1077-92-773   **Necibe Tuncer*** (`necibe-tuncer@utulsa.edu`), necibe-tuncer@utulsa.edu. *Applications Of Reaction Diffusion Systems Defined On Evolving Surfaces.*

Reaction diffusion systems defined on evolving surfaces has many application in mathematical biology. Examples of such applications include tumor growth, pattern formation on seashells, butterfly wing pigmentation patterns and animal coat markings. We develop and analyze a finite element method to approximate solutions of reaction diffusion systems defined on evolving surfaces. The method we propose is based on *radially projected finite elements* (Received September 21, 2011)