## PERSONAL DETAILS

**Name:** Gang Chen
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**Research ID (Web of Science):** AAB-5536-2019

## EDUCATION

06 / 2022 **Swiss Federal Institute of Technology Zürich (ETH), Zürich, Switzerland**
**Doctoral Studies:** Environmental Science
**Thesis Title:** "Investigations of the Sources of European Atmospheric Aerosols using Novel Source Apportionment Techniques"
**Defense Date:** 08.06.2022

06 / 2018 **University of Toronto (U of T), Toronto, ON, Canada**
**Master Studies:** Chemical Engineering and Applied Chemistry
**Thesis Title:** "Method Development for Measuring Black Carbon (BC) using a Smartphone Camera"
**Defense Date:** 15.06.2018

06 / 2016 **Western University (UWO), London, ON, Canada**
**Bachelor Studies:** Chemical Engineering

## EMPLOYMENT

08 / 2022 – Present **School of Public Health, Imperial College London, London, UK**
**Research Associate**

## SUPERVISION OF STUDENTS/JUNIOR RESEARCHERS

05 /2023 – Present Co-supervisor for PhD and master students (Rongyan Fang, Michelle Schneider, Megan Pete and Nicole Cizauskas)
**Imperial College London, London, UK**

09 / 2020 – 08 / 2022 Mentor for junior PhD students (Jun Zhang, Tiantian Wang, and Jimeng Wu)
**PSI, Villigen, Switzerland**

02 / 2022 – 07 / 2022 Supervision of a bachelor thesis (Michelle Schneider)
**ETH, Zurich, Switzerland**

05 / 2017 – 08 / 2017 Supervision of bachelor research assistant (Mengxuan Cai)
**U of T, Toronto, ON, Canada**

## TEACHING ACTIVITIES

02 / 2021 – 06 / 2021 **ETH, Zurich, Switzerland**
Teaching Assistant in *Aerosols II*

09 / 2016 – 09 / 2018 **U of T, Toronto, ON, Canada**
Teaching Assistant in *Chemical Engineering and Applied Chemistry – Laboratory III and IV*

05 / 2016 – 09 / 2016 **Mathematics and Science Tutor, Jinhua, China**

05 / 2016 – 09 / 2016 **Basketball Coach in a Summer Camp, Jinhua, China**

## ADMINISTRATIVE/COLLECTIVE DUTIES

**Chair** for *Sources of Organic Aerosol* at EAC 2023

**Reviewer** for *Environmental International* (8), *Atmospheric Chemistry and Physics* (2), *Atmospheric environment* (1), ACS ES&T Air (1), *Frontiers in environmental science* (1)

## AWARDS

**MRC Pump Priming Awards** 2023 (£15K)

**GAef Student Travel Grant** EAC 2019, EAC 2020, EAC 2021, IAC 2022 (€ 500 ×4)

**Chemical Engineering Fellowship** at U of T 2016-2018 ($ 72K CAD)

**Dean's Honor List** at UWO 2014-2016

## PERSONAL SKILLS

| | |
|---|---|
| **Digital Competences** | Proficient in MATLAB, Igor, R, and entry-level in Python |
| **Languages** | English (proficient), Mandarin (mother tongue), German (A1) |

