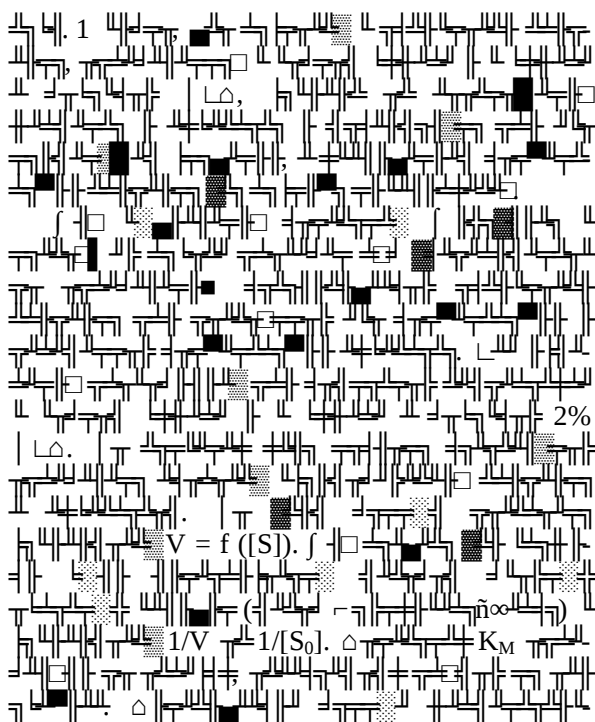
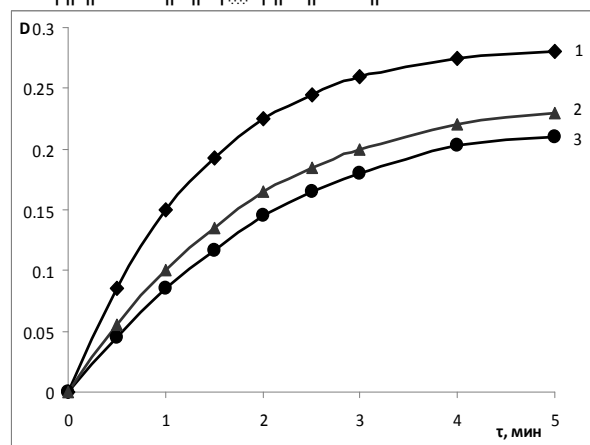


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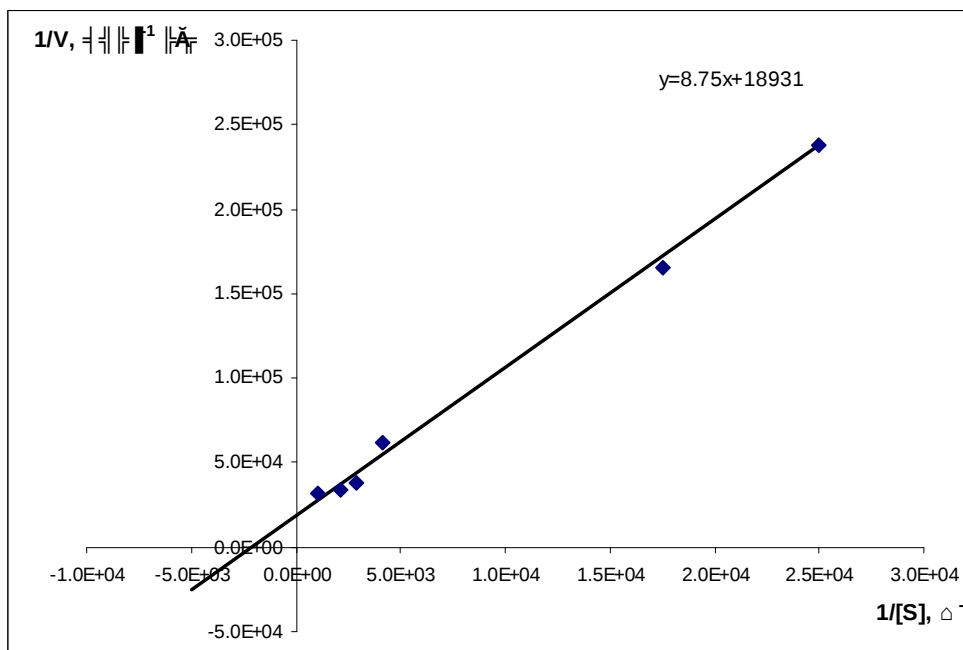
УДК 661.72.01:621.372.6.01.8, 8, 1



