



16<sup>th</sup> European Conference

*Le ultime tecnologie del  
freddo e del condizionamento*



*Latest technologies  
in refrigeration and air conditioning*



*Politecnico di Milano 12<sup>th</sup>-13<sup>th</sup> June 2015  
EXPO 2015 13<sup>th</sup> June 2015*



## **RESULTS OF XVI EUROPEAN CONFERENCE**

### **FIRST TO FORTH SESSION. THE ISSUES OF THE NEW REFRIGERANTS, COMPONENTS AND EQUIPMENT**

The conference was the largest event in the history of Centro Studi Galileo and the Italian Association of Refrigeration Technicians

CSG has been able to celebrate its 40th anniversary with extreme satisfaction: 200 participants from 4 continents, more than 50 speakers and 26 Platinum, Gold and Silver Partners came together to support the Conference.

Our industry will face huge challenges in the coming years and in response, the main theme of the conference was "Do not Wait - Act now!" (Per Jonasson President of AREA). Our industry will suffer if we do not act now; however if immediate action is taken, there will be innumerable benefits both for the environment and future technological evolutions and innovations.

In particular for session 1 to 4, the key concepts from the Conference and the conclusions are therefore: zero use of refrigerants with a high Global Warming Potential GWP environmental impact, energy efficiency, and correct labeling. All of these actions are to be undertaken urgently in the coming months; further innovations will help and support European Companies and expansion into new markets.

Of course, a long-term solution is represented by the refrigerants naturally present in our atmosphere, but many stakeholders are still looking at short-term "quick-fixes", in the form of synthetic refrigerants (as they are the solution with minimal help and fast changes in the system). We will not be able to develop a 5th generation of refrigerants - "we have evaluated all the types of different synthetic refrigerants - we are at the fruit in our virtual dinner," said prof. Cavallini at the Conference - the only substances still available to be put in our plants are natural refrigerants and therefore we must focus on those.

It thus has two important consequences:

- Most new alternative refrigerants have characteristics of toxicity, flammability and high pressures: standards must be adapted to these refrigerants in order to avoid accidents and to take into account technology progresses;
- Technicians of the Refrigeration and Air Conditioning industry must be trained in order to correctly implement these technologies and to provide proper maintenance.

## STRONG INCREASE IN COLLABORATION WITH THE UNITED NATIONS AGENCIES TO DEVELOP TECHNOLOGIES IN REFRIGERATION AND THE COLD CHAIN



The XVI European Conference provided the opportunity to form numerous new alliances and strengthen existing ones. Firstly, the alliance between UNEP, the IIR and the Centro Studi Galileo was strengthened with the promise of sustained cooperation on organizing training courses and technical conferences in all regions of the world and particularly in developing countries.

Other alliances involve private sector companies across all aspects within the industry. Collaboration with the private sector is considered crucial for making progress in an increasingly globalized market. Europe is the global leader in the use of new technologies, motivated by technological innovation brought on by the recent changes in regulations. The European alliance can firmly make inroads into new markets because of Europe's experienced dynamism not seen in any other market of the world.

Last but not least, we developed a collaborative partnership with the FAO in co-organizing a session on refrigeration technologies for food storage. The session explored a rich array of issues, including experiences on fruit storage from the Gambia and Italy. It presented relevant solutions that will be found useful in the work of FAO and other agencies working on promoting food and nutritional security in the world.

The session made the XVI EUROPEAN CONFERENCE the only one within EXPO 2015 which is dedicated specifically to the conservation and preservation of foods. As a follow-up to the session, FAO proposed the creation of a coordinated global coalition which would include CSG, IIR and UNEP and other organizations and would aim at implementing an initiative to foster and support cold chain development in developing countries. We look forward to strengthening the partnership with FAO which will allow us contribute even more effectively in using refrigeration technologies in the fight against hunger and malnutrition in developing countries: post-harvest losses due to a lack of refrigeration represent 23% of the food production in developing countries (vs 9% in developed countries) and refrigerated storage capacities are tenfold in developed countries compared to developing countries (IIR statistics).