

## Analysis in the field of providing of antimicrobe properties of exploited polyethelene based compositions

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**A**t present, as a result of scientific-technical progress, need for polymer composition materials having high exploitation indices is increasing from quantity and quality points of view. It is possible to support meeting of existing need by using polymer compositions based on exploited polymers. Therefore, influences of factors as effective use of raw matereals for meeting future requirements of the mankind, scientific-practical value of the researches and their ecological significance reveal urgency of these researches in corresponding field. As a research object the exploited LDPE has been determined, change of its structural-chemical content and indices has been revealed. Researches are carried out in the field of improvement of the compositions obtained as a result of cross-linking of functional groups formed in LDPE exploitation process with modification additives. Possibilities of availability of antimicrobe indices of the polymer compositons obtained in this process have been analyzed comparatively. Researches on the interaction nature of antimicrobe additives containing N, S and other elements with exploited LDPE, indices and also antimicrobe properties of the obtained polymer compositions are continued. Carried out researches show that during the secondary processing in modification

process cross-linking of antimicrobe additive with exploited polymer increases service period of the obtained item. It is explained that antimicrobe additive isn't extracted from parent mass due to the cross linking taking place between the components. At the same time it helps to protect environment. During polymer compositions obtaining it is necessary to consider aging level of the exploited polymer and exploitation direction of the item.

### Biography

Dr. Rahima S. Mammadova is a head of "New biological active compounds" scientific-research laboratory of Azerbaijan State Pedagogical University. Results of her investigations are such: dynamics of polyethylene samples aging in Azerbaijan's natural climatic conditions; contents of new polymer compositions; new investigation method of the functional groups of aging polymers; method for investigation of the polymer compositions content; generalize of the obtaining methods of polymer compositions. Currently, she works on the thesis of Doctor of Sciences on Chemistry and continues research on the content and properties of biologically active polymer compositions.

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