

Kinetic simulation results with the final detailed model for n-heptane developed in this work

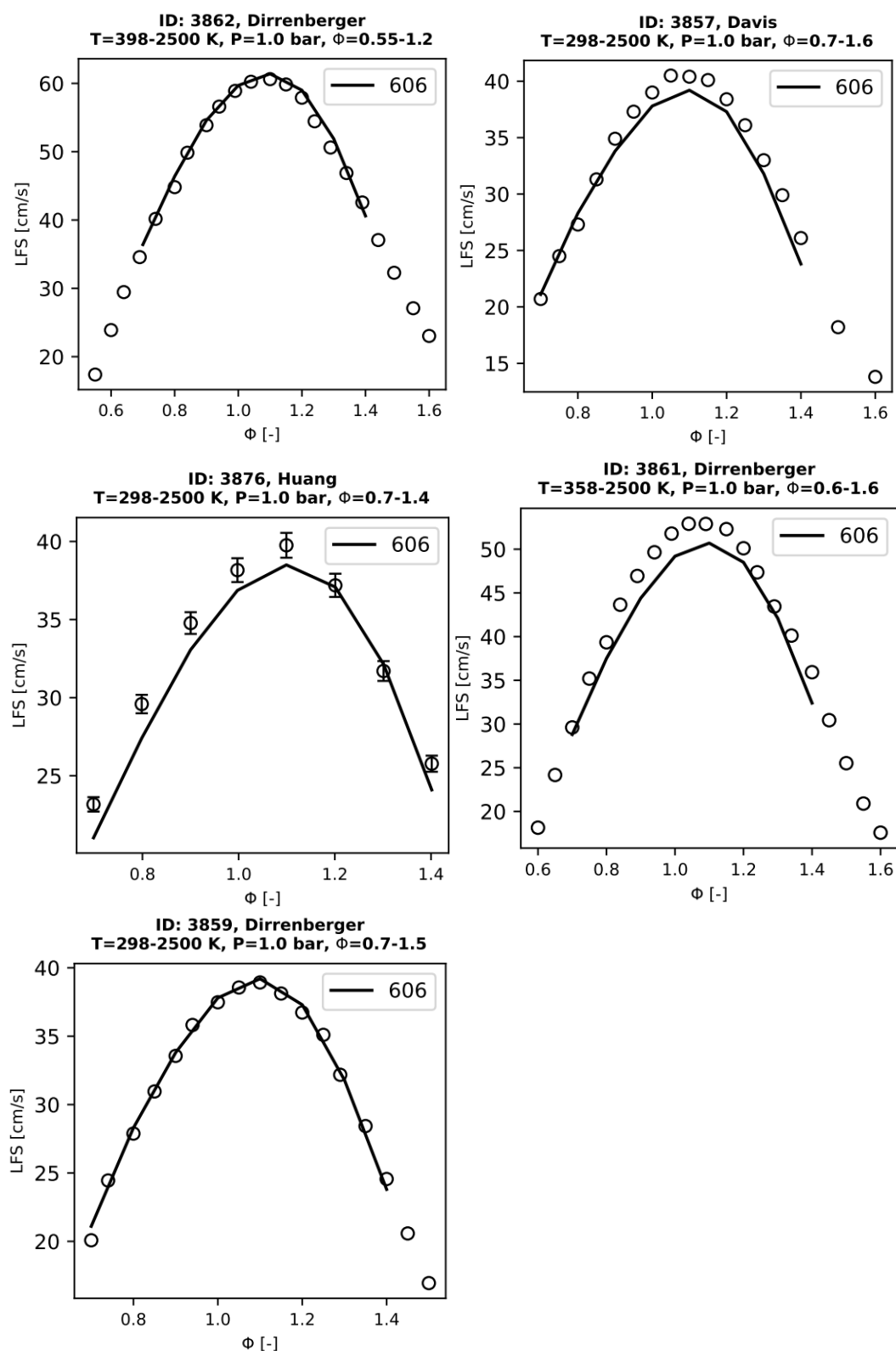


Figure S1: Simulated (solid line) and experimental (empty symbols, from [1,2]) laminar burning velocities of n-heptane measured at different operating conditions (see plot titles for details).

