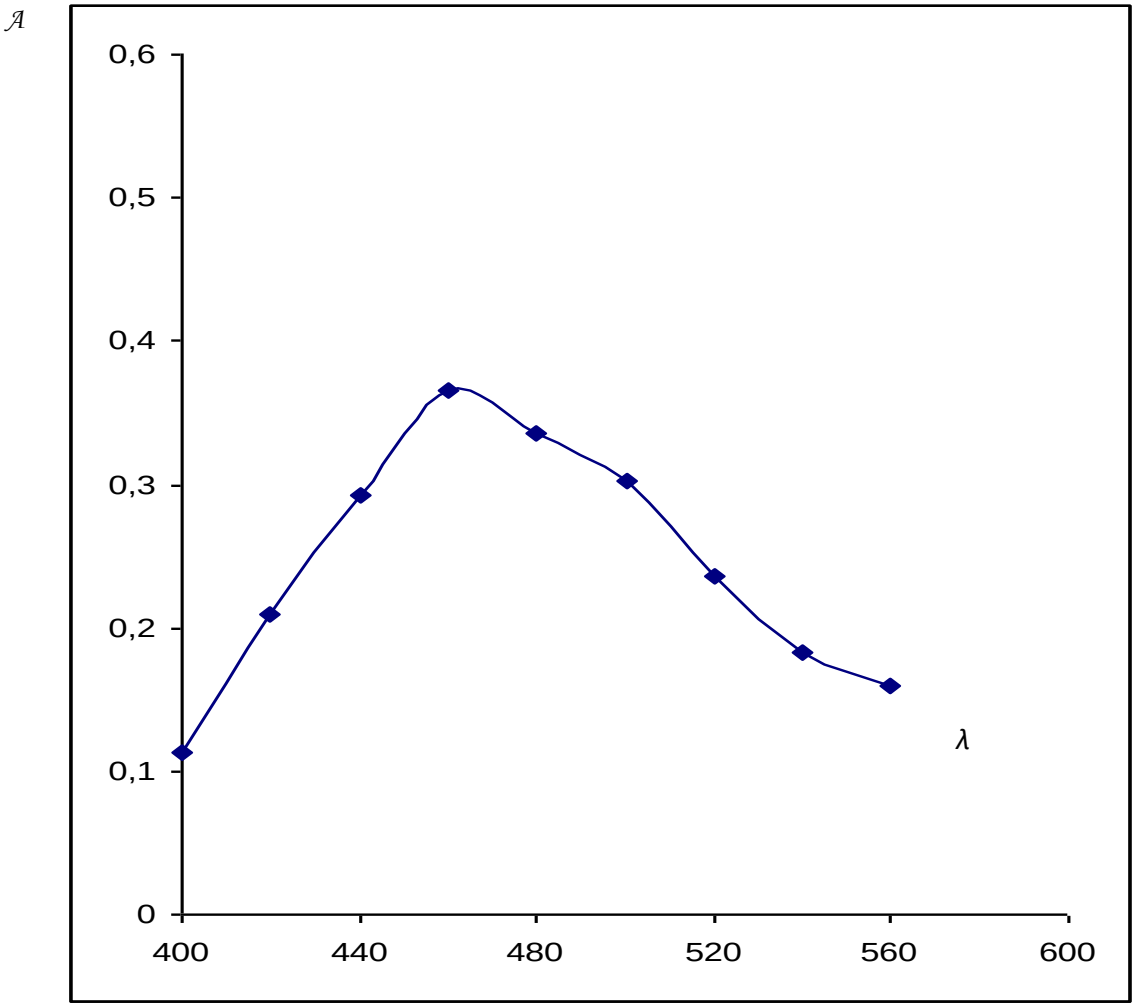

Fig 1S. The absorption spectrum of the reaction solution initial composition*:* $0.18\ M\ \ H_2SO_4$*;* $1.20\cdot10^{-4}\ M\ \ HOIO$*;* $4.48\cdot10^{-4}\ M\ \ KIO_3$*;* $T = 298\ K$.

