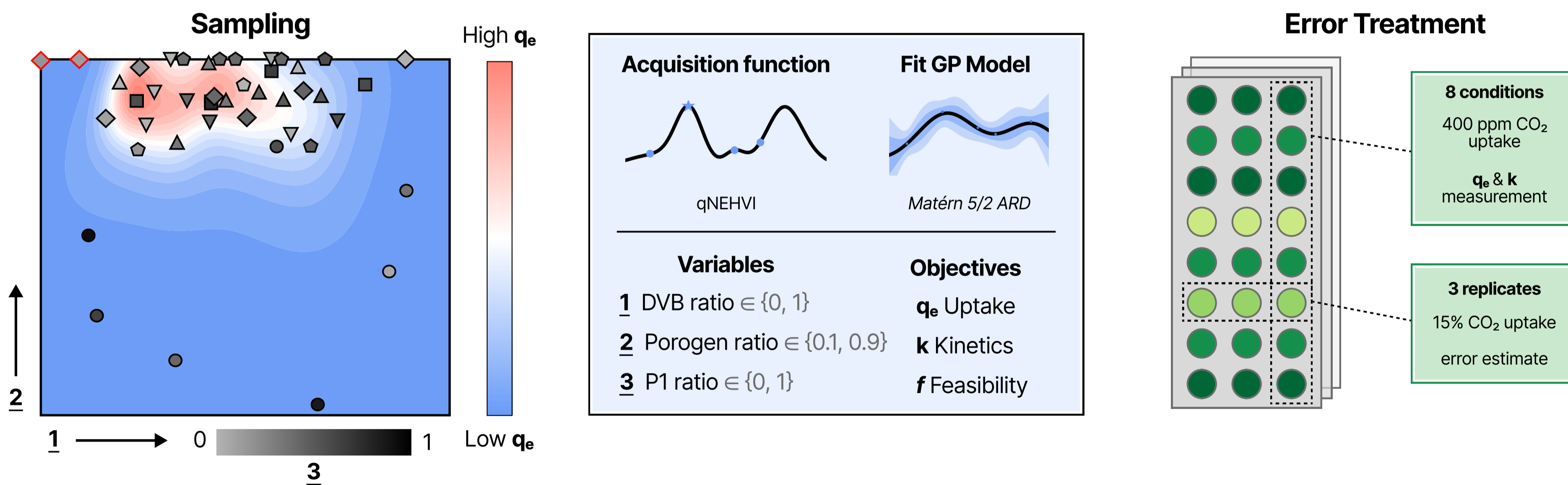
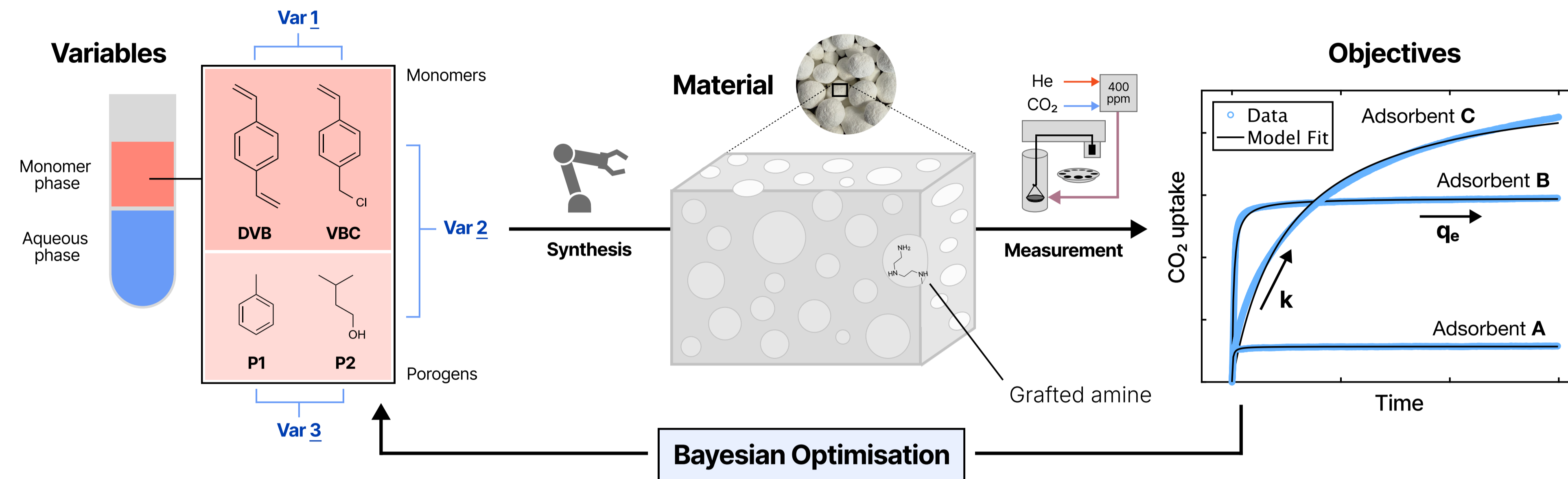


