



UNITED NATIONS ENVIRONMENT PROGRAMME
INTERNATIONAL INSTITUTE OF REFRIGERATION
AREA EUROPEAN RAC ASSOCIATION
CENTRO STUDI GALILEO
ASSOCIAZIONE TECNICI DEL FREDDO
EUROPEAN ENERGY CENTRE

19th EUROPEAN CONFERENCE THE LATEST TECHNOLOGY IN REFRIGERATION AND AIR CONDITIONING

*ENVIRONMENT, ENERGY, TRAINING, CERTIFICATION,
LEGISLATION, STANDARDS, SAFETY*

10 - 11 June 2021

Politecnico of Milan, De Donato Room

hybrid event: on-site and on-line

In Association with Global Leading Researchers and Experts from:
United Nations Environment Programme (UNEP)
United Nations Industrial Development Organization (UNIDO)
European Commission DG Clima
International Institute of Refrigeration (IIR)
Association Française du Froid (AFF)
AREA - ASERCOM - ASHRAE - AHRI - EPEE
Politecnico of Milan, Turin
Universities of Ancona, Genoa, Padua
and all the AC&R European Associations



Politecnico di Milano
Piazza Leonardo Da Vinci, 32 - Milano (Italia)

General Introduction

F-GAS REGULATION 517/2014 AND ALTERNATIVE REFRIGERANTS. NEW PLANTS WITH REFERENCE TO ENERGY AND ENVIRONMENTAL OPTIMIZATION. WORLD SITUATION.

J. Curlin United Nations Environment Programme – UNEP
D. Coulomb International Institute of Refrigeration – IIR
M. Buoni Air Conditioning & Refrigeration Association – AREA

First Session

NEW REFRIGERANTS AND FUTURE PERSPECTIVES WITH REFERENCE TO EU 517/2014, F-GAS REGULATION, ENERGY SAVING

CHAIRPERSONS

A. Cavallini Università di Padova - IIR
J. Curlin United Nations Environment Programme– UNEP
D. Coulomb International Institute of Refrigeration – IIR
A. Voigt EPEE - C. Zilio, D. Del Col Università di Padova

New low GWP refrigerants. Developments, perspectives and forecasts on new alternative refrigerants. New synthetic and natural refrigerants, pure and mixtures HFC, R32, HFO-1234yf/ze/za, HFO mixtures, CO₂, ammonia, hydrocarbons; secondary refrigerants; lubricants for synthetic refrigerants.

Speakers: A. Cavallini, D. Coulomb IIR - N. Kagawa JSRAE - C. Zilio Università di Padova - D. Del Col Università di Padova - P. de Larminat (tbc) Johnson Controls - B. Bella Emerson - J. De Bernardi Honeywell - S. Saab Chemours - C. Marotta General Gas

Debate

With the participants in the conference

Timetable 9 am – 1 pm / 2 pm – 6 pm
Coffee Break 11-11.30 am – Lunch Break 1-2 pm

Second Session

NEW COMPONENTS & EQUIPMENT IN RELATION TO NEW REFRIGERANTS, ENERGY SAVING AND ENVIRONMENTAL ISSUES, RESULTS AND UPDATES IN NEW SYSTEMS

CHAIRPERSONS

E. Macchi, G. Lozza Politecnico of Milan
S. Yurek AHRI - A. Voigt EPEE
F. Polonara UNEP TEAP - RTOC
M. Masoero Politecnico of Turin

Energy issues in relation to the air conditioning and refrigeration components and plants optimization; eco design, eco-labelling, energy saving. Secondary refrigerant plants, CO₂, HC systems. Compressors and systems. Energy optimization. New components for domestic, commercial and industrial refrigeration and air conditioning. Process and design.

Speakers: E. Macchi, G. Lozza Politecnico di Milano - A. Voigt EPEE - S. Filippini LU-VE Group - M. Bonfanti Officine Mario Dorin - P. Trevisan (tbc) Bitzer - M. Bassi Embraco - G. Borin (tbc) Mitsubishi Electric Europe - F. Fadiga (tbc) GI Industrial Holding - A. Hafner Norwegian University of Science & Technology - S. Minetto (tbc) CNR Padova - S. Capanelli Carel Industries - D. Tsimpoukis Metro - M. Ascani Angelantoni Industrie - K. Nourrice Frascold

Debate

With the participants in the conference

Conference Organizer & Secretariat

CENTRO STUDI GALILEO &
ASSOCIAZIONE TECNICI DEL FREDDO

To participate, please get in touch with us:
conference@centrogalileo.it / +39 0142 452403

Subscription fees to the conference:

- Discounted early bird registration fee: Euro 180 + VAT (22%) – until 31st March 2021
- Standard participation fee: Euro 360 + VAT (22%) – starting 1st April 2021

9 am, Friday – 11 June 2021

PRESIDENTS & KEYNOTE SPEAKERS

JIM CURLIN, *Acting Head/Network and Policy Manager*
United Nations Environment Programme, OzonAction – UNEP

DIDIER COULOMB, *Director General*
ALBERTO CAVALLINI, *Honorary President*
International Institute of Refrigeration – IIR

Invited (tba)
United Nations Industrial Development Organization – UNIDO

Invited (tba)
European Commission, Climate Action

STEPHEN YUREK, *President and CEO*
Air Conditioning, Heating and Refrigeration Institute – AHRI