ID: 3868, Xie
T=500-800 K, P=1.027 bar, $\Phi=0.5$

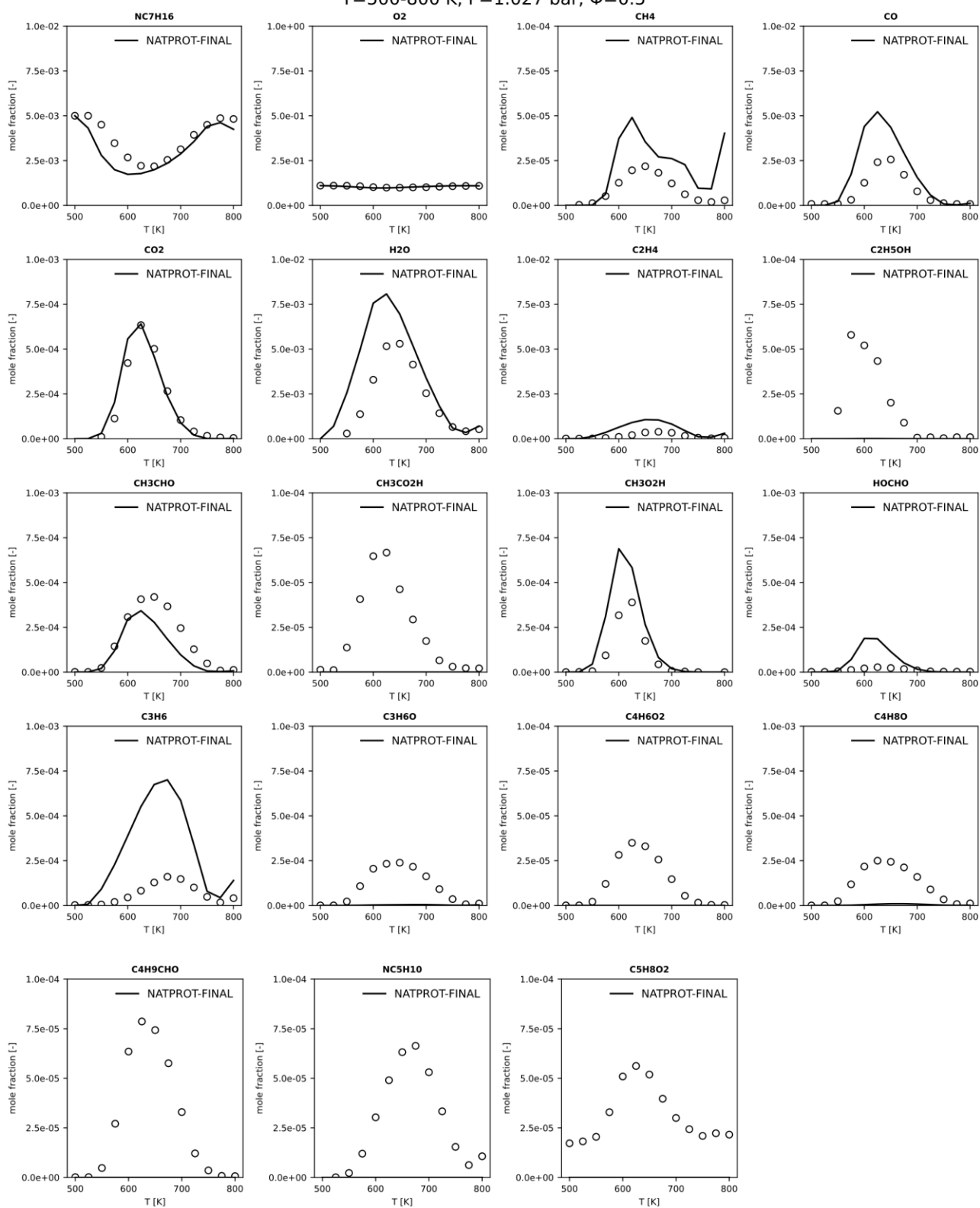
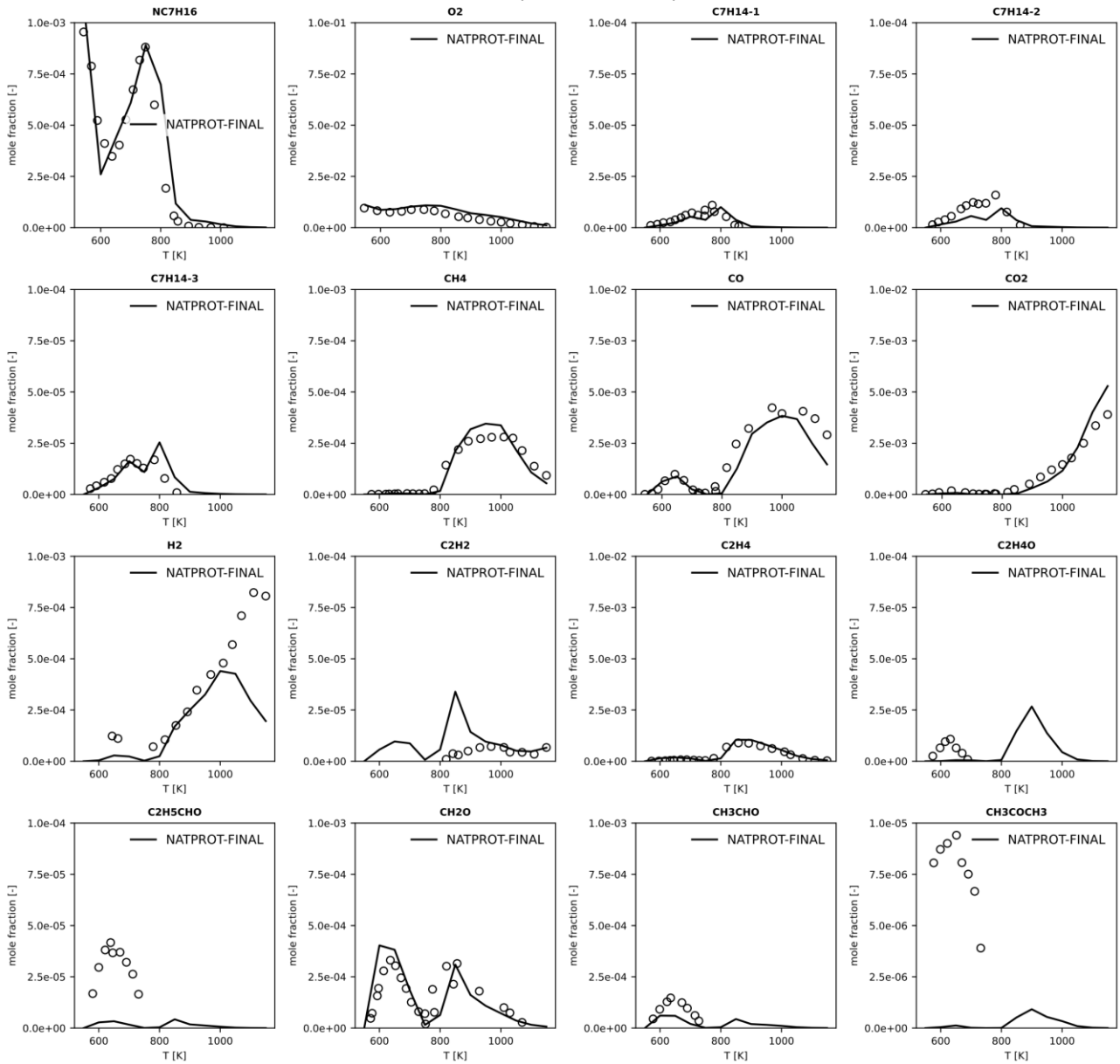


Figure S2: Simulated (solid line) and experimental (empty symbols) speciation profiles in the JSR experiments of *n*-heptane oxidation of Xie et al. [3]. Detailed experimental conditions are reported in the figure title.

