## STATSTICAL CHEMICAL **ANALYSIS METHODS**



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IN THE SCAMS@BRISTOL GROUP, WE ARE INTERESTED IN USING DATA-DRIVEN METHODOLOGIES TO IMPROVE ANALYSIS AND INCREASE AUTOMATION IN THE CHEMICAL SCIENCES.

THE MEASUREMENT PROCESS IS A NOISY CHANNEL; INFORMATION IS LOST. THE ROLE OF ANALYSIS IS TO TRY AND RECONSTRUCT THE PHYSICAL OBSERVABLE.

1.0

 $(D^*|MGD)$ 

0.9

BAYESIAN

128

DOI: 10.48550/ARXIV:/2305.18244 & 10.21105/J066.05984

1.1

BETTER AND MORE AUTOMATED ANALYSES CAN FACILITATE RATIONAL DESIGN OF CHEMICALS AND MATERIALS, LEVERAGING ARTIFICIAL INTELLIGENCE.



...TOWARDS DATA STANDARDS AND NEW ANALYSIS METHODS;...



...INCLUDING USING ATOMISTIC SIMULATION TO UNDERSTAND EXPERIMENTS.

DOI: 10.1039/C9CP00203K, 10.1088/2399-6528/ AB12A9, 10.1088/2632-2153/AB94C4 & 10.1107/ 61600576722011426



pip install kinisi

DOI: 10.21105/JOSE.00019, 10.1107/ S1600576719004333, 10.1021/ACS.JCHEMED.3C00466 & 10.26434/CHEMRXIV-2024-C61XT

## WE WANT TO USE DATA-DRIVEN APPROACHES TO OPTIMISE SYNTHESIS AND FORMULATION.

64

TIME/S

SYNTHETIC YIELD

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WE LOVE TO CONTRIBUTE TO OPEN SOURCE SOFTWARE PACKAGES

RECENTLY, WE HAVE DEVELOPED AN INTEREST IN QUANTIFYING COLLECTIVE MOTION ....

