

## CURRENT EMPLOYMENT

*Senior Associate, KPMG*

Present

- Analyze Global Climate Models in the context of climate risk for KPMG's Modeling and Valuation service.

## EDUCATION AND SKILLS

**Harvard University Graduate School of Arts and Sciences, Cambridge, MA**

February 2022 – November 2022

- **Postdoctoral fellow** working with Professor Michael McElroy.
- **Memberships** – Sigma Xi, Air & Waste Management Association.
- **Journal Reviewer** – ERL, ERIS, Nature Communications, Science Progress

**Harvard University Graduate School of Arts and Sciences, Cambridge, MA**

September 2017 – January 2022

- **PhD candidate** in the Department of Earth Planetary Sciences: focus on climate change and green technology.
- **Fellowships** – Skaff Family Graduate Environmental Fellowship recipient.
- **GPA** – 3.85.

**Imperial College London, London, UK**

September 2013 – June 2017

- **MSc** – Degrees in Physics (4-year Bsc/Msci degrees).
- **Upper Class Honors.**

## Computing Skills

Current

- **Modelling skills** – CESM, GEOS-Chem, UKESM.
- **Programming languages** – MATLAB, Python, R, Linux, HPC, AWS, SQL, HTTP.

## MENTORSHIP AND TEACHING EXPERIENCE

*Research Supervisor, Harvard University:*

February 2020 – Present

- Supervise five Harvard undergraduate on projects ranging from offshore wind power in southeast Asia to air conditioning demand in India.
- Published paper in Environmental Research Letters on COVID-19 emissions recovery on India's climate.

*Mentor, Science Research Mentorship Program:*

October 2020 – Present

- Supervise five local high schoolers on the effects of COVID-19 emissions recovery on India's climate and global offshore wind potential.
- Published paper in Environmental Research Letters on COVID-19 emissions recovery on India's climate.

*Teaching Fellow, Harvard University - EPS, Cambridge, MA:*

September 2018 – Present

- Fall 2018 – SPU14: *How to Build a Habitable Planet* (Charles Langmuir)\*
  - Authored a TF manual for SPU14: *How to Build a Habitable Planet*.
- Fall 2019 – GENED1018: *How to Build a Habitable Planet* (Charles Langmuir)\*
- Spring 2020 – GENED1137: *The Challenge of Human Induced Climate Change* (Michael McElroy)
- Fall 2020 – GENED1018: *How to Build a Habitable Planet* (Charles Langmuir)
- Spring 2021 – GENED1137: *The Challenge of Human Induced Climate Change* (Michael McElroy)\*
- Fall 2021 – GENED1018: *How to Build a Habitable Planet* (Charles Langmuir)
- Fall 2021 – ESPP 90N: *Addressing the Global Climate Crisis* (Michael McElroy)\*

\*The Derek Bok Center Certificate of Distinction and Excellence in Teaching Award

*Lab Demonstrator, Imperial College London, London, UK:*

March 2017 – June 2017

- Supervised first-year physics students in wave experiments.
- Advised students on writing clear and effective lab reports.

*Academic Mentor, EXSCITEC, Imperial College London, London UK:*

February 2014 – August 2015

- Taught physics and math to students preparing for A-level examinations.
- Led outreach activities to mentor and inspire youth to study STEM.

## PUBLICATIONS

- **Sherman, P., Lin, H., and McElroy, M.B., 2022.** [Projected global demand for air conditioning associated with extreme heat and implications for electricity grids in poorer countries](#). Energy and Buildings.