## HOBBIES

Basketball (Lakers fan), Biking, Hiking, Movies, and Travelling

## PUBLICATIONS

**First-author papers: 4**

**Co-author papers: 13**

1. **Chen G,** Canonaco F, Slowik JG, Daellenbach KR, Tobler A, Petit JE, Favez O, Stavroulas I, Mihalopoulos N, Gerasopoulos E, El Haddad I, Baltensperger U, Prévôt ASH. Real-Time Source Apportionment of Organic Aerosols in Three European Cities. **Environ. Sci. Technol.** 2022 Nov 15;56(22):15290-15297. https://doi.org/10.1021/acs.est.2c02509
2. **Chen, G.**, Canonaco, F., Tobler, A., Aas, W., Alastuey, A., Allan, J., Atabakhsh, S., Aurela, M., Baltensperger, U., Bougiatioti, A., De Brito, J.F., Ceburnis, D., Chazeau, B., Chebaicheb, H., Daellenbach, K.R., Ehn, M., El Haddad, I., Eleftheriadis, K., Favez, O., Flentje, H., Font, A., Fossum, K., Freney, E., Gini, M., Green, D.C., Heikkinen, L., Herrmann, H., Kalogridis, A.-C., Keernik, H., Lhotka, R., Lin, C., Lunder, C., Maasikmets, M., Manousakas, M.I., Marchand, N., Marin, C., Marmureanu, L., Mihalopoulos, N., Močnik, G., Nęcki, J., O'Dowd, C., Ovadnevaite, J., Peter, T., Petit, J.-E., Pikridas, M., Matthew Platt, S., Pokorná, P., Poulain, L., Priestman, M., Riffault, V., Rinaldi, M., Różański, K., Schwarz, J., Sciare, J., Simon, L., Skiba, A., Slowik, J.G., Sosedova, Y., Stavroulas, I., Styszko, K., Teinemaa, E., Timonen, H., Tremper, A., Vasilescu, J., Via, M., Vodička, P., Wiedensohler, A., Zografou, O., Minguillón, M.C., Prévôt, A.S.H., 2022. European aerosol phenomenology − 8: Harmonised source apportionment of organic aerosol using 22 Year-long ACSM/AMS datasets. **Environ. Int.** 166, 107325. https://doi.org/10.1016/j.envint.2022.107325
3. **Chen, G.**, Sosedova, Y., Canonaco, F., Fröhlich, R., Tobler, A., Vlachou, A., Daellenbach, K.R., Bozzetti, C., Hueglin, C., Graf, P., Baltensperger, U., Slowik, J.G., El Haddad, I., Prévôt, A.S.H.H., 2021. Time-dependent source apportionment of submicron organic aerosol for a rural site in an alpine valley using a rolling positive matrix factorisation (PMF) window, **Atmos. Chem. Phys.** https://doi.org/10.5194/acp-21-15081-2021
4. **Chen, G.**, Wang, Q., Fan, Y., Han, Y., Wang, Y., Urch, B., Silverman, F., Tian, M., Su, Y., Qiu, X., Zhu, T., Chan, A.W.H., 2020. Improved method for the optical analysis of particulate black carbon (BC) using smartphones. **Atmos. Environ.** 224, 117291. https://doi.org/10.1016/j.atmosenv.2020.117291
5. Via, M., **Chen, G.,** Canonaco, F., Daellenbach, K. R., Chazeau, B., Chebaicheb, H., Jiang, J., Keernik, H., Lin, C., Marchand, N., Marin, C., O'Dowd, C., Ovadnevaite, J., Petit, J.-E., Pikridas, M., Riffault, V., Sciare, J., Slowik, J. G., Simon, L., Vasilescu, J., Zhang, Y., Favez, O., Prévôt, A. S. H., Alastuey, A., and Minguillón, M. C., 2022. Rolling vs. seasonal PMF: real-world multi-site and synthetic dataset comparison, **Atmos. Meas. Tech.**, 15, 5479–5495, https://doi.org/10.5194/amt-15-5479-2022
6. Atabakhsh, S., Poulain, L., **Chen, G.,** Canonaco, F., Prévôt, A. S. H., Pöhlker, M., Wiedensohler, A., and Herrmann, H., A 1-year aerosol chemical speciation monitor (ACSM) source analysis of organic aerosol particle contributions from anthropogenic sources after long-range transport at the TROPOS research station Melpitz, **Atmos. Chem. Phys.** https://doi.org/10.5194/acp-23-6963-2023
7. Chebaicheb, H., de Brito, J.F., **Chen, G.,** Tison, E., Marchand, C., Prévôt, A. S. H., Riffault, V., Investigation of four-year chemical composition and organic aerosol sources of submicron particles at the ATOLL site in northern France, **Environ. Pol.** https://doi.org/10.1016/j.envpol.2023.121805
8. Canonaco, F., Tobler, A., **Chen, G.**, Sosedova, Y., Slowik, J.G., Bozzetti, C., Daellenbach, K.R., El Haddad, I., Crippa, M., Huang, R.-J., Furger, M., Baltensperger, U., Prévôt, A.S.H., 2021. A new method for long-term source apportionment with time-dependent factor profiles and uncertainty assessment using SoFi Pro: application to 1 year of organic aerosol data. **Atmos. Meas. Tech.** 14, 923–943. https://doi.org/10.5194/amt-14-923-2021
9. Heikkinen, L., Äijälä, M., Daellenbach, K.R., **Chen, G.**, Garmash, O., Aliaga, D., Graeffe, F., Räty, M., Luoma, K., Aalto, P., Kulmala, M., Petäjä, T., Worsnop, D., Ehn, M., 2021. Eight years of sub-micrometre organic aerosol composition data from the boreal forest characterized using a machine-learning approach. **Atmos. Chem. Phys.** 21, 10081–10109. https://doi.org/10.5194/acp-21-10081-2021
10. Tobler, A.K., Skiba, A., Canonaco, F., Močnik, G., Rai, P., **Chen, G.**, Bartyzel, J., Zimnoch, M., Styszko, K., Nęcki, J., Furger, M., Różański, K., Baltensperger, U., Slowik, J.G., Prevot, A.S.H., 2021. Characterization of non-refractory (NR) PM1 and source apportionment of organic aerosol in Kraków. **Atmos. Chem. Phys.** 21, 14893–14906. https://doi.org/10.5194/acp-21-14893-2021
11. Moallemi, A., Landwehr, S., Robinson, C., Simó, R., Zamanillo, M., **Chen, G.**, Baccarini, A., Schnaiter, M., Henning, S., Modini, R.L., Gysel‐Beer, M., Schmale, J., 2021. Sources, Occurrence and Characteristics of Fluorescent Biological Aerosol Particles Measured Over the Pristine Southern Ocean. **J. Geophys. Res. Atmos.** 126. https://doi.org/10.1029/2021JD034811

