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## Phosphorus, Sulfur, and Silicon and the Related Elements

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### Comperative Study of Chelating Properties of Functionalized Alkanophosphonates

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# COMPERATIVE STUDY OF CHELATING PROPERTIES OF FUNCTIONALIZED ALKANOPHOSPHONATES

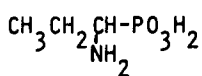
Z.H.KUDZIN<sup>a</sup>, G.ANDRIJEWSKI<sup>a</sup>, W.KOPYCKI<sup>b</sup>, A.KOTYŃSKI<sup>c</sup>

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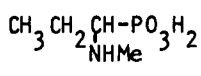
(b) Institute of Organic Chemistry, Politechnical  
 University, Żwirki 36, Łódź 90-924, Poland

(c) Institute of Chemistry, Medical Academy of Łódź,  
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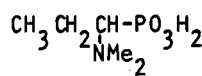
Recently we have reported on the complexing and tensiometric abilities of 1-aminoalkanephosphonic acids.<sup>1,2,3</sup> In order to characterize the influence of the auxiliary chelating function on the dissociation and chelation properties on functionalized alkanophosphonates we have synthesized compounds 1-8,



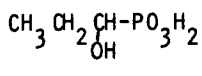
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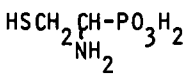
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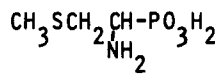
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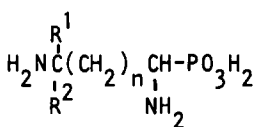
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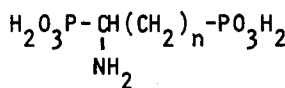
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6



7



8

for which the dissociation and chelate formation equilibria have been examined.

1. H.H.Kudzin, J.Mokrzan, R.Skovroński, Phosphorus and Sulfur, 36, (1988).
2. Z.H.Kudzin et al., Paper presented at XIII Int. Symposium on the Organic Chemistry of Sulfur, Odense, Denmark 1988.
3. Z.H.Kudzin et al., Paper presented at Polish Chemical Society Congress, 1988.