

Dr Sarah Connors

Employment

October 2019 - Present: Head of Science Team

IPCC Working Group 1 Technical Support Unit (www.ipcc.ch/working-group/wg1), Paris, France

- Supporting the development and publication of the Working Group I (WGI, Physical Climate Science) contribution to the IPCC Sixth Assessment Report (AR6)
- Supporting the work of the AR6 authors, working closely with the WGI Bureau
- Managing and coordinating Science Team activities and reporting to the Head of TSU and the Co-Chairs of WGI

Jan 2017 – October 2019: Senior Science Officer (Senior title since Jan 2019)

IPCC Working Group 1 Technical Support Unit (www.ipcc.ch/working-group/wg1), Paris, France

- Supporting the development and publication of IPCC assessment reports including:
 - The IPCC Special Report on Global Warming on 1.5°C
 - The IPCC Special Report on Climate Change and Land
 - The IPCC AR6 Working Group I
- Coordinating complex multidisciplinary projects within a small team
- Understanding of key climate science issues relevant for international policy including greenhouse gas emissions, short-lived climate forcers, carbon budgets, climate feedbacks, urban climate science.
- Communicating report key messages at international events

Sep 2015 – Dec 2016: Science Policy Fellow

European Geosciences Union (EGU - www.egu.eu), Munich, Germany

Establishing an interface between EGU scientists and EU public policy.

- Stressing the vitality of evidence-based policy, highlighting the importance of the Earth, planetary and space sciences.
- Creating novel science-policy resources for the EGU website (www.egu.eu/policy)
- Organising science policy events at the EGU general assembly (Europe's premier geosciences conference with over 14 000 attendees).

Mar 2015 – May 2015: Policy Internship

Centre for Science and Policy (CSaP - <http://www.csap.cam.ac.uk>), Cambridge, UK

Designing, promoting and delivering events for academic and policy making communities.

Education

Oct 2011 – Aug 2015: PhD Atmospheric Chemistry

Centre for Atmospheric Science, University of Cambridge, Cambridge, UK

Thesis title: Development of a method for estimating methane emissions at high resolution.

- Developing a novel verification method for the UK greenhouse gas inventory for methane by combining atmospheric measurements and dispersion modelling.
- Inversion approach developed with the UK Met Office.

Supervisor: Dr Neil Harris, Co-Chair of SPARC.

Oct 2006 – Jul 2010: MChem Chemistry 2:1 (Hons) with 1 year industrial placement

Department of Chemistry, University of York, York, UK

- Selected modules on the natural environment, atmospheric chemistry and clean technology.

Skills

Project Management, Organisation and Leadership

- Scientific understanding
 - Up to date understanding of key climate issues spanning across the IPCC working groups
 - Understanding of the IPCC process and procedures
 - Ability to synthesis and distil key messages from complex scientific documents
- Coordination & Management
 - Multi-project management experience with the ability to meet concurrent deadlines
 - Typically taking the coordinator role

- Supervision and mentoring experience, for example, co-supervision of 2 month Masters internship
- Team coordination and management experience, for example, of the SR1.5°C and WGI Chapter Scientists
- Scientific event planning experience (e.g., CitiesIPCC, Lead Author Meetings)

Science Communication

- 2018, Coordinator of the SR1.5°C FAQs (11 in total)
 - Designed and analysed user survey to choose appropriate and relevant topics
 - Coordinated FAQ production with authors, the science editor and the contracted graphics expert, as well as contributing to the drafting of most texts
 - Worked with the graphics and communications officer post production on social media products
- 2013-2018, Blogging professionally (blogs.egu.eu) and privately (muchadoaboutclimate.wordpress.com) on climate and earth science topics.
 - 2016, received a 'special mention' in the 'EU in my region' blogging competition organised by the European Commission
- 2014, Royal Society Summer Science Exhibition
 - Week long exhibition aimed to communicate scientific research to the public and attended by over 15 000 people.
- 2014, winner of the Outstanding Student Presentation Award (top 3-5 %) at the American Geophysical Union General Assembly, San Francisco.

