Supplementary Information (SI) for Faraday Discussions. This journal is © The Royal Society of Chemistry 2025

## **Supplementary**

## KKT Transformation code

The in-house code is in the following link: https://github.com/olelenz/FTIR-Kramers-Kronig-Lizzi-Lenz

To use the program, it is necessary to download the referenced code and execute it in a terminal. Python version 3.8 or higher is required. Once inside the project folder, 'pip install -r requirements.txt' must be executed to install the required Python modules. The program is called with two arguments, a path to the .xlsx file containing the input data and a path to the desired output file. If the output file is not present, it will be generated. In addition to the results in the form of a text file, a subdirectory containing a plot for each input row is created.