Título:

Autor: **Precio:** $1524.00

Editorial: **Año:** 2009

Tema: **Edición:** 1ª

Sinopsis   **ISBN:** 9780387763552

This book treats the interaction between discrete convex geometry, commutative ring theory, algebraic K-theory, and algebraic geometry. The basic mathematical objects are lattice polytopes, rational cones, affine monoids, the algebras derived from them, and toric varieties. The book discusses several properties and invariants of these objects, such as efficient generation, unimodular triangulations and covers, basic theory of monoid rings, isomorphism problems and automorphism groups, homological properties and enumerative combinatorics. The last part is an extensive treatment of the K-theory of monoid rings, with extensions to toric varieties and their intersection theory.

This monograph has been written with a view towards graduate students and researchers who want to study the cross-connections of algebra and discrete convex geometry. While the text has been written from an algebraist's view point, also specialists in lattice polytopes and related objects will find an up-to-date discussion of affine monoids and their combinatorial structure. Though the authors do not explicitly formulate algorithms, the book takes a constructive approach wherever possible.