L'Industria incontra Giovani Ingegneri: Sfide e Opportunità per Giovani İngegneri e Aziende



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Industrial Plant Business Sector meets with Young Engineers: Challenges and Opportunities for Young Engineers & Companies



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L'Industria Impiantistica incontra Giovani Ingegneri: Sfide e Opportunità per Aziende e Giovani Ingegneri



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Gli interessati a <u>Colloqui</u> sono invitati a <u>Registrarsi sulle Liste</u> di ciascuna Aziende all'ingitesso

Meeting Programwww.itim.unige.it/cs/plants/mipet4/march2013.htm26 marzo, 2013, 10:00 am - 17:00Piano Nobile, Villa Cambiasovia Montallegro 1, 16145 Genova, Italy

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CONFINDUSTRIA GENOVA Ordine degli Ingegneri della Provincia di Genov

10:00 Benvenuto Prof. Agostino G. Bruzzone
10:10 Eccellenza e Competitività Oggi
10:30 Responsabili di Aziende Leader a livello Mondiale evidenziano le Sfide e le Opportunità per Aziende e Giovani
11:45 Incontro diretto con le Aziende e Colloqui Preliminari
13:00 Prosecuzione dei colloqui e campus interview
17:00 Prosecuzione dei colloqui e campus interview

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INVITO A TUTTI GLI STUDENTI DI INGEGNERIA

Industrial Plant Business Sector meets with Young Engineers: Challenges and Opportunities for Companies and Young Engineers



Industrial Plant Business Sector meets with Young Engineers: Challenges and Opportunities for Companies and Young Engineers



Genoa University, Polytechnic School & Engineering Faculty

The University of Genoa is one of the oldest in Italy and in the World (founded in 1471 AD), it is located in middle of Italian Riviera.

The students are about 40,000 (about 8,000 new entries),

and the Engineering Departments involve around 7,500 students distributed among Genoa Locations and two External Sites: Savona Campus and La Spezia Area

Recently the Polytechnic School was established combining Engineering Faculty and Architecture in order to reinforce the vocation of Genoa University to be an International Leader in Innovative Technologies in a wide spectrum of applications

For further Information about the Engineering & University of Genoa:



www.itim.unige.it www.ingegneria.unige.it www.unige.it

Prof.Patrizia Perego, Vice Dean



CONFINDUSTRIA Genova



CONFINDUSTRIA Genova supports actively the MIPET since and promote these initiatives among Industrial Community CONFINDUSTRIA

Intellectual Capital for Future of Engineering

Jack Welch (GE CEO 1981-2001 from \$14 billions market value to over \$410 billions): Globalization has changed us into a company that searches the world, not just to sell or to source, but to find Intellectual Capital: the World's Best Talents and Greatest Ideas



Scientists investigate that which already is; Engineers create that which has never been Albert Einstein, Physics Nobel Price 1921

A Two-Speed World

The crisis pointed out by Media is very relative in term of Geographic/Temporal Coordinates for Instance:

- Automotive Vehicles: +19% Worldwide from 2008 to 2012
- Shipbuilding:

Europe from 8% of World Market to 3% (-60%) 2011: 200 Ship in Construction just in Shanghai Area

GDP:



2012: China 9.5% USA 2.8% Russia 4.5% India 7.8% Brazil 4.1% Vietnam6.7% World 4.5%

