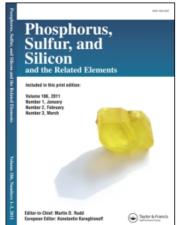
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## Thermal Treatment of a Multicomponent System Metaphosphatecoacervate-TiO,

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THERMAL TREATMENT OF A MULTICOMPONENT SYSTEM METAPHOSPHATE COACERVATE-TiO2

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In view of developing heat resistant protective coatings, we study presently metaphosphate polymeric chains in two colloidal forms (gel and coacervate). The two main advantages are:

- easier coating process
- formulation homogenety ( at room temperature) of this inorganic "paint" In this field, we study multicomponent systems containing oxides ( Zr02, Ti02, NiO...)and multivalent metal coacervates (Ca/Na, Ca/Mg, Mn/Na ...). The various steps during the heating treatment (range 25 - 1000°C) are illustred for the TiO2 coning system. Differents P205/ Ti02 ratios are selected. The influence of Ti02 addition is deermined during the synthesis of condensed phosphates. Parallel reactions occur depending on the cation associated with the starting coacervate