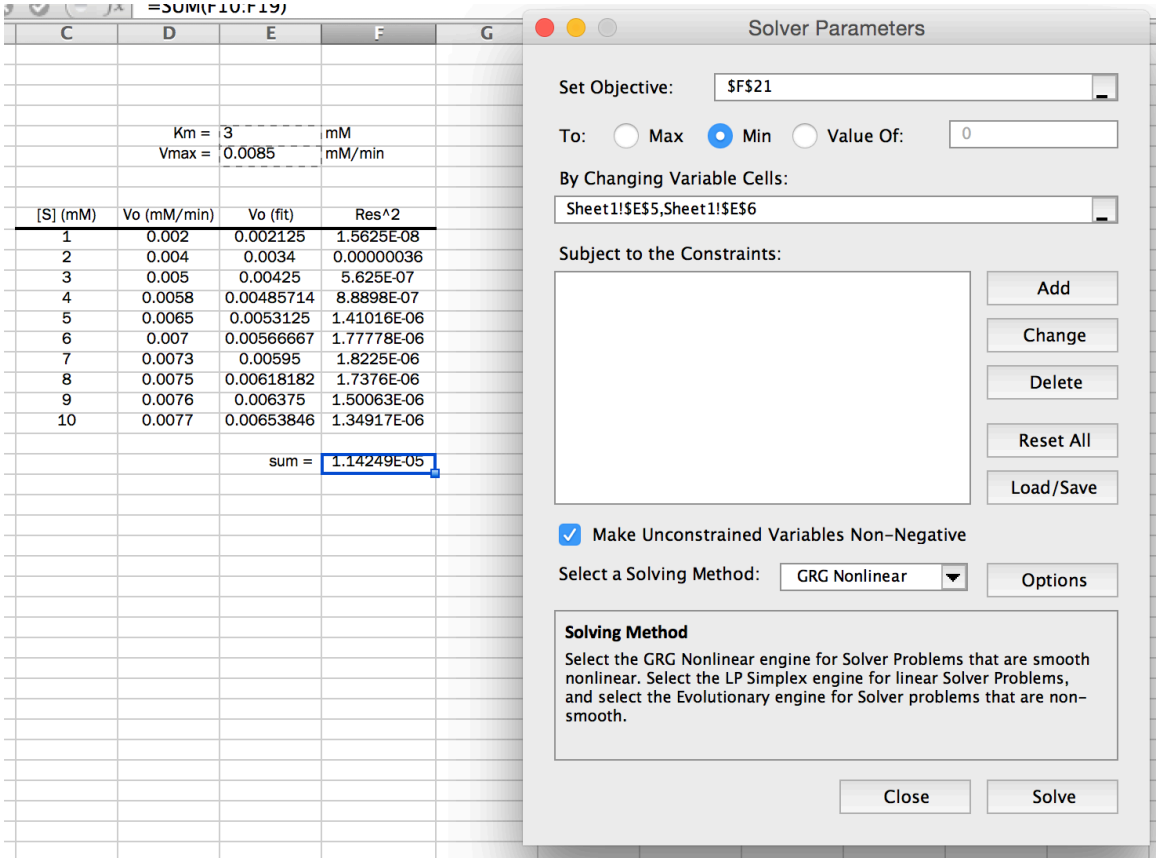
Using least-squares curve-fitting in Excel

1. Input [S] and Vo data
2. Make initial guesses for Vmax and Km values in separate cells
3. Create a 'fit' column for Vo data using the [S] data and the guesses at Km and Vmax
4. Create a 'residuals squared' column in which the difference between Vo and Vo-fit is squared. Make sure to use cell references and that the Km and Vmax cells are fixed using dollar signs.
5. Sum the residuals.
6. With the sum cell selected, start Solver from the Tools menu (you might need to install it from the 'Add-Ins' option.
7. Solve for the minimum value of your summed residuals by allowing Excel to change the cells for Km and Vmax (see screenshot below).
8. The second screenshot shows the result and a plot with both the Vo and Vo-fit data.



	Km =	3.41981364	mM
	Vmax =	0.01067356	mM/min

[S] (mM)	Vo (mM/min)	Vo (fit)	Res^2
1	0.002	0.00241493	1.7217E-07
2	0.004	0.00393872	3.75545E-09
3	0.005	0.00498779	1.49099E-10
4	0.0058	0.00575408	2.10819E-09
5	0.0065	0.00633836	2.6128E-08
6	0.007	0.00679858	4.057E-08
7	0.0073	0.00717047	1.67791E-08
8	0.0075	0.00747722	5.18861E-10
9	0.0076	0.00773458	1.81116E-08
10	0.0077	0.00795358	6.43041E-08
		sum =	3.44595E-07