- Song, S., ... **Sherman, P.**, ... 2022. [Deep decarbonization of the Indian economy: 2050 prospects for wind, solar, and green hydrogen](#). iScience.
- D'Souza, J., ... **Sherman, P.**, ... 2021. [Projected changes in seasonal and extreme summertime temperature and precipitation in India in response to COVID-19 recovery emissions scenarios](#). Environmental Research Letters.
- Lin, H., ... **Sherman, P.**, ..., 2021. [Production of Hydrogen from Offshore Wind in China and Cost-competitive Supply to Japan](#). Nature Communications.
- **Sherman, P.**, et al., 2021: [Sensitivity of modeled Indian monsoon to Chinese and Indian aerosol emissions](#). Atmospheric Chemistry and Physics.
- **Sherman, P.**, Song, S., Chen, X., and McElroy, M.B., 2021: [Projected changes in wind power potential over China and India in high resolution climate models](#). Environmental Research Letters.
- Lu, T., **Sherman, P.**, Chen, X., Chen, S., Lu, X., and McElroy, M.B., 2020: [India's potential for integrating solar and on- and offshore wind power into its energy system](#). Nature Communications.
- **Sherman, P.**, Tziperman, E., Deser, C., and McElroy, M.B., 2020: [Historical and future roles of internal variability in modulating Greenland Ice Sheet melt](#). Geophysical Research Letters.
- **Sherman, P.**, Chen, X., and McElroy, M.B., 2020: [Offshore wind: an opportunity for cost-competitive decarbonization of China's energy economy](#). Science Advances.
- **Sherman, P.**, Gao, M., Song, S., Ohiomoba, P., Archibald, A., and McElroy, M.B., 2019: [The influence of dynamics and emissions changes on China's wintertime haze](#). Journal of Applied Meteorology and Climatology.
- Gao, M., ... **Sherman, P.**, ..., 2019: [Ozone Pollution over China and India: Seasonality and Sources](#). Atmospheric Chemistry and Physics.
- Gao, M., **Sherman, P.**, Song, S., Yu, Y., Wu, Z., and McElroy, M.B., 2019: [Seasonal prediction of Indian wintertime aerosol pollution using the Ocean Memory Effect](#). Science Advances.
- Gao, M., ... **Sherman, P.**, ..., 2019: [China's emission control strategies have suppressed unfavorable influences of climate on wintertime PM2.5 concentrations in Beijing since 2002](#). Atmospheric Chemistry and Physics.
- **Sherman, P.** and Archibald, A., 2019: [The Urban Heat Island \(UHI\) is a major source of uncertainty in projections of population-weighted surface temperature under climate change](#). EarthArXiv.
- **Sherman, P.**, Chen, X., and McElroy, M.B., 2017: [Wind-generated electricity in China: decreasing potential, inter-annual variability and association with changing climate](#). Scientific Reports.
- **Sherman, P.** and van Sebille, E., 2016: [Modeling marine surface microplastic transport to assess optimal removal locations](#). Environmental Research Letters.

## POSTERS AND PRESENTATIONS

- India's potential for integrating renewables into its energy system (Presentation) – Harvard China Project (July 2020)
- The influence of North Atlantic sea surface temperatures on aerosol loading in China (Poster) – AGU (December 2018).
- Modeling marine surface microplastic transport to assess optimal removal locations (Presentation) – Centre Councillor for the Chartered Institution of Wastes Management Open Meeting on Offshore Wastes – London Borough of Newham (July 2017).

## OTHER WORK EXPERIENCE

*Remote Basketball Operations Analyst, **Orlando Magic**:*

September 2021 – Present

- Analyze player tracking data for the Orlando Magic.
- Conduct statistical analysis to inform decision-making processes for player transactions.

*Remote Basketball Operations Analyst, **Minnesota Timberwolves**:*

September 2019 – September 2021

- Analyze player tracking data for the Minnesota Timberwolves.
- Conduct statistical analysis to inform decision-making processes for player transactions.

## LATEST NEWS

- [Harvard China Project Researcher Profile](#) – Harvard-China Project
- [Less wind due to climate change won't impact wind power generation in India and China](#) – Harvard SEAS News and Events
- [India's renewable future](#) – Harvard SEAS News and Events
- [Opportunity blows for offshore wind in China](#) – Harvard SEAS News and Events