

## **Finmeccanica: Innovation Award now open to young university students**

*Students, recently graduated students and graduate students from Italian universities are called upon to show their innovative skills*

- **Finmeccanica is offering young people internships with the Companies of the Group as well as economic rewards**
- **The projects must focus on 4 business areas of the Group: 3D Printing/Additive Manufacturing, Autonomous Systems, Cyber Security and Low Observability**
- **An award ceremony for the best projects will be held in October at Expo 2015.**

**Rome, 9 July 2015,** The challenge of shaping new ideas and being innovative falls to young people. This year the Finmeccanica Innovation Award, which for the last ten years has been aimed at companies of the Group, will now be open to university students in Engineering, Mathematics, Physics, IT and Chemistry from all Italian universities. Students, recently graduated students and graduate students can tap into their creativity and their innovative skills, draw on what they have learnt in the academic world and let themselves be challenged by the world of industry.

Participants are to develop innovative projects in a research field linked to one of the business areas of the Finmeccanica Group (3D Printing/Additive Manufacturing, Autonomous Systems, Cyber Security and Low Observability) and submit their proposals by 15 September 2015. The winners in each category will be offered internships at the Companies of the Group, financial rewards and the possibility to participate in an award ceremony to be held in October at Expo 2015. Details about the initiative are available at [www.premioinnovazionefinmeccanica.com](http://www.premioinnovazionefinmeccanica.com), and where participants can also submit their projects.

“Technological innovation – says Mauro Moretti, CEO and General Manager of Finmeccanica – is the main driver for the growth and economic development of a country, but first and foremost it produces a momentum that stimulates social progress with benefits for the whole of society. It is the strongest pillar of competitiveness in the manufacturing industry and it is key to maintaining the leading edge in the high-tech sector. The ability to innovate is therefore a launch pad, it is the ability to imagine and design the future through the present. For this reason – Moretti adds – Finmeccanica continues to invest around 11% of its revenues in research and development, funding activities carried out in cooperation with universities, institutes and research bodies across the world, focusing not only on the development of technologies, products and services, but also on pure research. Opening up the Finmeccanica Innovation Award to young people is part of this approach and we believe that they need to be recognized as having key role in the innovation process of our Country.”

**The research areas, the technologies of the future:****3D Printing/Additive Manufacturing**

New "Additive Manufacturing" processes are gradually revolutionising the world of "Mechanical Manufacturing" opening up new prospects with respect to the limits of conventional processing based on the removal of material. The possibility of producing mechanical components and sub-systems by "adding" material rather than "removing" it offers a wide range of advantages like time and cost reduction both in the prototyping phase and in production, besides reducing weights and minimising - if not totally eliminating - waste materials. "Additive Manufacturing" therefore opens up to new solutions that would be unattainable using the conventional techniques and that go from redesigning systems made up of several components in a single step, to the development of new business models such as for instance the production of spare parts or repairing items "locally".

**Autonomous Systems**

The world around us is increasingly populated by "machines" that act and react automatically and to some extent, autonomously, therefore without being controlled directly by a human being. This evolution is a major opportunity that at times is perceived to be a threat, as occurs with all great revolutions. A major opportunity is offered by the greater autonomy of robotic systems governed by increasingly sophisticated sensors to ensure an environmental awareness that is as accurate as possible and by computing platforms that are increasingly powerful to support the "hunger" of calculation power determined by the growing processing needs in support of cognitive and decision-making processes

**Cyber Security**

Software is ubiquitous in today's digital world. Software affords flexibility, intelligence and security to all complex systems and to all apparatuses that support and control the fundamental infrastructure of our society. However, given its nature, software is vulnerable to intentional and accidental attacks. Protecting and monitoring the security of software in its wide-ranging applications, is the most modern (cyber-security, physical and logic security, safety) and topical challenge to keeping "safe" human life, transportation, communications, energy, production, automation, business, health, law enforcement, entertainment, etc.

**Low Observability**

Observation and surveillance missions are increasingly carried out using unmanned aircraft with rotating and fixed wings and their success is strongly dependent on the "low observability" of the platform, in other words on the ability of being "invisible" to radars, infra-red visors and also to acoustic sensors and video-cameras. The technologies currently being used or exploited to minimise observability range from structural materials and surface treatment (paints), to special geometric shapes that can absorb or deviate the radiations picked up by detectors.