

Session Title:

Name: KODAMA Akio

Position: Professor

Abstract title: Effective use of heat generated during FT synthesis in thermally-regenerative DAC

Abstract text (within 100 words):

For the combination of DAC and FT synthesis process, the entire process can be energy efficiently by using the reaction heat of the synthesis to drive the combined DAC. Especially, by directly extracting the vapor generated by FT synthesis and using it as a heat transfer medium, the DAC can use the heat more efficiently and FT synthesis can control its temperature. The LCA will clarify the usefulness of the use of the generated heat considering not only the temperature level and state (vapor or liquid) of the heat, but also the power consumption.