1067-Z1-1073   **Kapila Rohan Attele*** (`kattele@csu.edu`), Department of Mathematics, HWH 332, Chicago State University, 9501 South King Drive, Chicago, IL 60615, **Dan Hrozencik**, IL , and **Victor Akatsa**, IL. *Introduction to Abstract Algebra Based on Computational Algebra with Applications Drawn from Biology.*

Students are introduced to real analysis based a platform of computational experience gained in calculus. There is no comparable student experience in learning introductory abstract algebra. The disconnect between students' background of calculus and linear algebra, and the concepts and practices in abstract algebra makes teaching and learning the subject a challenge.

The advent of applications of algebraic geometry and commutative algebra to biology provides a fillip to examine what should an introductory abstract algebra course be and material for a supportive sophomore course in computational algebra. The authors will present a more commutative algebra oriented curriculum for introductory abstract algebra and a prerequisite computational algebra course. (Received September 18, 2010)