

ENCLOSURE A (D.R. n. 903 del 11.10.2010)

**SUBJECT GROUP: INDUSTRIAL ENGINEERING**

**RESEARCH PROGRAMME NR 21**

**Evaluation criteria of the titles and of the interview: 2010 November 29th at 9.00** - Dipartimento di Meccanica e Costruzione delle Macchine (DIMEC) - Via Opera Pia 15/A - Genova

**Collective judgement of the submitted documents and notice of candidates who will be interviewed: 2010 November 29th at 12.00** - Dipartimento di Meccanica e Costruzione delle Macchine (DIMEC) - Via Opera Pia 15/A - Genova

**Interview: 2010 November 29th at 14.00** - Dipartimento di Meccanica e Costruzione delle Macchine (DIMEC) - Via Opera Pia 15/A - Genova

**Therefore all candidates, who have not been notified by a note of exclusion, are expected to appear at the exam location without further notice.**

**NR. 1 grant – Duration years: 1**

**Title:** Development of methods for type synthesis and analysis of limited degree of freedom parallel and complex mechanisms for cooperative manufacturing tasks

**Description:** Equipment for manufacturing using cooperative robotic systems composed of reconfigurable agents with limited mobility interacting to execute complex tasks can remarkably improve performance and flexibility of in-use systems. The design of robots with complex architecture involves steps of synthesis and analysis which cannot be carried out efficiently with traditional design methods. The research is targeted to the development of new methods with specific focus on characterization of motion pattern and singularities..

**Subject Division:** ING-IND/13 MECHANICS APPLIED TO MACHINES

**Department:** Dipartimento di Meccanica e Costruzione delle Macchine (DIMEC)

**Requested Study Title:** Research doctorate in Mechanical and Industrial Engineering

or

Degree in Mechanics or in Mathematics or in Computer Science with curriculum proving knowledge meccanica applicata e robotica

**Subjects of interview** metodi di analisi e sintesi di meccanismi, meccanismi per la robotica, gradi di libertà e criteri di distribuzione fra robot cooperanti, knowledge of English and/or French language.