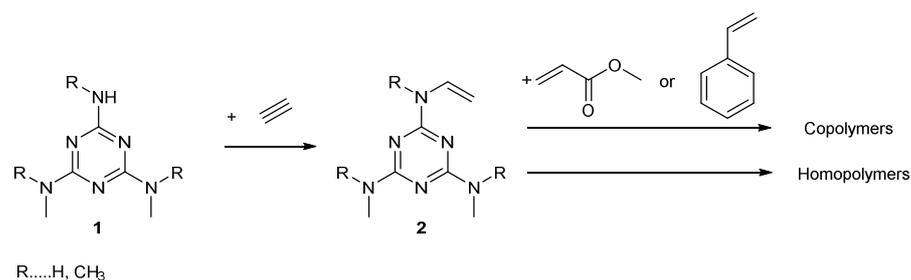


***N*-methylmelamines as precursors for new polymers**

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Methylated melamines are widely used as anti-tumor drugs, insect sterilants, and as monomers for modified melamine-formaldehyde-polymers. Methylol(methylmelamines) are metabolites of antitumor agents such as altretamine (hexamethylmelamine) and trimelamol (trimethylol(trimethylmelamine)), formed by oxidation of a methyl group and subsequent elimination of formaldehyde. *N*-vinylmelamine derivatives **2** offer a broad range of industrial applications, not only homopolymerization but also copolymerization with other monomers currently being under investigation. Our recent studies have used methylmelamines **1** as building blocks for the synthesis of functional acrylate monomers for coatings or in the synthesis of polymer additives.



In attempt to produce new melamine polymers we have prepared different functional triazine compounds for further vinylation and then polymerization with commercially available monomers, such as ethylene, styrene, or methylmethacrylate. The vinylgroup is usually attached to a free NH-group – the influence of different substituents on the nitrogen on the rate of vinylation has been investigated and found to be of great importance. At the moment copolymerization of the vinyl melamines is being done. Depending on the selected melamine derivative basic polymerization parameters have been studied and optimized.