
Activity report: Attendance to HARMO22

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Thanks to being awarded the PIANOFORTE Early Career Scientist travel grant in March, I had the opportunity to present my current PhD thesis work at the HARMO22 conference held in Pärnu, Estonia, this year. The HARMO conference is a series of international conferences focused on the harmonization of atmospheric dispersion modeling for regulatory purposes, aimed at improving the “modeling culture” both in Europe and internationally.

The HARMO22 conference had about 130 attendees who mainly presented their work through fifteen-minute presentations and a few poster presentations with visually impressive and comprehensive layouts. The conference covered 10 different topics, ranging from dispersion modeling for accidental releases and urban scale and street canyon modeling to health and exposure effects.

On the first day, I was particularly interested in the topic of model evaluation and quality assurance, where many wind tunnel and experimental validation studies were presented. On days two and three, it became evident that many attendees, including myself, use computational fluid dynamics to achieve high-resolution pollution modeling for accidents and air pollution estimation. A small but intriguing session covered the topic of AI for dispersion modeling, highlighting the potential of merging these fields and presenting very exciting science.

On the fourth and final day, I presented my work on "Refining Urban Flow and Dispersion Modelling through Airborne Lidar Reconstruction and CFD Validation with Windscanner Building Wake Measurements." The presentation went very well and sparked some valuable networking and discussions. Unfortunately, I had to leave right at the end of the conference, so some of these discussions had to move online.

My primary motivation for attending the HARMO22 conference was to connect with other dispersion modelers, as there are not many at my university, and the field is relatively small. My second motivation was to gain a better understanding of the current state of the field, which I certainly did. I am very grateful for the opportunity to receive conference support and am excited to attend the next HARMO conference, as it will be held in my home city of Hamburg.