student for each year.

Teaching assistantship:

There are various forms of financial aid for activities of support to the teaching practice.
 The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.

Computer and Desk availability: shared use.