 Italy
 1.3%

 Qatar
 7.1%

 Angola
 10.4%

 Iraq
 12.5%

 Chile
 4.9%

 Malaysia
 5.2%

 Europe
 1.7%

Germany2.0%Indonesia6.5%Nigeria6.5%



| | Com | mercial Vehicle Pro | fuct | ion 2008- | 2012 | | | |
|-----------------|--------------------------|------------------------|-------|----------------------|----------------------------|---------------------------|-----------|--|
| | | Intry | | Vehicles | | 1 | | |
| | | | | 306,131 27 | | | | |
| <u> </u> | China | | | 186,715 | | 46% | | |
| | | Canada | | | | 61% | | |
| | Thailand | | | 532,987 54 | | _ | | |
| | India | | _ | 373,421 | 77 | - | | |
| _ | Mexico | | _ | 241,481 | 25% | | | |
| | Indonesia | | | 152,851 | 90 | _ | | |
| 8 | | | | 69,269 | 35 | _ | | |
| <u> </u> | Brazil | | | 48,666 | _ | | | |
| <u> </u> | Iran | | | 30,550 | 28 | _ | | |
| 11 | | | | 22,710 | | _ | | |
| 12 | 00 | Car Product | ion ' | | | | - | |
| 13 | Bk | Country | | | ~ Cars | r | %] | |
| 14 | | China | | 8,785 | | | 0% | |
| 15 | | India | | 1,439 | | | 3% | |
| 16 | _ | South Korea | | | ,611 | _ | 1% | |
| 17 | _ | Mexico | | 592,549 | | | | |
| 18 | _ | Thailand | | | ,314 | _ | 9% | |
| 19 | _ | Russia | | | ,360 | | 4% | |
| 20 | _ | USA | _ | | ,212 | _ | % | |
| 21 | _ | Slovakia | | | ,224 | | 5% | |
| 22 | _ | Indonesia | | | ,078 | | 2% | |
| 23 | | Czech Rep. | | | _ | | 5% | |
| 24 | | Taiwan | _ | | ,728 | _ | | |
| 29 | | Argentina | | 139,329 98,140 | | 100% 25% | | |
| 25 | _ | Romania | | 95,500 | | 25% 41% | | |
| 20 | _ | Brazil | | | ,975 | | % | |
| | _ | Others | | | | _ | | |
| 28 29 | _ | Otners Malaysia | | 62,016 25,888 | | 17% 5% | | |
| 30 | | UK | | | ,000 | | % | |
| 31 | _ | Serbia | | | 409 | _ | % | |
| 32 | _ | Austria | | | ,836 | -1 | | |
| 33 | | Finland | | | ,619 | | 70 3% | |
| 33 | | Portugal | | | | _ | 2% | |
| | | | | | ,507 | _ | 2% 3% | |
| 35 36 | _ | Netherlands Egypt | | | ,223 | | 9% | |
| 37 | | Turkey | | | , <mark>605</mark> ,907 | | 5 % '% | |
| | | South Africa | | | <u> </u> | | 76 4% | |
| 38 39 | _ | | | -40 | ,251 .058 | _ | 4% 6% | |
| <u>39</u> 40 | _ | Uzbekistan Slovenia | | -30 | ,058 ,397 | | 0% | |
| 40 | | Siovenia Sweden | | | ,397 ,473 | _ | u% 5% | |
| | _ | Iran | | | | | 0% | |
| | _ | iran Australia | - | | ,870 | | 0% 8% | |
| | _ | | - | | ,110 010 | _ | | |
| | 31 Hungary 32 Germany | | | | 26,919 | | -37% | |
| | 33 Canada | | | -143,574 | | -3% | | |
| | | | | -155,138 | | -13% | | |
| | 34 Belgium | | | | 2,927 | | -25% | |
| | 35 Italy 36 Polond | | | -262,404 | | -40% | | |
| | 36 Poland | | | -302,000 | | -36% | | |
| | _ | 37 Ukraine 38 Spain | | -331,112 -403,369 | | <mark>-83%</mark> -21% | | |
| | | | | | | _ | | |
| | | France | | -463 | | _ | 2% 4% | |
| | 40 | Japan Tatal | | -1,373 | | _ | | |
| | | Total | | 10,343 | ,424 | 2 | 0% | |
| | | | | | | | | |

Global 500 Companies in World during 2012

TOP COMPANIES Worldwide in term of World Sales Percentage 2012 vs. 2010

Main Companies worldwide have serious challenges in 2012 therefore some result are provided:

