NEW MONOMERS FOR BIOSTABILIZATION OF POLYMERS

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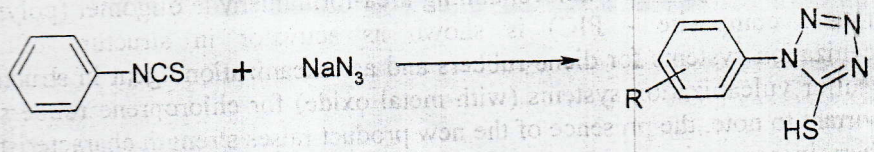
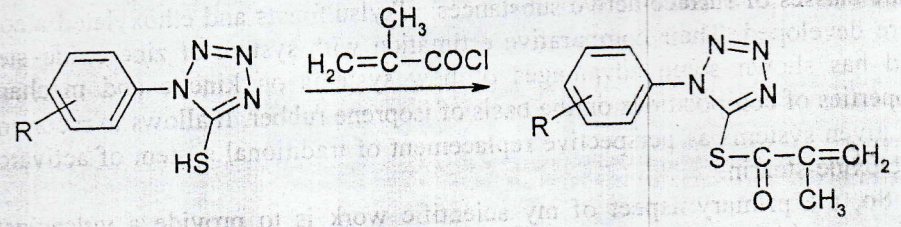
Most of plastics are lost each year due to biodestruction processes. In order to protect plastics from biodestruction it is necessary either to cover their surfaces by biocide protective films or make them «uneatable» by including in basic polymers units of monomers with biocide (fungicide etc) properties.

We studied possibilities of a synthesis of monomers and polymers based on antibacterial active 5-thiol-1-(4-R-phenyl)-tetrazoles and 5-thiol-1-(3-R-phenyl)-tetrazoles. These compounds were synthethied by condensation of Ph-NCS with NaN_3 in aqua solution:



New monomers were prepared by acylation of their –SH groups with chloroanhydrides of methacrylic acids:



Such monomers were obtained, characterized and their polymerizability was studied.