**Morphic rings**

Morphic rings are defined and studied. Several special classes of morphic rings with involutions.

In "Morphic modules" Nicholson introduced and studied the notion of left and right morphic module and particularly left and right morphic rings were defined. In "Morphic abelian groups" by Călugăreanu G. results about morphic abelian groups are estamblished, in "Morphic groups" by Nicholson W.K. and Zan L. morphic groups are studied and in "Morphic objects in categories" by Călugareanu G. and Pop L. the morphic objects in categories are defined and studied.

Unless otherwise stated, all rings are assumed to be associative with identity and all the homomorphisms of rings are unital. The morphic ring is defined as the morphic bimodule ${}_RR_R$.

Let $R$ and $S$ be two associative rings with identity and $M$ be an $(R,S)-$bimodule. We shall use the notation ${}_RM_S$. Denote by $Z = Z(R)$ the center of the ring $R$ and by $End_{R,S}(M)$ the set of $(R,S)-$endobimorphisms of the bimodule $M$.

If ${}_RM_S$, ${}_RN_S$ are two $(R,S)-$bimodules, the set of all morphisms of $(R,S)-$bimodules is denoted by $Hom_{R,S}(M,N)$.

The class of all $(R,S)-$bimodules together with the above $Hom$ is organised as a category where the product of morphisms is the composition of the maps. Denote this category by $R-Mod-S$. It is well-known that the category $R-Mod-S$ is a small, abelian category.

First the notion of morphic bimodule is introduced and some basic properties are gived. Next we point out suitable functors and study the behavior of the morphic objects in relation with this functors. The notion of morphic ring is also introduced and some basic properties are given.

In other sections we study rings with the involution, the actions of the group over a ring and give conditions for this ring to be morphic. We also study in what conditions some special subrings of this ring are morphic. We prove that for commutative, principal ring the notion of morphic ring is equivalent to the notion of dual ring.