12. Landwehr, S., Volpi, M., Haumann, F.A., Robinson, C.M., Thurnherr, I., Ferracci, V., Baccarini, A., Thomas, J., Gorodetskaya, I., Tatzelt, C., Henning, S., Modini, R.L., Forrer, H.J., Lin, Y., Cassar, N., Simó, R., Hassler, C., Moallemi, A., Fawcett, S.E., Harris, N., Airs, R., Derkani, M.H., Alberello, A., Toffoli, A., **Chen, G.**, Rodríguez-Ros, P., Zamanillo, M., Cortés-Greus, P., Xue, L., Bolas, C.G., Leonard, K.C., Perez-Cruz, F., Walton, D., Schmale, J., 2021. Exploring the coupled ocean and atmosphere system with a data science approach applied to observations from the Antarctic Circumnavigation Expedition. **Earth Syst. Dyn.** 12, 1295–1369. https://doi.org/10.5194/esd-12-1295-2021
13. Manousakas, M., Furger, M., Daellenbach, K.R., Canonaco, F., **Chen, G.**, Tobler, A., Rai, P., Qi, L., Tremper, A.H., Green, D., Hueglin, C., Slowik, J.G., El Haddad, I., Prevot, A.S.H., 2022. Source identification of the elemental fraction of particulate matter using size segregated, highly time-resolved data and an optimized source apportionment approach. **Atmos. Environ. X** 14, 100165. https://doi.org/10.1016/j.aeaoa.2022.100165
14. Zografou, O., Gini, M., Manousakas, M. I., **Chen, G.**, Kalogridis, A. C., Diapouli, E., Pappa, A., and Eleftheriadis, K., 2022. Combined organic and inorganic source apportionment on yearlong ToF-ACSM dataset at a suburban station in Athens, **Atmos. Meas. Tech.**, 15, 4675–4692, https://doi.org/10.5194/amt-15-4675-2022
15. Shui, T., Feng, S., **Chen, G.**, Li, A., Yuan, Z., Shui, H., Kuboki, T., Xu, C., 2017. Synthesis of sodium carboxymethyl cellulose using bleached crude cellulose fractionated from cornstalk. **Biom. Bioe.** 105, 51–58. https://doi.org/10.1016/j.biombioe.2017.06.016
16. Gramlich, Y., Siegel, K. Haslett, S. L., Cremer, R. S., Lunder, C., Kommula, S. M., Buchholz, A., Yttri, K. E., **Chen, G.,** Krejci, R., Zieger, P., Riipinen, I., Mohr, C., Impact of Biomass Burning on Arctic Aerosol Composition. **Accepted by Earth and Space Chemistry**.
17. Scales J. , Hajmohammadi H. , Priestman M. , McIlvenna L. C., de Boer I.E., Hassan H. , Tremper A.H., **Chen G.,** Wood H.E., Green D.C., Katsouyanni K., Mudway I.S., Griffiths C., Assessing the Impact of Non-exhaust Emissions on the Asthmatic Airway (IONA) Protocol for a randomised three exposure crossover study. Preprint at medRxiv. https://doi.org/10.1101/2024.01.30.24301985

