

ENTROPY PRODUCTION
BY THE DIFFUSION PROCESS
IN A PLANE-PARALLEL PORE IN THE CASE
OF SCATCHARD–HAMER SOLUTION

*D.A. Gavryushenko,
O.V. Korobko, V.M. Sysoev, K.V. Cherevko*

Taras Shevchenko National University of Kyiv,
Faculty of Physics
(4, Academician Glushkov Ave., Kyiv 01133, Ukraine;
e-mail: oksana2208@i.ua)

S u m m a r y

An expression for the entropy production in the case of facilitated diffusion in a Scatchard–Hamer binary solution has been obtained. The presence of a stabilizing effect for the entropy production with respect to the concentration gradient is shown. The entropy-driven contributions to the variation of thermodynamic potentials at the mixing are demonstrated to play the dominant role for the entropy production in the system.