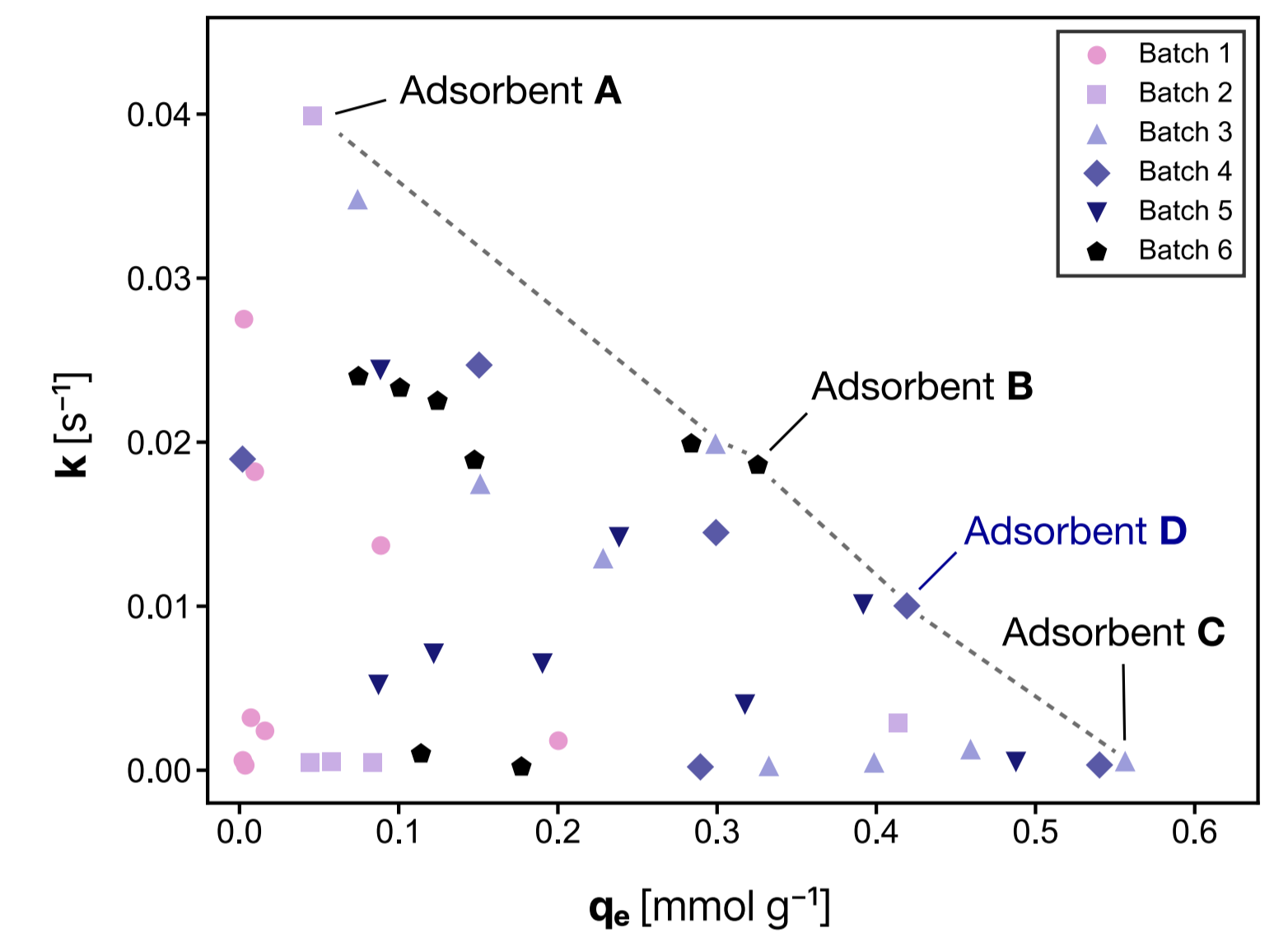
## Accelerated Design of Porous Polymers for DAC via Bayesian Optimization and Automated High-Throughput Experimentation