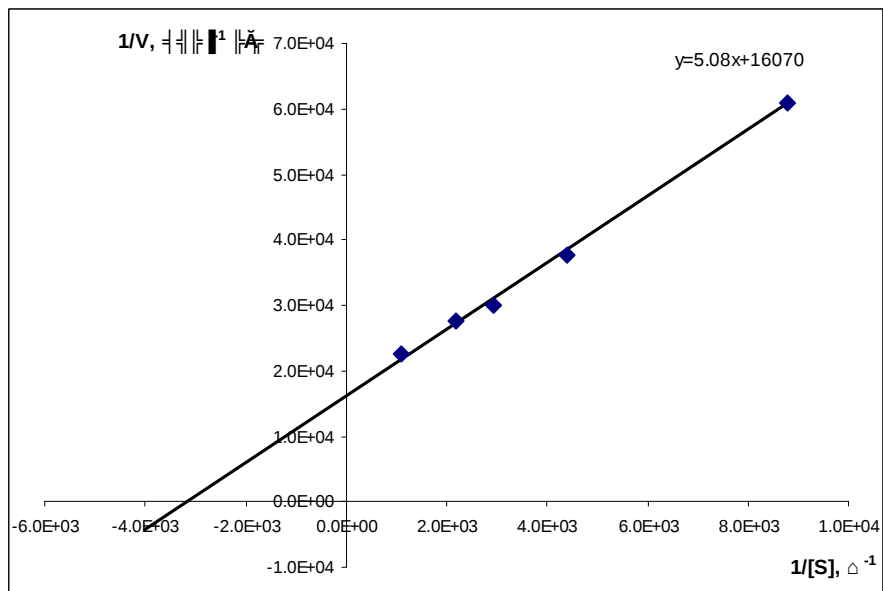
1. Δ ; 2. ∇ ; 3. $\square$
 1 $\tilde{n}$ Δ ; 2 $\tilde{n}$ ∇ ; 3 $\tilde{n}$ $\square$
 2% Δ ; 2% ∇ ; 2% $\square$
 3 $\tilde{n}$ Δ ; 3 $\tilde{n}$ ∇ ; 3 $\tilde{n}$ $\square$
 5 $\tilde{n}$ Δ ; 5 $\tilde{n}$ ∇ ; 5 $\tilde{n}$ $\square$

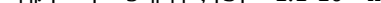
1. Δ ; 2. ∇ ; 3. $\square$
 1 $\tilde{n}$ Δ ; 2 $\tilde{n}$ ∇ ; 3 $\tilde{n}$ $\square$
 2% Δ ; 2% ∇ ; 2% $\square$
 3 $\tilde{n}$ Δ ; 3 $\tilde{n}$ ∇ ; 3 $\tilde{n}$ $\square$
 5 $\tilde{n}$ Δ ; 5 $\tilde{n}$ ∇ ; 5 $\tilde{n}$ $\square$

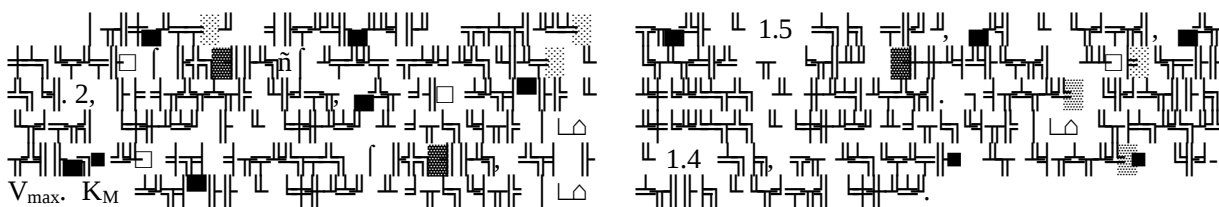
$[S], M$	$[S]/[S] \cdot 10^2$	V_1, V_2, V_3			V_2/V_1
		V_1	V_2	V_3	
8.0	6.96	0.14	0.13	0.13	0.93
4.0	3.48	0.08	0.10	0.10	1.25
2.0	2.74	0.04	0.075	0.075	1.87
0.8	0.70	0.005	0.01	0.01	2.00



