WANTED

Master Thesis in Chemistry and Process Engineering

Analytic Review of Industry Standards for Volatile Organic Compounds

CHASE is seeking a skilled and motivated young scientist willing to work on future proof topics dealing with sustainability and circular economy. You will be part of a multi-disciplinary team and acquire first-hand information on your selected topic and beyond. We are offering positions for students with a finished BSc degree, in the field of Chemistry, Physics, Polymer- or Process Engineering, for pursuing their diploma/master thesis, on a part-time basis (10 to 20h/week), limited to 12 months, to strengthen our team at the headquarters in Linz with immediate entry.

CHASE is a European Research and Technology Organization for Chemical Systems Engineering with its headquarters in Austria. We enable companies in the chemical process industry to make their production more energy-efficient, more resource-saving and more sustainable.

This master thesis investigates the VOC emission characteristics of plastic materials across key industrial sectors food contact, automotive, pharmaceutical packaging and cosmetic packaging with a focus on establishing a systematic comparison of international performance indicators and regulatory standards. By conducting a structured literature review of established norms. This project aims to identify critical knowledge gaps in cross-sector standard harmonization and metric comparability. The comparative analysis of sector-specific parameters, such as Overall Migration Limits, TVOC thresholds, Specific Migration Limits, and Permitted Daily Exposure values, will be supported by a statistical evaluation of published measurement data enabling a benchmark of regulatory stringency, detection capabilities, and analytical methodologies across industries. The findings will contribute to a deeper understanding of how plastic derived VOC hazards are characterized and regulated and will underpin the development of more unified testing frameworks for next-generation sustainable plastic materials.

We are looking forward to hearing from you: personal@chasecenter.at
Reference number: 033
Application: until 30. November 2026

CHASE your future

You will contribute to the following tasks:

- Preparation of literature review of industries' standards of decontamination parameters.
- Evaluation of different standards of decontamination parameters, by measuring and comparing the standards.
- Statistical analysis of your results finds trends in your data.
- Improve the understanding of these standards.

Your expertise:

- Background in chromatography.
- Skills in statistics and chemometrics or are willing to learn.
- Good analytical and problem-solving skills.
- Independent and structured workflow.
- Effective communication skills in both English and German.

CHASE your career

We are committed to providing a framework for your professional growth:

- Work with industry standards and improve your analytic chemistry knowledge.
- Expanding your knowledge of polymer analytics.
- Acquisition of practical programming skills for chemists and polymer engineers to enhance their computational and data analysis capabilities.
- Work alongside academic professionals and industry partners building your expertise in polymer analytics, materials science and sustainability.
- Earn a competitive salary while making impactful contributions to innovative research. The expected monthly salary is EUR 2.658,00 on a basis of 40h/week.

For further information, please contact:
Gunnar Spiegel, Area Manager – Circular Process Streams
gunnar.spiegel@chasecenter.at

We look forward to receiving your application (cover letter, CV, academic certificates, employment references), including the reference number of the job posting, to the following email address: personal@chasecenter.at

By submitting your application documents, you expressly consent to the transmission of your application documents to the partners involved in CHASE.

Application: until 30. November 2026

www.chasecenter.at