

## Kinetics05\_OSS

Kinetics05\_OSS uses a variety of linear and nonlinear regression methods, depending on the model to be fitted. Isoconversional methods use linear regression, supplemented by empirical correlations between model parameters and reaction profile characteristics. Distributed activation energy and nucleation-growth models use nonlinear regression, with the exception of the discrete distribution model, which uses a nested constrained linear-nonlinear regression method.

### References

1. Braun, R.L. and Burnham, A.K.(1999) , <https://doi.org/10.1021/ef9800765>, Energy & Fuels, 13, 1-22
2. Burnham, A.K.(2000) , <https://doi.org/10.1023/a:1010163809501>, Journal of Thermal Analysis and Calorimetry, 60, 895-908
3. Burnham, A.K.(2000) , [https://doi.org/10.1016/S0040-6031\(00\)00446-9](https://doi.org/10.1016/S0040-6031(00)00446-9), Thermochimica Acta, 335, 165-170
4. Burnham, A.K., Weese, R.K., and Weeks, B.L.(2004) , <https://doi.org/10.1021/jp0483167>, The Journal of Physical Chemistry B, 108, 19432-19441
5. Burnham, A.K. and Weese, R.K.(2005) , <https://doi.org/10.1016/j.tca.2004.07.009>, Thermochimica Acta, 426, 85-92
6. Burnham, A.K.(2005) , <https://doi.org/10.1016/j.cej.2004.12.037>, Chemical Engineering Journal, 108, 47-50

### Category

Software

### Authors

Robert L. Braun  
Alan K. Burnham

### Learn more