ID: 3877, Dagaut
T=543-1150 K, P=10.133 bar, $\Phi=1.0$



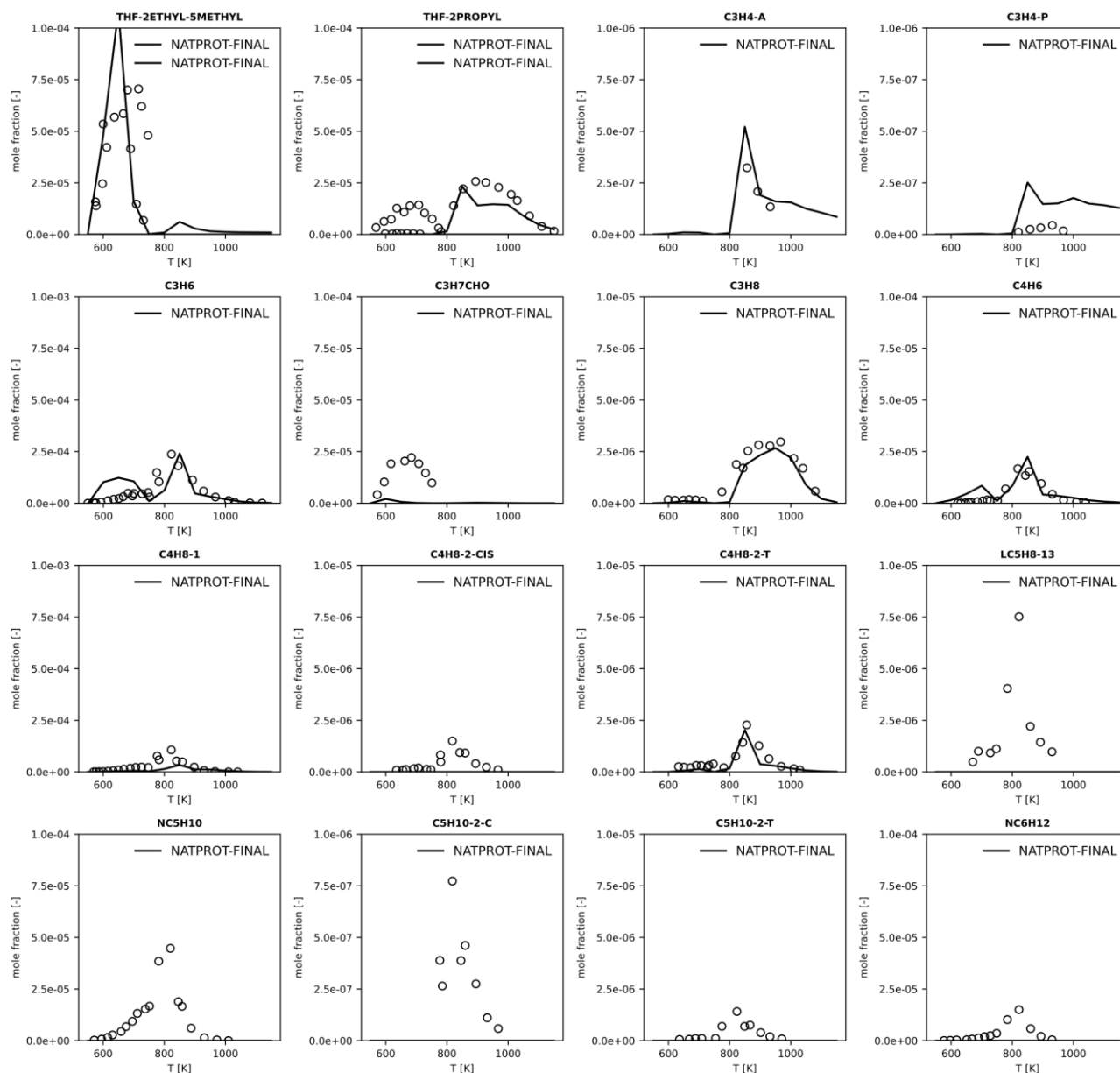


Figure S3: Simulated (solid line) and experimental (empty symbols) speciation profiles in the JSR experiments of *n*-heptane oxidation of Dagaut et al.[4]. Detailed experimental conditions are reported in the figure title.

