Meeting: 1006, Lubbock, Texas, SS 16A, Special Session on Partial Differential Equation and Its Application in Biomedical Study

1006-92-217 **Akif Ibragimov*** (akif.ibraguimov@ttu.edu), Mathematics and Satistics, Texas Tech, Lubbock, TX 79409-1042. *Simulation and Modeling in Bilogical Systems (Problem Descussion).*

Tremendous success and current discoveries in cell biology and their biomedical impact bring a number of new topics in focus of modern applied mathematics. The conjoining of mathematical tools and fundamental understanding of biochemical phenomena for modeling stimulate development in various areas of nonlinear PDE. This includes a qualitative as well as quantitative study of the processes occurring in natural life on different scales using solid mathematical machinery.

In proposed talk we are planning to descuss a number of biological and biochemical problems, which can be effectively modeled within the framework of nonlinear PDE. (Received February 15, 2005)