1035-35-641 Qi S. Zhang\*, Math. Dept., UC Riverside, Riverside, CA 92521, and J. M. Wrkich, Riverside, CA 92521. Solvability conditions for inhomogeneous reaction diffusion equations.

We establish a necessary and nearly sufficient condition on the nonlinear potential so that a model reaction diffusion equation will have a positive solution. (Received September 12, 2007)