CONCRETE ALGEBRAIC STRUCTURES AND CATEGORIES

László Márki

In this talk I will present three topics from the sixties and seventies pointing at a categorical approach to certain algebraic structures:

1. A characterization of the category of groups.

   (based on a paper by P. Leroux)

2. How can one distinguish between general (not necessarily associative) rings and associative or alternative rings in a categorical way?

   (based on a paper by B. Terlikowska-Oslowska)

3. Decomposition theorems for certain ring-like structures and semigroups – do they follow from a categorical 'metatheorem?

   (based on a survey paper by O. Steinfeld and R. Wiegandt)