Academic Record

Publications

2019

IPCC: Summary for Policymakers, in an IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems.

Gensuo, J., E. Shevliakova, P. Artaxo, N. De Noblet-Ducoudré, R. Houghton, J. House, K. Kitajima, C. Lennard, A. Popp, A. Sirin, R. Sukumar, L. Verchot, **Chapter 2: Land-Climate Interactions, in an IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems.**
[Contributing Author]

Casado, M., G. Gremion, P. Rosenbaum, J. Caccavo, K. Aho, N. Champollion, **S. Connors**, A. Dahood, A. Fernandez, M. Lizotte, K. Mintenbeck, E. Poloczanska, G. Fugmann, **The benefits to climate science of including Early Career Scientists as reviewers.** In prep.

INTERNATIONAL CONFERENCE ON CLIMATE CHANGE AND CITIES: Conference Proceedings

S. Dhakal, S. Schultz, D. Ürge-Vorsatz, X. Bai, A. Barau, H. Cleugh, D. Dodman, R. Dawson, B. Lee, L. Leonardsen, V. Masson-Delmotte, M. L. Melamed, G. C. Delgado Ramos, R. Sanchez Rodriguez, D. Roberts, C. Rosenzweig, K. Seto, W. Solecki, M. van Staden, M. Chapman, M. Colbert, **S. Connors**, M. Craig, J. Douwes, J. Espey, J. M. Lee, S. O'Donoghue, M. Pathak, A. Prieur-Richard, B. Rama, M. Shongwe, B. Walsh. UNHabitat, Nairobi, Kenya, 2019.

2018

IPCC: Summary for Policymakers, in Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, edited by V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, **S. Connors**, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield, p. 26, World Meteorological Organization, Geneva, Switzerland, 2018.
[Contributing Author]

IPCC: Global Warming of 1.5 °C: an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, edited by V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, **S. Connors**, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield. 2018.

Coninck, H., Revi, A., Babiker, M., Bertoldi, P., Buckeridge, M., Cartwright, A., Dong, W., Ford, J., Fuss, S., Hourcade, J.-C., Ley, D., Mechler, R., Newman, P., Revokatova, A., Schultz, S., Steg, L. and Sugiyama, T.: **Strengthening and implementing the global response, in Global Warming of 1.5C: an IPCC special report on the impacts of global warming of 1.5C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change**, edited by V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, **S. Connors**, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield, Geneva. 2018. **[Contributing Author]**

Palmer, P. I., O'Doherty, S., Allen, G., Bower, K., Bösch, H., Chipperfield, M. P., **Connors, S.**, Dhomse, S., Feng, L., Finch, D. P., Gallagher, M. W., Gloor, E., Gonzi, S., Harris, N. R. P., Helfter, C., Humpage, N., Kerridge, B., Knappett, D., Jones, R. L., Le Breton, M., Lunt, M. F., Manning, A. J., Matthiesen, S., Muller, J. B. A., Mullinger, N., Nemitz, E., O'Shea, S., Parker, R. J., Percival, C. J., Pitt, J., Riddick, S. N., Rigby, M., Sembhi, H., Siddans, R., Skelton, R. L., Smith, P., Sonderfeld, H., Stanley, K., Stavert, A. R., Wenger, A., White, E., Wilson, C. and Young, D.: **A measurement-based verification framework for UK greenhouse gas emissions: an overview of the Greenhouse gAs Uk and Global Emissions (GAUGE) project**, *Atmos. Chem. Phys.*, 18(16), 11753–11777, doi:10.5194/acp-18-11753-2018, 2018.

Riddick, S. N., Hancock, B. R., Robinson, A. D., **Connors, S.**, Davies, S., Allen, G., Pitt, J. and Harris, N. R. P.: **Development of a low-maintenance measurement approach to continuously estimate methane emissions: A case study**, *Waste Manag.*, 73, 210–219, 2018.