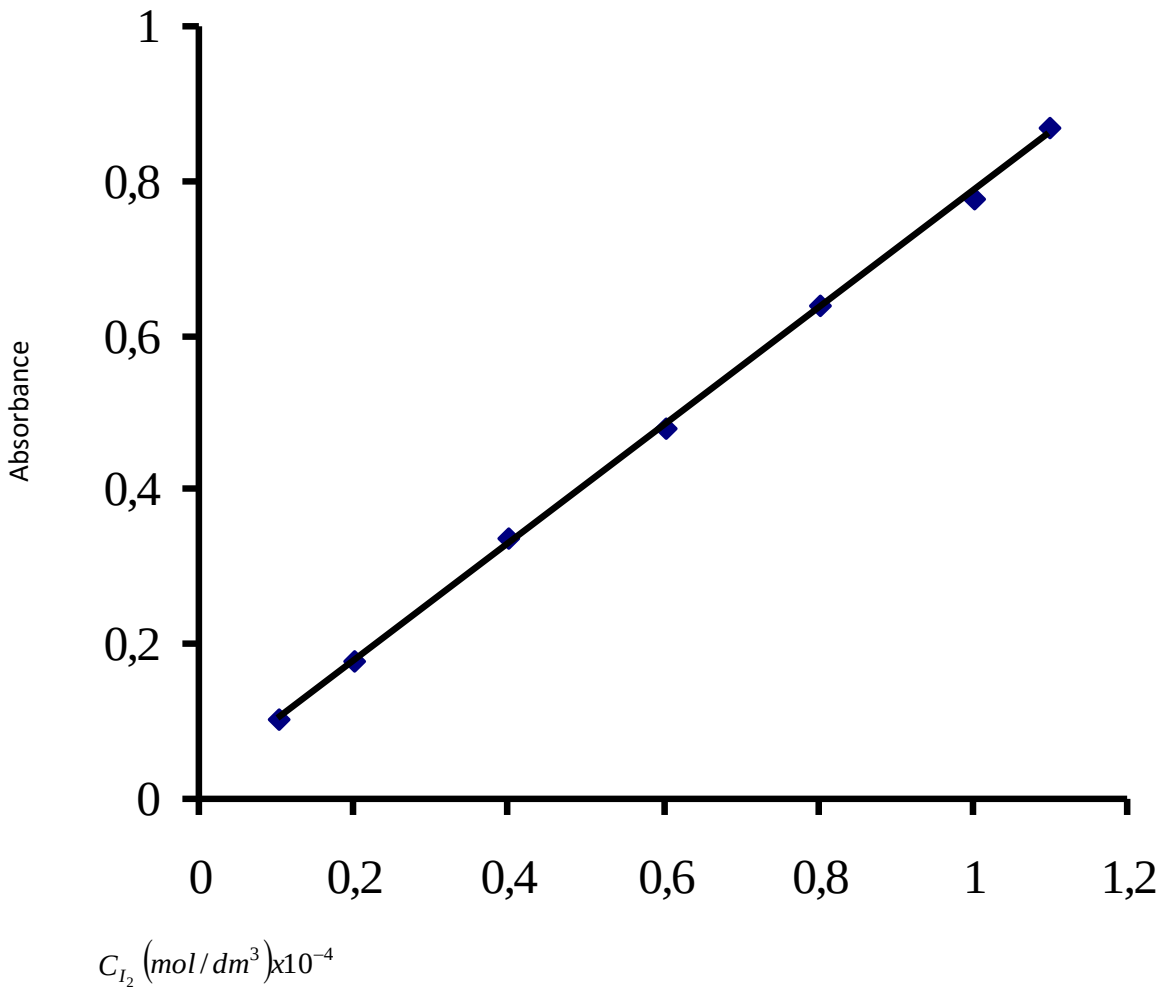

Fig 2S. The calibration diagram A = $f(c)$ for determining the value of the molar absorption coefficient I_2.

