

PhD in INGEGNERIA DEI MATERIALI / MATERIALS ENGINEERING - 37th cycle

THEMATIC Research Field: SURFACE MODIFICATION AND METALLIZATION PROCESSES FOR MEMS

Monthly net income of PhDscholarship (max 36 months)

€ 1325.0

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 technologies for the surface modification and metal integration in MEMS silicon devices. This will open new functionalities and integration processes into existing production lines.
Methods and techniques that will be developed and used to carry out the research	The research activities will include the evaluation of new materials and functionalization for the integration with MEMS technology. The use of electrochemical techniques and structural/morphological analyses will be part of the activities for the evaluation of the device performances.
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 MEMS technology
Job opportunities	The introduction of new materials and processes in MEMS 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 1 Associated Professors 2 Assistant Professors 8 PhD Students
Name of the research directors	Prof. Luca Magagnin

POLITECNICO DI MILANO



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	564.01 €
By number of months	6

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

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 must sign a specific commitment.

Educational activities (funding for participation in courses, summer schools, workshops and conferences) - financial aid per PhD student per year:

1st year: -

2nd year: about 1.500 euros per student 3rd year: about 1.500 euros per student

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