2. Δ ; 3. ∇ ; 4. $\square$
 1 $\tilde{n}$ Δ ; 2 $\tilde{n}$ ∇ ; 3 $\tilde{n}$ $\square$
 2% Δ ; 2% ∇ ; 2% $\square$
 3 $\tilde{n}$ Δ ; 3 $\tilde{n}$ ∇ ; 3 $\tilde{n}$ $\square$
 5 $\tilde{n}$ Δ ; 5 $\tilde{n}$ ∇ ; 5 $\tilde{n}$ $\square$



3. Δ  BAPNA 
 Δ ,  ∞  [$\Delta = 5$; [S] = $1.1 \cdot 10^4$ ñ $9.1 \cdot 10^4$].



	K_M, M	$V_{\max} \cdot 10^{n_6}$	ΔR
0.462 ± 0.002	0.75 ± 0.002	0.9981	
0.316 ± 0.002	1.07 ± 0.002	0.9986	

[2],

,

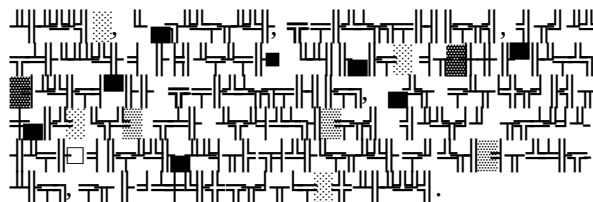
$\leq \square$

$N-$ $\hat{n}$ $(\square)$, [2]

$\Delta, \leq,$

25% ($\square$). 1),

[illegible]



1. $\Delta \vdash \dots$ 2005. 472.
2. $\Delta \vdash \dots$ 1998. 252.
3. $\Delta \vdash \dots$ 2009. σ 2. γ . 40ñ43.
4. $\Delta \vdash \dots$ 2010. $\perp$ 36. σ 6. γ . 769ñ773.
5. $\Delta \vdash \dots$ 1994. $\perp$ 20. σ 3. γ . 257ñ261.
6. $\Delta \vdash \dots$ 1998. $\perp$ 72. σ 11. γ . 1990ñ1995.
7. $\Delta \vdash \dots$ 1994. $\perp$ 20. σ 3. γ . 268ñ272.
8. $\Delta \vdash \dots$ 1987. $\perp$ $\sqrt{29}$. σ 2. γ . 211ñ222.
9. $\Delta \vdash \dots$ 1991. $\perp$ $\sqrt{33}$. σ 6. γ . 1186ñ1191.
10. $\Delta \vdash \dots$ 1982. $\perp$ $\sqrt{24}$. σ 11. γ . 2373ñ2378.
11. $\Delta \vdash \dots$ 1979. $\perp$ $\sqrt{21}$. σ 12. γ . 2734ñ2740.
12. $\Delta \vdash \dots$ 1997. $\perp$ 3. σ 2. γ . 179ñ189.

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It is known that some synthetic polymers can enhance the stability of some proteins including enzymes against thermal denaturation. An important example of such behaviour is poly-N-vinylcaprolactam (PVC), although the mechanism of this phenomenon is not fully understood. This paper deals with this problem with the system PVC trypsin as an example. PVC is a polymer, which has lower critical solution temperature (LCST) in aqueous solution. It is shown that the rate of enzymatic hydrolysis of a substrate α benzoyl arginine α n-nitroanilide (BAPNA) with trypsin in aqueous solutions of PVC at 25°C is higher than that in the buffer solution. It is supposed that this effect is a consequence of the complex formation of trypsin with PVC affecting the conformation of the protein and binding of the substrate. The complexation brings about a decrease of the Michaelis constant and an increase of the rate of the biocatalyst interaction with the substrate. It is found that the activity of trypsin depends on the ratio of the enzyme to the substrate. The complexation of trypsin to poly-N-vinylcaprolactam can have influence on the enzymatic activity of the protein at temperatures above LCST, as well as on trypsin trapping in the precipitating polymer. It is noted that, when one determines the enzyme activity by spectral methods, it is necessary to take into account the possibility of complex formation of the polymer with another substance in the reaction system, which can cause errors.

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