ID: 3878, Dagaut
T=549-851 K, P=10.133 bar, $\Phi=1.0$

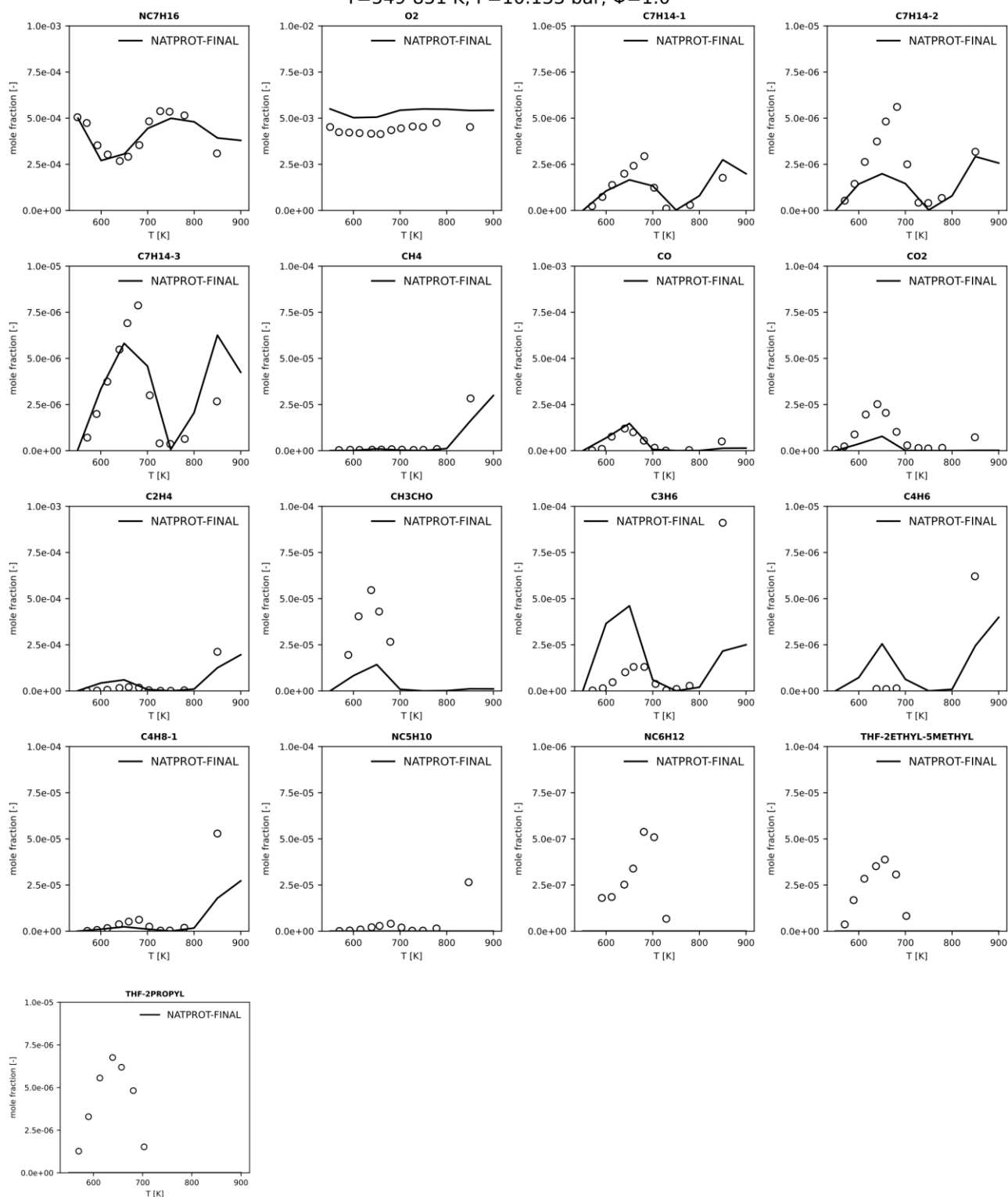
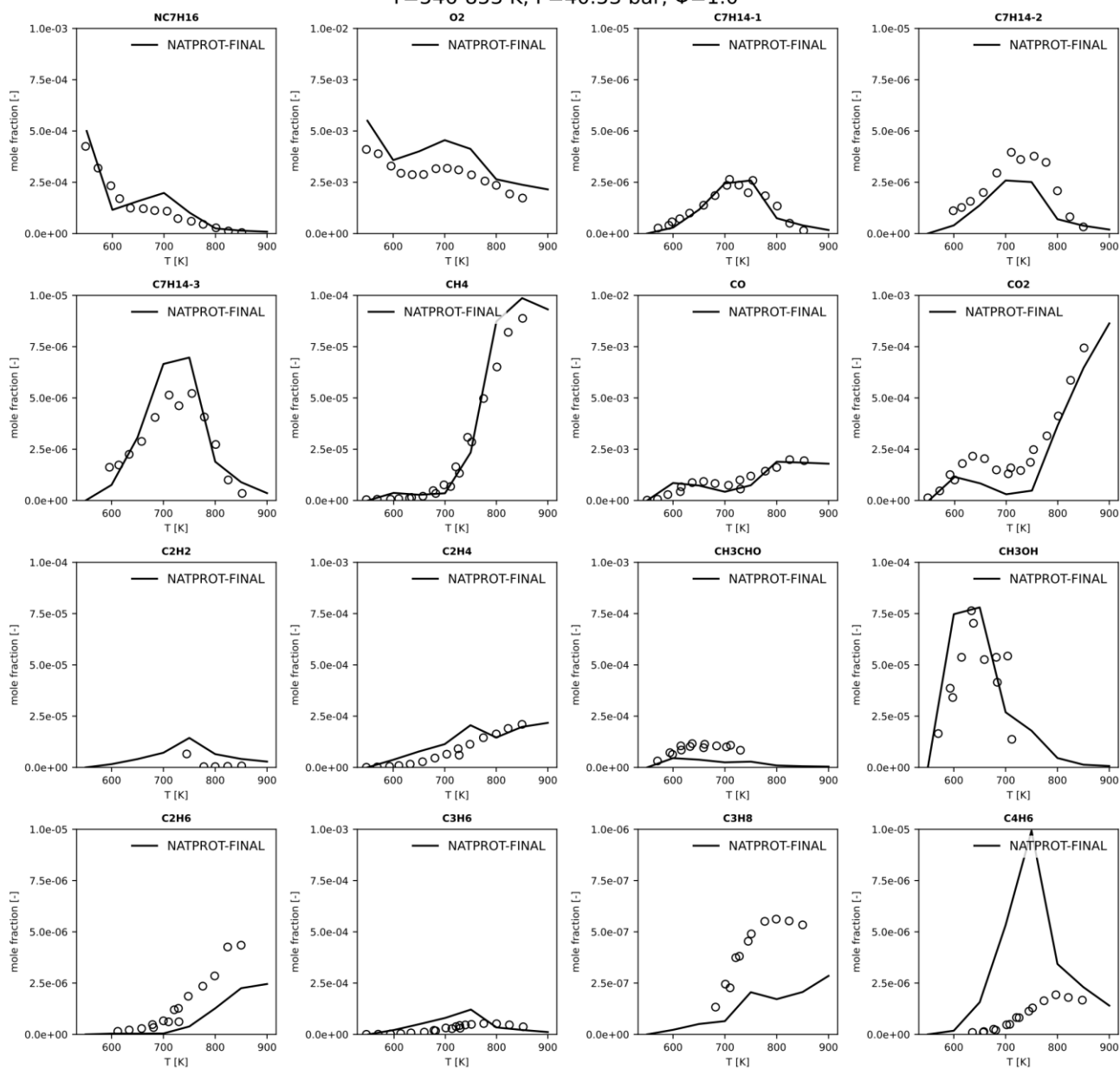


Figure S4: Simulated (solid line) and experimental (empty symbols) speciation profiles in the JSR experiments of *n*-heptane oxidation of Dagaut et al. [4]. Detailed experimental conditions are reported in the figure title.