Royal Dutch Shell Revenues +28% Profits 30'918 +53% Wal-Mart Sinopec China Nat.Petr. State Grid Volkswagen GazProm **General Electric**

Walmart >



Profits 15'669 -4.2% 9'452 +23% Profits 16'317 +13% 5'678 +24% Profits 21'425 +136% Profits 14'151 +21%



- World Ranking (Previously 2)
- World Ranking (Previously 1) 3
- World Ranking (Previously 5) 5
- 6 World Ranking (Previously 6)
- World Ranking (Previously 7)
- 12 World Ranking (Previously 13)
- 15 World Ranking (Previously 35)
- 22 World Ranking (Previously 16)



Global 500 Source 2012 Values in \$ millions

Global 500 Companies in Italy: Challenges and Opportunities

Companies, even in Italy, have to face the challenges, therefore some results are interesting and there are opportunities everywhere and every time if decision making is effective and efficient:

FNI Revenues +16% Profits 9.5 GUSD EXOR/FIAT Revenues +50% Profits 0.7 GUSD +286% Generali FNFI Poste Italiane Revenues +4% Profits 1.2 GUSD

Revenues +13% Profits 5.7 GUSD

+14% 17th World Company (previously 23rd) 45th World Company (previously 53rd) Revenues -6.3 Profits 1.2 GUSD -47% 48th World Company (previously 33rd) -1% 52th World Company (previously 56th) UNICREDIT Revenues +7% Profits -12.8 GUSD -830% 164th World Company (previously 154th) Intesa S.Paolo Revenues +12% Profits -11.3 GUSD -417% 193th World Company (previously 192nd) Telecom Revenues +14% Profits -6.5 GUSD -259% 244th World Company (previously 236th) -1% 361st World Company (previously 329th) Finmeccanica Revenues -3% Profits -3.2 GUSD -600% 443rd World Company (previously 380th)





TOP Italian Companies Worldwide in term of World Sales

Global 500 Source 2012



Human Capital is becoming Even more Important

Engineering is providing an unique opportunity to improve the Capabilities and Understanding of high qualified people: Scientists, Researchers, Technicians and Engineers







Impiantistica e Ingegneria a Genova

Master IPET Industrial plant engineering and technologies



In Genoa University several groups are active in Industrial Plant Engineering; for instance the Simulation Team MITIM DIME resulted as evolution of the Institute of **Technology and Industrial Plant Engineering** & Management (ITIM) that was focused on these issues since '60; DIST, DICHEP, **DINAEL** and other Engineering Departments are also active on these subjects. The Genoa University is involved in several R&D activities on Plant and Process Engineering and also in Undergraduate, Postgraduate and Continuous Education on this area. Simulation Team MITIM DIME for instance co-operates actively with major Excellence **Centers World-Wide.**









Simulation Team MITIM DIME

The Simulation Team - MITIM DIME of *Genoa University* carries out many industrial projects in cooperation with the large corporations and Small and Medium sized Enterprises; some example of recent industrial simulation project are following:















The Master in Industrial Plant Engineering and Technologies of the Genoa University Master IPET WHO SHOULD ATTEND

- Young Engineers with strong potential and technical background
- International Excellent Students of Engineering Departments from all around the world
- Engineers with experience in Plant Engineering from world-wide
- Engineers already employed in Engineering and Construction Companies who are interested in attending specific Operative Modules of the Master Program such as Project Management, Constructions, Standards and Regulations, Safety, Security & Risks















Servizio Formazione Permanente PerForm Università degli Studi di Genova

Prof. A.G.Bruzzone MIPET Director

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MIPET ADDED VALUE

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- High Profile Professional Education devoted to provide High Value Skills in Industrial Plant Engineering and Technologies
- Continuous Interaction with Top Quality Experts from Academia, Institutions and leading Engineering & Construction Companies.
- Very Qualified Selection and Evaluation Processes that guarantee the Master Attendees as highly qualified resources for top companies.
- Opportunities to complete experiences On Field on complex Industrial Plant projects
- Contacts and visibility to major E&C^{*} Companies and EPC^{**} Contractors (EPC) operating at International and National level.
- Developing Human Potential of the attendees by training and improving their Individual and Team Working capabilities.
 * E&C Engineering & Contracting

















