Marian Bocea* (marian.bocea@ndsu.edu), Department of Mathematics, 300 Minard Hall,
North Dakota State University, Fargo, ND 58105. The Power-Law Asymptotics for Some Model
Problems of Polycrystal Plasticity.

The asymptotic analysis for a general class of power-law functionals acting on divergence free fields is performed by means of Γ -convergence. Some consequences are described in the settings of antiplane shear and plane stress plasticity. (Received September 09, 2007)