

**MODELING OF THE AMMONIA/WATER ABSORPTION
PROCESS IN A MARANGONI-TYPE ABSORPTION CELL USING
THE TWO-POINT MASS AND HEAT THEORY**

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Abstract

Recently, a two-point theory (TPT) of mass and heat transfer has been outlined (Staicovici, IJRefr. 23, pp. 153-167, IJHMT 43/22, pp. 4153-4173 and 4175-4188, IJTh.Sci. 41, pp. 737-752). The work attempts giving a true explanation of the Marangoni convection. The NH₃/H₂O (H₂O/LiBr) absorption processes occurring in a Marangoni-type cell is modelled with the TPT tools. The model is solved numerically. Results are graphically presented in a dimensionless form for different absorption parameters and cell configuration and conclusions deriving thereof are presented.