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The Master in Industrial Plant Engineering and Technologies of the Genoa University

GENERAL PROGRAM



The Master in Industrial Plants includes:

- Basic Modules for Industrial Plant Engineering and Construction, including Process Engineering, Plant Automation, Materials & Technologies, etc.
- Operative Modules on Critical Issues for Industrial Plants (e.g. Engineering Standards and Regulations, Project Management, Quality Assurance etc.)
- Thematic Modules on Specific Plant Sectors (e.g. Power, Iron and Steel, Environment)
- Company Internships devoted to acquire on-field experience, including the development of the Project Work related to a Real Case
- Visits to Industrial Plants and Engineering, Research & Development Centers and Labs.
- Tests for certifying individual skills and capabilities acquired by the attendees on specific topics at the end of each single module.
- Professional Modules, integrated in the Master Program, but open for external attendees as stand alone courses. These modules include individual and team Projects Works to be carried out in competition/cooperation interacting with experts.



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industrial plant engineering and technologies





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- Active Role free of cost into Student Meetings, Campus Interview and other Initiatives organized by MIPET
- Joint University-Industry stimulation of interest and research projects on subjects related to plant engineering.
- Development of a Fertile Background in Industrial Plant, Global Engineering and Construction devoted to enhance the competitiveness of the whole system.
- Visibility on Media and Promotional Initiatives



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- Subscribing an Agreement that includes an annual fee and the commitment to provide resources (i.e. 15 hours of experts for specific contributions to educational modules to be developed under Technical Scientific Committee Coordination).
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- Getting Benefits of Free Seats and discounts on MIPET Operative Modules for its Employers and/or Customers
- Offering Internships to Master Program Students
- Providing Expertise as well as Real Case Studies

PAUL WURTH

Prof. A.G.Bruzzone

MIPET Director

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Excellence is the main goal of MIPET; in fact MIPET Partners agreed to strengthen the following aspects:

- Strong commitment of all Partners in promoting MIPET at the National and the International level.
- International Approach in MIPET structure by involving teachers from Industry and Academia coming from International Excellence Centers and selecting excellent engineers from other Countries.
- Introducing new contents, especially through the Operative Modules, related to the Plant Engineering & Technologies.



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GENOVA, 26 Aprile 2013





Giorgio Migliorini & Simone Compagnone, Ingegneria

FISIA ITALIMPIANTI è una società appartenente al Gruppo IMPREGILO primo general contractor in Italia e tra i principali gruppi di costruzione a livello internazionale, attivo nel settore della realizzazione di grandi opere infrastrutturali, nel settore delle concessioni e nel settore impiantistico.

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Paul Wurth



PAUL WURTH

26 PW entities in 18 countries, totalling about 1600 people, mostly holding a university degree. PW Italia, employing 208 people based in Genoa (65 hired in the last 4 years), is a prominent member of this group with its own long term tradition.

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Manuel Alfonso, CEO





APM TERMINALS

APM Terminals Vado Ligure Meeting Young Engineers March 2013

Elisabetta Tiziano, Business Process Manager

00, Los Angeles





Massimo Romairone, Head of Engineering Italy & Mediterranean Region, Emma Downing, HR











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Elvio Gnecco, HR Generalist





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Anna Maria Beltrami, Manager of Resourcing



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People matter, results count.



Daniele di Mascio, HR





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Riccardo Franchini, Consigliere dell'Ordine degli Ingegneri della Provincia di Genova

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Stefano Sadowski, Direttore Marketing, Projenia

Questions & Free Discussion...



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