Comments:

1. Table with the given data points, also, temperature is converted into Kelvins.

2. Analysis of the suggested dependence: using natural logarithms and changing the variables, we organize our data points in such a way that the dependence is linear.

3. Create calculation table: find X, X^2, Y, XY, and the sums.

4. Starting from the general form of the system to find the LSM coefficients, we form a system with proper coefficients (our sums).

5. Solve the system using the matrix method: unknown matrix-column $\boldsymbol{X}$ is determined as a product of the inverse matrix $\boldsymbol{A^{-1}}$ and column-matrix $\boldsymbol{B}$ of the free coefficients: $\boldsymbol{X = A^{-1} \cdot B}$.

6. Find out how one can find inverse matrix and product of the matrices in Excel using the built-in functions MINVERSE and MMULT.

7. Round off the coefficients found according to the number of meaningful digits given for the data points.

8. Find physical quantities - activation energy $\boldsymbol{W_a}$, constant $\boldsymbol{A}$ from the coefficients $\boldsymbol{a, b}$.

9. Form ***Y-fit*** column using the coefficients $\boldsymbol{a, b}$.

10. Plot linear dependence $\boldsymbol{Y = ax+b}$. Also, you can add a trend line and see if Excel can find the same coefficients for you automatically.

11. Form ***R-fit*** column using the physical quantities - activation energy $\boldsymbol{W_a}$, constant $\boldsymbol{A}$.

12. Plot exponential dependence $\boldsymbol{R = f(T) = A \cdot exp(W_a/(kT))}$

13. Find variance and standard deviation. Learn about these statistical quantities.