

# PhD in PHYSICS

## Specific Research Subject: CNST – IIT “Materials and devices for biophotonics”

<b>Scholarships and Financial support</b>	
Monthly net income of PhD scholarship (max 36 months)	€ 1300 (In case of a change of the welfare rates during the three-year period, the amount could be slightly modified)
Number of scholarships	1
Beginning of PhD	1/5/2017
Deadline for application	10/3/2017 at 2:00 pm.
<b>Context of the research activity</b>	
Motivations and objectives of the research in this field	The approaching end of fossil fuels reserves call for a massive scientific and technological effort to identify new concept, materials and devices for energy harvesting. Nano science and technology are at the fore front of such activity. They are also involved in humanoid technology and the development of new bio-organic interfaces. The main objective is innovation, by exploiting new knowledge in proof of concepts devices. <a href="http://cnst.iit.it/">http://cnst.iit.it/</a>
Methods and techniques that will be developed and used to carry out the research	To investigate phenomena at the fundamental level with a broad range of characterization techniques and test proof of concept with state of art technology in plastic electronics, molecular and hybrid devices for biotechnology.
Educational objectives	To provide a background in molecular photophysics, nano-science and nanotechnology; Lab practical skills in mastering complex systems for spectroscopy, material deposition, electrical characterization and modeling. Team work and problem solving skills.
Job opportunities	Engineers, research or technical managers in high tech industry: Solar photovoltaics, photonics and bio-photonics, semiconductors and micro-electronics, biosensoristic, smart packaging and smart tagging, magnetic materials for

	spintronic.
Composition of the research group	1 Full Professor and Associate Professor 2 Research Directors 18 Post Doc 6 Researchers 40 PhD Fellows 3 Labs Techincians
Names of the research directors	Maria Rosa Antognazza
E-mail address, phone number and web-page	<a href="mailto:tessa.gronchi@iit.it">tessa.gronchi@iit.it</a> ; <a href="mailto:silvia.matti@iit.it">silvia.matti@iit.it</a> +39 2399 9877/67 - <a href="http://cnst.iit.it/">http://cnst.iit.it/</a>
List of 5 Universities, Companies, Agencies and/or National or International Institutions that are cooperating in the research	1. Università Milano Bicocca 2. CNR 3. University of Oxford 4. Eni
<b>Additional support</b>	
<u>Housing:</u> financial aid per PhD student per year (gross amount)	<u>Foreign students</u> N.a.  <u>Out-of-town residents (more than 80 Km out of Milano)</u> N.a.
<u>Educational activities</u> (purchase of study books and material, funding for participation in courses, summer schools, workshops and conferences): financial aid per PhD student per year	<i>1<sup>st</sup> year: euros per student: -</i> <i>2<sup>nd</sup> year: euros per student: € 1370</i> <i>3<sup>rd</sup> year: euros per student: € 1370</i>
<u>Teaching assistantship:</u> availability of funding in recognition of supporting teaching activities by the PhD student	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.
<u>Computer availability:</u>	<i>1<sup>st</sup> year: individual use</i> <i>2<sup>nd</sup> year: individual use</i> <i>3<sup>rd</sup> year: individual use</i>
<u>Desk availability:</u>	<i>1<sup>st</sup> year: shared use</i> <i>1<sup>st</sup> year: shared use</i> <i>3<sup>rd</sup> year: shared use</i>