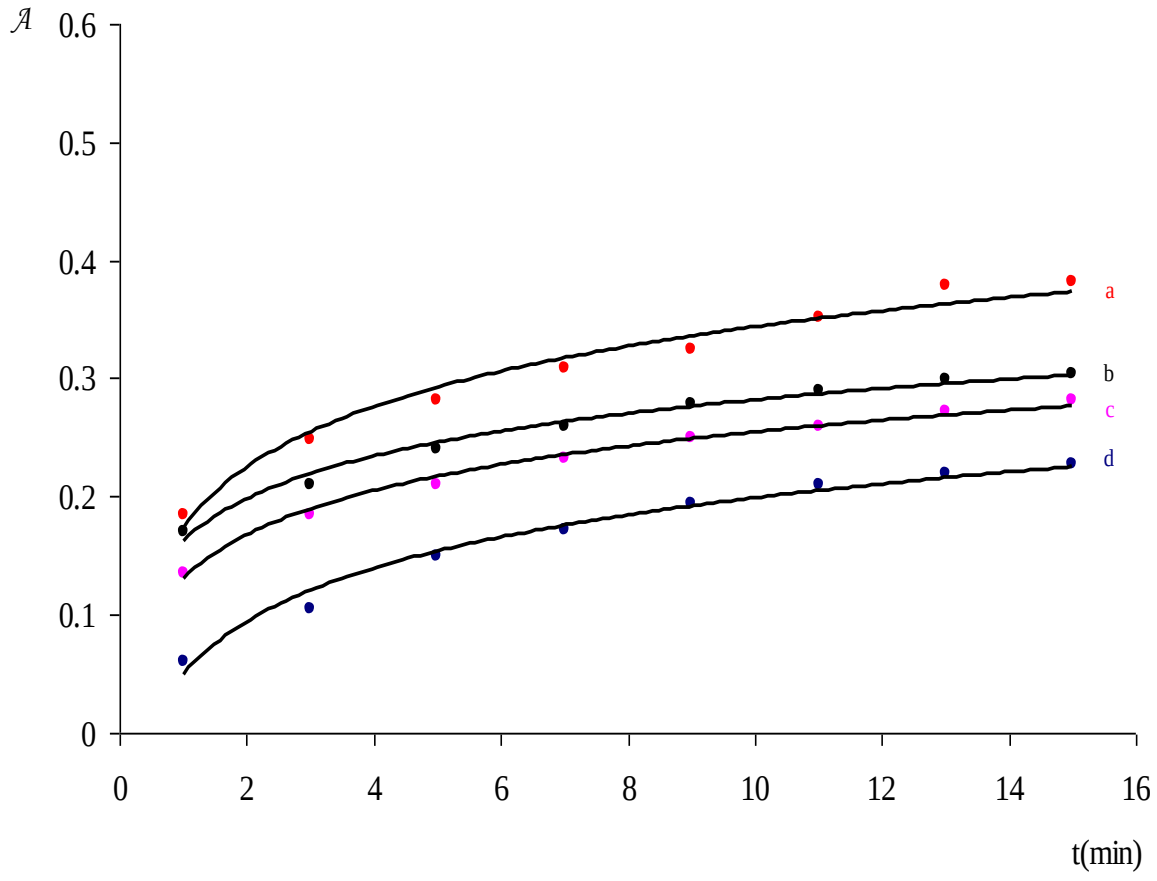

Fig 3S. The experimentally obtained depending $A = f(t)$ on the difference temperature: *a)* $T = 303\ K$, $[HOIO] = 1.00x10^{-4}\ M$, $[IO_3^-] = 3.23x10^{-4}$ *b)* $T = 298\ K$, $[HOIO] = 1.00x10^{-4}\ M$, $[IO_3^-] = 3.23x10^{-4}\ M$ *c)* $T = 291\ K$, $[HOIO] = 1.30x10^{-4}\ M$, $[IO_3^-] = 3.23x10^{-4}\ M$ *d)* $T = 285\ K$, $[HOIO] = 1.00x10^{-4}\ M$, $[IO_3^-] = 3.23x10^{-4}\ M$.

Circles are denoted experimental points and the solid line denoted the curve obtained by numerical simulation.