## CONFERENCES

### Oral presentations: 12

### Poster presentations: 5

1. **Chen, G.** et al., Using clustering approaches to dynamically determine the number of sources of organic aerosol in PMF analyses, **European Aerosol Conference (EAC)**, Malaga, 2023 (Poster Presentation)
2. **Chen, G.** et al., Five-year PM Chemical Composition and Organic Aerosol (OA) Sources in a European Megacity, London, **EGU General Assembly**, Vienna, 2023 (Oral Presentation)
3. **Chen, G.** et al., Long-term PM Chemical Composition and Organic Aerosol (OA) Sources in European Arctic, Svalbard, **11th International Aerosol Conference (IAC)**, Athens, 2022 (Oral Presentation)
4. **Chen, G.** et al., European aerosol phenomenology − 8: Harmonised source apportionment of organic aerosol using 22 Year-long ACSM/AMS datasets, **12th Asian Aerosol Conference (AAC)**, Taipei, 2022 (Oral Presentation)
5. **Chen, G.** et al., Real-time Source Apportionment of Organic Aerosols in Three European Cities, **AGU Fall Meeting**, 2021 (Poster Presentation)
6. **Chen, G.** et al., Real-time Source Apportionment of Organic Aerosols in Three European Cities, **39th American Association for Aerosol Research (AAAR)**, Virtual. 2021 (Oral Presentation)
7. **Chen, G.** et al., Organic Aerosol Components across Europe Using 22 ACSM/AMS Yearlong Datasets and a Harmonized Source Apportionment Protocol, **39th American Association for Aerosol Research (AAAR)**, Virtual. 2021 (Oral Presentation)
8. **Chen, G.** et al., 2022. Real-time Source Apportionment of Organic Aerosols in Three European Cities, **European Aerosol Conference (EAC)**, Virtual. 2021 (Oral Presentation)
9. **Chen, G.** et al., Organic Aerosol Components across Europe Using 22 ACSM/AMS Yearlong Datasets and a Harmonized Source Apportionment Protocol, **European Aerosol Conference (EAC)**, Virtual. 2021 (Poster Presentation)
10. **Chen, G.** et al., Investigations of the Spatial and Temporal Variations in Organic Aerosols Sources within Europe Using 24 Long-term ACSM Datasets, **38th American Association for Aerosol Research (AAAR)**, Virtual. 2020 (Oral Presentation)
11. **Chen, G.** et al., **European Aerosol Conference (EAC)**, Virtual. Aachen, Germany, 2020 (Oral Presentation)
12. **Chen, G.** et al., Investigations of the Spatial and Temporal Variations in Organic Aerosols Sources within Europe Using 24 Long-term ACSM Datasets, **European Aerosol Conference (EAC)**, Virtual. Aachen, Germany, 2020 (Oral Presentation)
13. **Chen, G.** et al., European Overview for Source Apportionment of Organic Aerosol, **21st online meeting of the Task Force on Measurements and Modelling (TFMM)**. WMO, Virtual. 2020 (Oral Presentation)
14. **Chen, G.** et al., Conducting Rolling PMF Analysis Using Source Finder Professional (SoFi Pro) for Different Sources of Organic Aerosols (OA) in Europe, **European Aerosol Conference (EAC)**. Gothenburg, Sweden, 2019 (Oral Presentation)
15. **Chen, G.** et al., Method Development for Measuring Black Carbon (BC) using a Smartphone Camera, **10th International Aerosol Conference (IAC)**. St. Louis, MO, USA, 2018 (Poster Presentation)
16. **Chen, G.** et al., Developing a particulate matter (PM)-indicating smartphone app using image analysis, **36th American Association for Aerosol Research (AAAR)**. Raleigh, NC, United States, 2017 (Poster Presentation)
17. **Chen, G.** et al., Developing a particulate matter (PM)-indicating smartphone app using image analysis, **100th Canadian Chemistry Conference and Exhibition (CSC)**. Toronto, ON, Canada, 2017 (Oral Presentation)