DIVINE NJIE, *Deputy Director, Food Systems and Food Safety* for Food and Agriculture Organization – FAO

ANDREA VOIGT, *Director General*
European Partnership for Energy and the Environment – EPEE

MARCO BUONI, *President*
Air conditioning and Refrigeration European Association – AREA

WOLFGANG ZAREMSKI, *President* of the Association of European Refrigeration Component Manufacturers – ASERCOM

FRANCESCO SCUDERI, *Deputy Secretary General*
European Industry Association – Eurovent

GERALD CAVALIER, *President*
CEMAFROID | Association Française du Froid – AFF

FEDERICO MUSAZZI (tbc), *Secretary General*
Associazione costruttori sistemi climatizzazione – Assoclisma

ENNIO MACCHI, *Professor Emeritus*
GIOVANNI LOZZA, *Professor Energy Dept*
Politecnico di Milano

MARCO MASOERO, *Director Energy Dept*, Politecnico di Torino
& *Vice President*, Associazione Tecnici del Freddo

FABIO POLONARA, *Co-chair TEAP RTOC & Director Industrial Engineering Dept*, Università Politecnica delle Marche

LUCA TAGLIAFICO, *Professor*
Università di Genova

Introduction

J. Curlin United Nations Environment – UNEP
D. Coulomb International Institute of Refrigeration – IIR

Third Session

**F-GAS REGULATION 517/2014,
EUROPEAN AND INTERNATIONAL PHASE DOWN,
CERTIFICATION AND LICENCES**

CHAIRPERSONS

A. Cavallini Università di Padova, IIR - **J. Curlin** UNEP
(tba) EU Commission - **S. Yurek** AHRI - **A. Voigt** EPEE
W. Zaremski ASERCOM - **F. Scuderi** Eurovent

The Kigali Amendment: HFC Phase-down, flammable refrigerants' standards, illegal refrigerants, inspections, logbook, maintenance. Containment, recovery and recycling. Training and certification in Europe and Italy. Products' and components' certification. Mobile air conditioning.

Speakers: (tba) EU Commission DG Clima - **A. Voigt** EPEE - **W. Zaremski** ASERCOM - **F. Scuderi** Eurovent - **S. Yurek** AHRI - **F. Walravens** EIA - **M. Buoni** AREA - **M. Creamer** IOR - **F. Mastrapasqua** Assocold
Conclusions on the latest TEAP-RTOC Report (F. Polonara, C. Malvicino)

Fourth Session

**NEW CONTROL TECHNOLOGIES, THE COLD CHAIN,
COLD STORAGE AND TRANSPORT,
FOOD CONSERVATION**

CHAIRPERSONS

D. Coulomb, **A. Cavallini** IIR - **(tba)** UNIDO
D. Njie FAO - **(tba)** EU Commission
G. Cavalier AFF - **M. Masoero** Politecnico of Turin

New technology in the cold chain: vehicles, trains, ships, cold storages; vaccines and food preservation; applications in commercial and domestic refrigeration, supermarkets, hospitals, vaccination centres and industry. Energy saving optimization. Solar refrigeration. Insulation; environmental control in food processes, safety control in the cold chain ATP.

Speakers: D. Coulomb IIR - **D. Njie** FAO - **(tba)** UNIDO - **M. Lorusso** Nippon Gases Refrigerants - **G. Cavalier** AFF - **M. Masoero** ATF & Politecnico of Turin - **M. Sakandé** U-3ARC - **T. Biris** Hellas Union Fgas - **V. Tsyplakov** Mirai Intex

2 pm, Friday – 11 June 2021

Fifth Session

EFFICIENCY AND RENEWABLE COOLING

CHAIRPERSONS

M. Masoero Politecnico of Turin
J. Curlin UNEP - **D. Coulomb** IIR
(tba) UNIDO - **F. Musazzi (tbc)** Assoclisma
L. Tagliafico Università di Genova

Energy efficiency in plants. Heat pumps, cooling with absorption and adsorption plants. Renewable energy and chemistry in air conditioning and refrigeration. Evaporative cooling, district cooling and magnetic cooling.

Speakers: F. Musazzi (tbc) Assoclisma - **T. Funder-Kristensen** Danfoss - **K. Berglöf** ClimaCheck - **L. Tagliafico** Università di Genova - **P. Mattavelli** Errecom - **L. Rollino** C2R, Centro Studi Galileo

Debate

With the participants in the conference

Conclusions and Recommendations

SOLUTIONS TO OBLIGATIONS DUE TO NEW REGULATIONS AND TECHNOLOGY, CLIMATE CHANGE

D. Coulomb International Institute of Refrigeration – IIR
J. Curlin United Nations Environment Programme – UNEP
M. Buoni Air Conditioning and Refrigeration Association – AREA

Conference Organizer & Secretariat

**CENTRO STUDI GALILEO &
ASSOCIAZIONE TECNICI DEL FREDDO**

Tel. +39 0142 452403 (Ms Debora and Chiara)

www.centrogalileo.it

EUROPEAN ENERGY CENTRE

Tel. +44 131 4469479 (Mr Paolo)

www.EUenergycentre.org

To participate and for info, please contact:

conference@centrogalileo.it