2017

Prieur-Richard, A.-H., Walsh, B., Craig, M., Melamed, M. L., M'Lisa, Colbert, Pathak, M., **Connors, S.**, Bai, X., Barau, A., Bulkeley, H., Cleugh, H., Cohen, M., Colenbrander, S., Dodman, D., Dhakal, S., Dawson, R., Jessica, Espey, Greenwalt, J., Kurian, P., Lee, B., Leonardsen, L., Masson-Delmotte, V., Munshi, D., Okem, A., Ramos, G. C. D., Rodriguez Sanchez, R., Roberts, D., Rosenzweig, C., Schultz, S., Seto, K., Solecki, W., Staden, M. van and Ürge-Vorsatz, D.: **Global Research and Action Agenda on Cities and Climate Change Science**, Nairobi, 2017.

Riddick, S. N., **Connors, S.**, Robinson, A. D., Manning, A. J., Jones, P. S. D., Lowry, D., Nisbet, E., Skelton, R. L., Allen, G., Pitt, J. and Harris, N. R. P.: **Estimating the size of a methane emission point source at different scales: from local to landscape**, *Atmos. Chem. Phys.*, 17(12), 7839–7851, doi:10.5194/acp-17-7839-2017, 2017.

2016

Kourtchev, I., Godoi, R. H. M., **Connors, S.**, Levine, J. G., Archibald, A. T., Godoi, A. F. L., Paralovo, S. L., Barbosa, C. G. G., Souza, R. A. F. and Manzi, A. O.: **Molecular composition of organic aerosols in central Amazonia: an ultra-high-resolution mass spectrometry study**, *Atmos. Chem. Phys.*, 16(18), 11899–11913, 2016.

Kourtchev, I., Giorio, C., Manninen, A., Wilson, E., Mahon, B., Aalto, J., Kajos, M., Venables, D., Ruuskanen, T., Levula, J., Lopenen, M., **Connors, S.**, Harris, N., Zhao, D., Kiendler-Scharr, A., Mentel, T., Rudich, Y. and Kalberer, M.: **Enhanced Volatile Organic Compounds emissions and organic aerosol mass increase the oligomer content of atmospheric aerosols**, *Sci. Rep.*, 6, 35038, 2016.

Scientific Talks and Events

2019

European Geosciences Union (EGU) General Assembly, Vienna, Austria

- *The APECS Careers Progression Session* – Invited speaker and Panellist
- *Science in policymaking: Who is responsible?* Session – Moderator
- *Tales from the IPCC: From Research to Report* – Moderator

2018

24th Conference of the Parties (COP24), Katowice, Poland

- *IPCC Special Report on 1.5°C key messages: Africa* – Speaker and Panellist
- *How to get Early Career Scientists involved in the IPCC* – Moderator

2017

Biodiversité et transition énergétique, Paris, France

- *Indigenous Knowledge in the IPCC* – Invited speaker

NERC GHG Summer School, Southampton, UK

- *What's in an assessment? How the IPCC process contributes to climate science policy* – Invited speaker

National Oceanography Centre, Southampton, UK

- *The next steps for the IPCC* – Invited speaker

2016

European Commission 'Impact of Climate Change on Global Health' Conference, Brussels, Belgium

- *Climate adaptation and mitigation of risks* – Invited speaker

European Geosciences Union (EGU) General Assembly

- *Estimating dispersed and point source emissions of methane in East Anglia: results and implications* – Poster Presentation

2015

European Geosciences Union (EGU) General Assembly, Vienna, Austria

- *High-resolution methane emission estimates using surface measurements and the InTEM inversion system* – PICO presentation

National Centre for Atmospheric Science (NCAS) Early Careers Forum, Reading, UK

- *Verifying UK methane emissions using the inversion technique 'InTEM'* – Oral presentation

2014

American Geophysical Union (AGU) General Assembly, California, USA

- *High resolution methane emissions estimates using the inversion approach InTEM* – Oral presentation