



PhD in INGEGNERIA DEI MATERIALI / MATERIALS ENGINEERING - 40th cycle

THEMATIC Research Field: DEVELOPMENT OF BATTERIES FOR LONG DURATION ENERGY STORAGE

Monthly net income of PhDscholarship (max 36 months)

€ 1400.0

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 scope of the work is the development of new electrolytes for stationary energy storage. The outcomes of the proposed research aimed to produce electrochemical devices for the storage of energy for longer duration applications.

Methods and techniques that will be developed and used to carry out the research

The research activities will include the evaluation of new electrodes and electrolytes for electrochemical energy storage systems. The use of electrochemical techniques and structural/morphological analyses will be part of the activities for the evaluation of the device performances. This scenario motivates doctoral multidisciplinary research in the field of energy storage. The proposed research will gain from knowledge coming from various disciplines, from material science to chemistry, from electrochemical processes to energy management, answering to the needs of innovation and new expertise and skills for into the energy storage as strategic area for our country.

Educational objectives

The educational aims are: (1) amplify supported PhD research experience and favour co-operative research experience at possible partners; (2) elevate the educational experience by creating a highly-visible center for electrochemical energy storage technology.

Job opportunities

The introduction of new materials, electrolytes and design



	in energy storage technology will implement the number of applications of these devices. Job opportunities for an expert PhD in this field are expected in the private and academic sector.
Composition of the research group	1 Full Professors 2 Associated Professors 2 Assistant Professors 8 PhD Students
Name of the research directors	Prof. Luca Magagnin

Contacts	
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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	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p>Confidentiality: since this is a thematic scholarship, the management of Confidential Information, Results and their publication is subordinate to the restrictions agreed upon with the funding company. Upon acceptance of the scholarship, the beneficiary may sign a specific commitment.</p> <p>Educational activities (funding for participation in courses, summer schools, workshops and conferences) - financial aid per PhD student per year: 1st year: around 1.900 euros 2nd year: around 1.900 euros 3rd year: around 1.900 euros</p> <p>Teaching assistantship: availability of funding in recognition of supporting teaching activities by the PhD student: There are various forms of financial of 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 regulation.</p>