



Supplementary Materials

Optimization and a Kinetic Study on the Acidic Hydrolysis of Dialkyl α -Hydroxybenzylphosphonates

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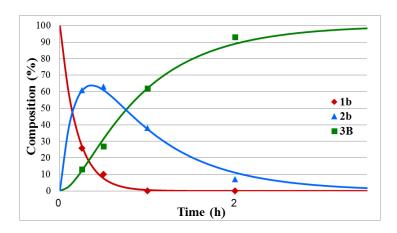


Figure S1. Concentration profile for the components during the hydrolysis of dimethyl α -hydroxy-4-nitrobenzylphosphonate (**1b**) under optimum conditions. The R² measure of goodness of fit is 0.989.

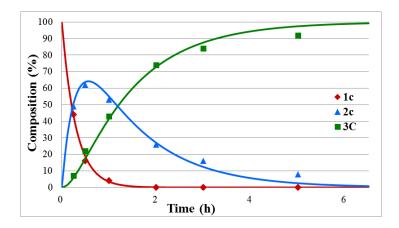


Figure S2. Concentration profile for the components during the hydrolysis of dimethyl α -hydroxy-4-chlorobenzylphosphonate (**1c**) under optimum conditions. The R² measure of goodness of fit is 0.987.





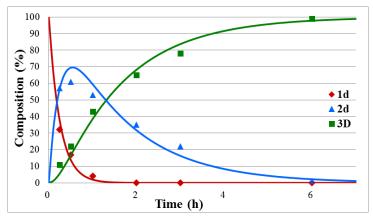


Figure S3. Concentration profile for the components during the hydrolysis of dimethyl α -hydroxy-4-fluorobenzylphosphonate (**1d**) under optimum conditions. The R² measure of goodness of fit is 0.965.

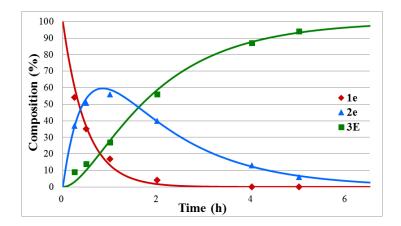


Figure S4. Concentration profile for the components during the hydrolysis of dimethyl α -hydroxy-4-trifluoromethylbenzylphosphonate (**1e**) under optimum conditions. The R² measure of goodness of fit is 0.988.

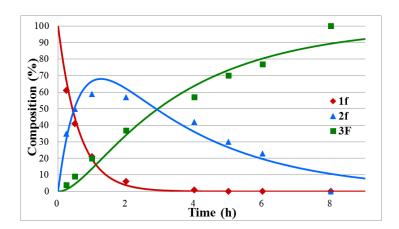


Figure S5. Concentration profile for the components during the hydrolysis of dimethyl α -hydroxy-4-methylbenzylphosphonate (**1f**) under optimum conditions. The R² measure of goodness of fit is 0.962.





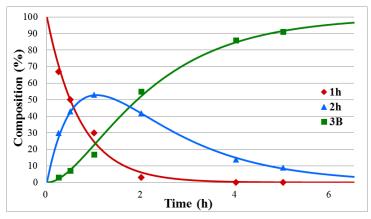


Figure S6. Concentration profile for the components during the hydrolysis of diethyl α -hydroxy-4-nitrobenzylphosphonate (**1h**) under optimum conditions. The R² measure of goodness of fit is 0.992.

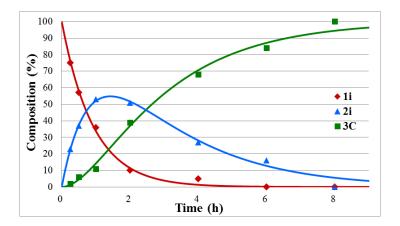


Figure S7. Concentration profile for the components during the hydrolysis of diethyl α -hydroxy-4-chlorobenzylphosphonate (**1i**) under optimum conditions. The R² measure of goodness of fit is 0.992.

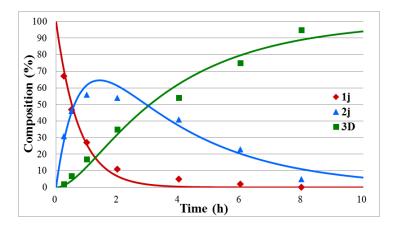


Figure S8. Concentration profile for the components during the hydrolysis of diethyl α -hydroxy-4-fluorobenzylphosphonate (**1j**) under optimum conditions. The R² measure of goodness of fit is 0.970.





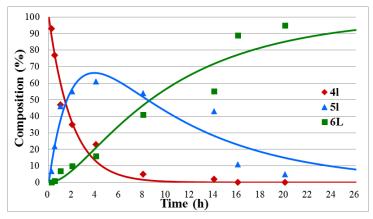


Figure S9. Concentration profile for the components during the hydrolysis of diethyl α -phenylethylphosphonate (41) under optimum conditions. The R² measure of goodness of fit is 0.940.

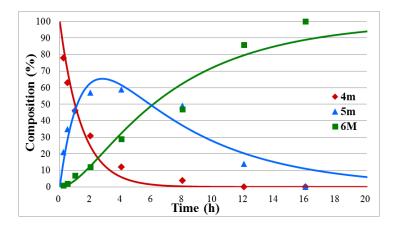


Figure S10. Concentration profile for the components during the hydrolysis of diethyl β-phenylethylphosphonate (**4m**) under optimum conditions. The R^2 measure of goodness of fit is 0.949.