Tristan L. Spreng<sup>1</sup>, Paul Schweng<sup>2</sup>,  
David Danaci<sup>1,3,4</sup>, Ronny Pini<sup>1,3</sup>,  
Camille Petit<sup>1</sup>

### Approach – Automated high-throughput synthesis & testing + Bayesian optimization

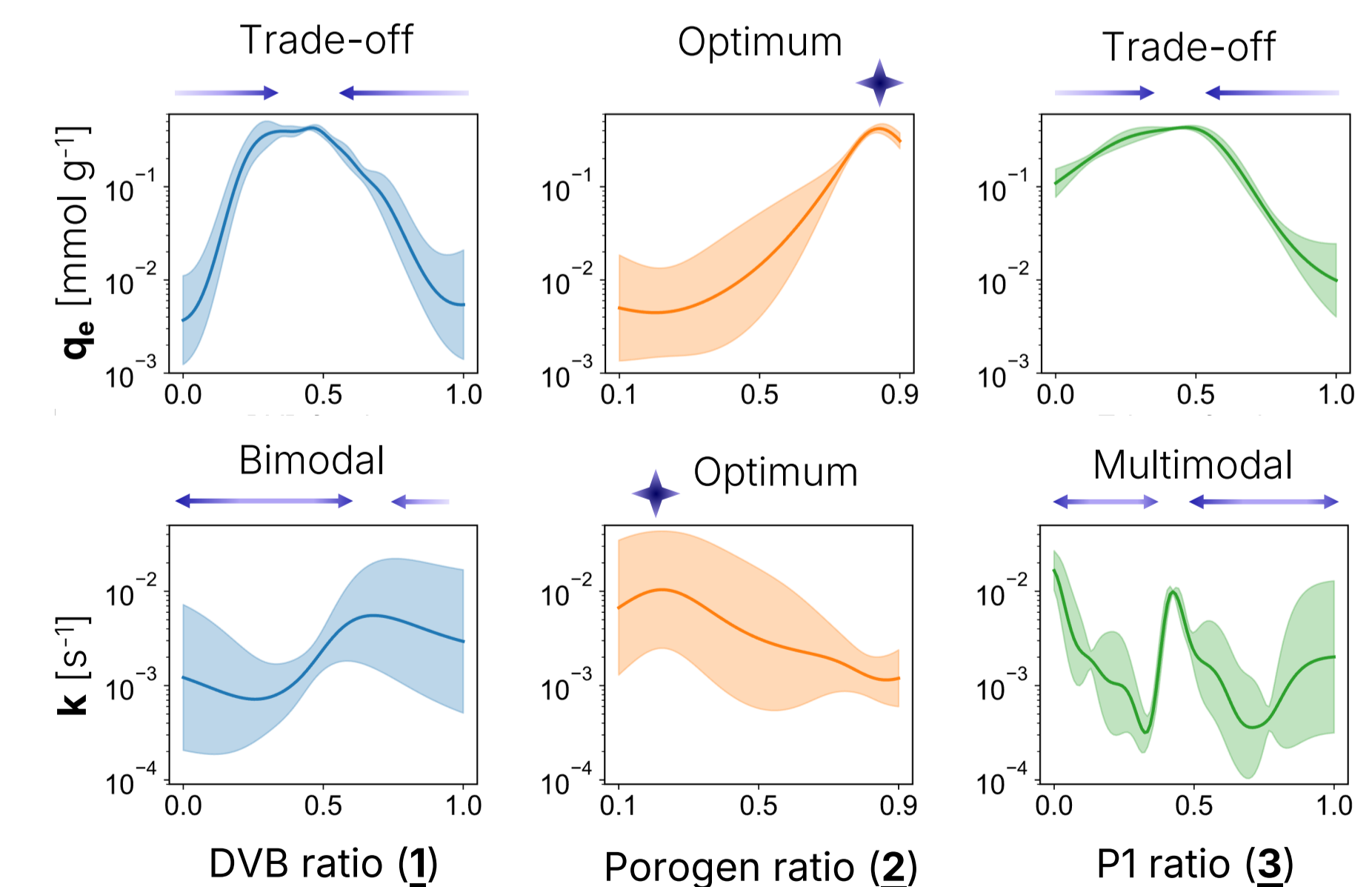


### Result 1 – A near-linear Pareto front



- Adsorbent D has 14x kinetics and half the uptake of the benchmark<sup>1</sup>

### Result 2 – Material design rules



### Future work – Modelling

