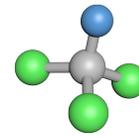




International Symposium On:  
**The Unexpected Increase in Emissions  
of Ozone-Depleting CFC-11**  
25-27 March 2019, Vienna, Austria



<https://www.sparc-climate.org/meetings/meetingscfc-11-workshop-march-2019-in-vienna/>

**Registration and abstract submission deadline is extended and closes on 14 January 2019**

**Purpose:**

The Montreal Protocol was designed to protect the stratospheric ozone layer by reducing the abundances of ozone depleting substances (ODS) such as chlorofluorocarbons (CFCs) in the atmosphere. The measures taken were successful with the abundance of ODS peaking in the late 1990s and continuously decreasing since that time. However, in a recent letter to Nature, Montzka et al. (2018) reported an unexpected and persistent global emission increase of 13,000 tonnes of CFC-11, both a powerful ozone-depleting substance and a powerful greenhouse gas. This study combined decade-long time-series of CFC-11 from various continents with a suite of two- and three-dimensional model simulations. It concluded that emissions from eastern Asia had increased, although increases in other regions were not ruled out. It also suggested that the CFC-11 emission increase arises from new production that has not been reported to the Ozone Secretariat of the United Nations Environment Programme.

The Symposium's purpose is to provide a forum for scientists and technologists to explore and present information on the potential causes of the increased CFC-11 emissions. This information will provide a firmer scientific basis for discussions amongst the Parties of the Montreal Protocol in the coming years. The Symposium is open to discussions on all aspects of CFC-11 and related compounds, from production to atmospheric loss, along with environmental impact of the molecule.

**Topics include, but are not exclusive:**

- Pathways by which CFC-11 is produced primarily, or inadvertently, along with feedstocks for that production (e.g.,  $\text{CCl}_4$ ) and co-produced compounds (e.g., CFC-12).
- Feedstock usages of CFC-11
- Primary usages of CFC-11, both historical and current
- Emission sources for CFC-11 and related compounds, their magnitudes, and timescales for CFC-11 release.
- Analysis of compounds that can be used to trace atmospheric transport of CFC-11
- Bottom-up estimates of global and regional CFC-11 emissions
- Atmospheric observations, sampling techniques, and analysis of CFC-11 and related compounds (ground, aircraft, satellite)
- Top-down emission estimates of global and regional CFC-11 emissions
- Lifetime estimates of CFC-11 and CFC-11 loss processes
- Ozone depletion from the increased emissions to date, and projected for the future.
- Other environmental impact of the increased emissions, including increases of UV and climate

**Attendance Application and Registration:**

Registration and abstract submission is open and will close on January 14, 2019.

<https://www.sparc-climate.org/meetings/meetingscfc-11-workshop-march-2019-in-vienna/>

The venue limits the Symposium to 100 persons. Hence, attendance will be approved by the Scientific Steering Committee if oversubscribed. Attendance priorities will be based upon whether an applicant has submitted an accepted abstract and their technical and scientific interests and standing.

Limited travel funding will be available for attendance - subject to priorities outlined above.

**Symposium Venue:**

Vienna International Centre  
United Nations Office at Vienna Wagramerstrasse 5  
1400 Vienna, Austria  
<https://www.unov.org/unov/en/vic.html>

**Contact:**

For addition info, email Ms. Susan McFadden ([susan.k.mcfadden@nasa.gov](mailto:susan.k.mcfadden@nasa.gov)).

**Organizing Committee:**

Geir Braathen (WMO)  
Neil Harris (SPARC)  
Paul Newman (SAP)  
Bella Maranion (TEAP)  
Sophia Mylona (Ozone Secretariat)

**Scientific Steering Committee:**

Tina Birmpili (Ozone Secretariat)  
Geir Braathen (WMO)  
Neil Harris (SPARC)  
Jianxin Hu (Peking U.)  
Ken Jucks (NASA)  
Paul Newman (SAP)  
Bella Maranion (TEAP)  
Steve Montzka (NOAA)  
Sophia Mylona (Ozone Secretariat)  
Sun Young Park (Korea)  
Stefan Reimann (Empa)  
Matt Rigby (Bristol U.)  
Takuya Saito (Japan)  
Helen Tope (TEAP)  
Helen Walter-Terrinoni (TEAP)

**Visa Information:**

Visa requirements for Austria vary greatly between nationalities and it is therefore essential to check visa requirements before travelling. Visas must be obtained prior to arrival, and it is each participant's responsibility to obtain the required entry visa. Note that a Schengen visa is required, even for transiting through Schengen-zone European countries. Further information is at: <https://www.bmeia.gv.at/en/travel-stay/entry-and-residence-in-austria/>