

[theorem] Acknowledgement

A Note on Global Weak Solutions for Semilinear Parabolic Systems Modelling Equilibrium Reactions with Different Diffusion Coefficients of Chemical Species

Hari Mahato¹ and Michael Böhm²

¹IIT Kharagpur

²Centre for Industrial Mathematics

July 30, 2020

Abstract

In this article we show well-posedness for a relatively general semilinear parabolic system under nonhomogeneous Neumann boundary conditions and semi-linearities of (some) equilibrium reaction type. The result in here weakens previously made by Krautle and Mahato (Kra08, Kra11 and MB131, MB132, resp.) on the coefficients of the elliptic operator as well as on the boundary conditions considerably.

Hosted file

Paper1b.pdf available at <https://authorea.com/users/347549/articles/473197-a-note-on-global-weak-solutions-for-semilinear-parabolic-systems-modelling-equilibrium-reactions-with-different-diffusion-coefficients-of-chemical-species>