ID: 3879, Dagaut
T=546-853 K, P=40.53 bar, $\Phi=1.0$



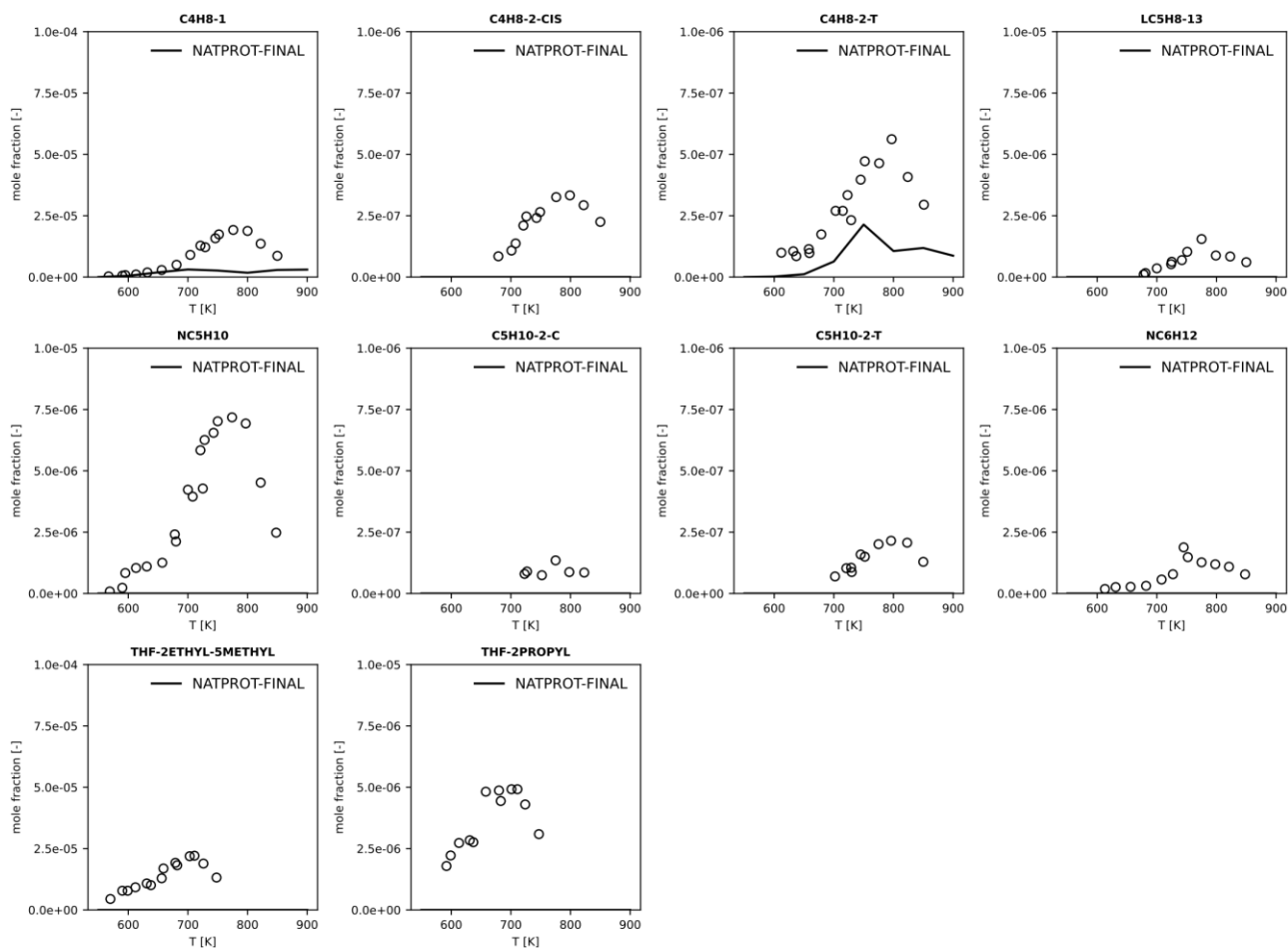


Figure S5: Simulated (solid line) and experimental (empty symbols) speciation profiles in the JSR experiments of *n*-heptane oxidation of Dagaut et al. [4]. Detailed experimental conditions are reported in the figure title.

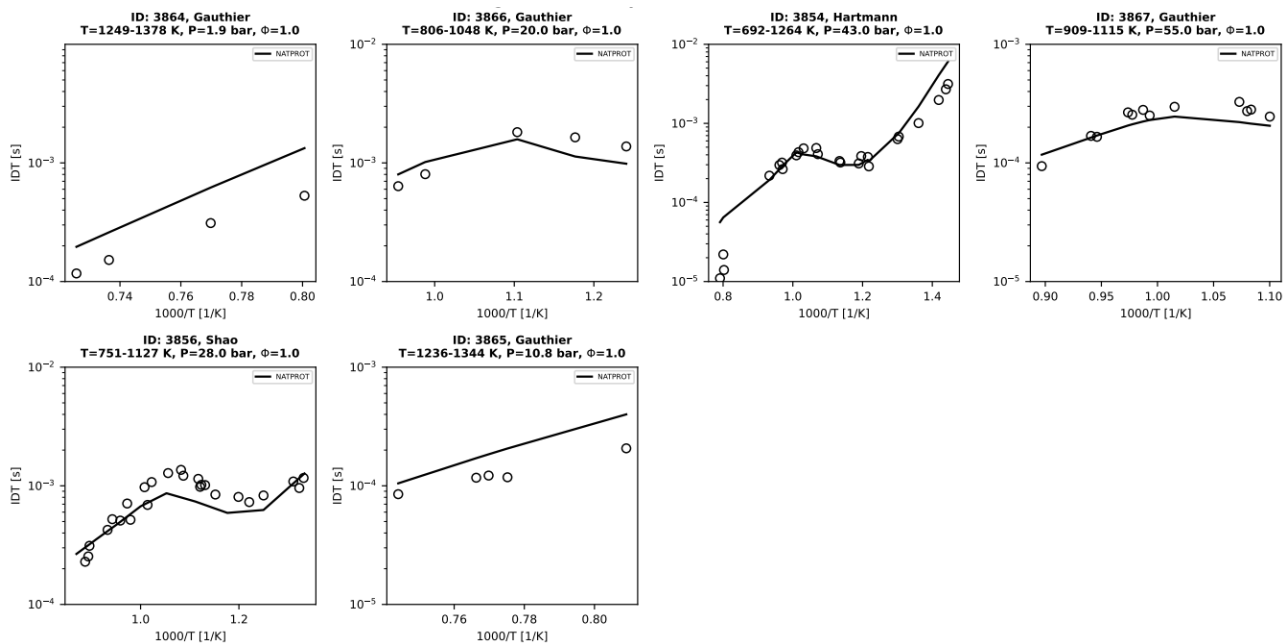


Figure S6: Simulated (solid line) and experimental (empty symbols [5–7]) ignition delay times for *n*-heptane oxidation. Experimental conditions and the corresponding references are reported in the title of each plot.

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- [5] B.M. Gauthier, D.F. Davidson, R.K. Hanson, Shock tube determination of ignition delay times in full-blend and surrogate fuel mixtures, *Combust. Flame*. 139 (2004) 300–311. <https://doi.org/10.1016/J.COMBUSTFLAME.2004.08.015>.
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