

For more information:
Request a demonstration
for your lab
info@douglas.co.uk

Dear Crystallographer

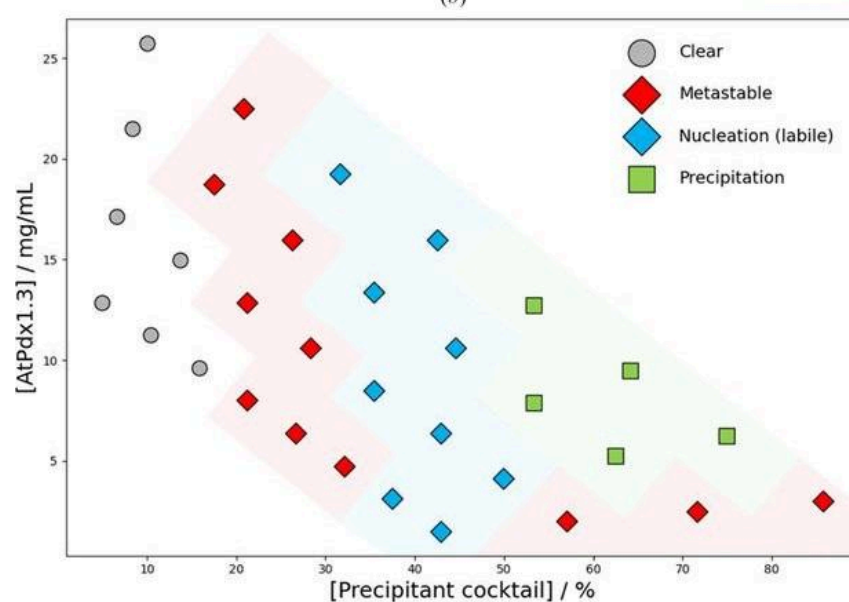
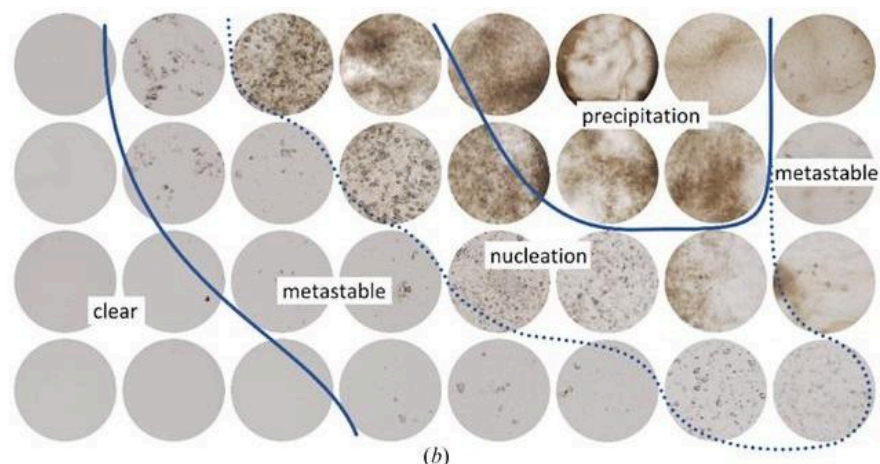
We are pleased to announce our latest publication in IUCrJ:

"Automated microbatch-under-oil phase diagrams to rationalize serial crystallography sample preparation"

Stubbs, J., Tremlett, C.J., Waitman, A., Harmer, N.J., Orville, A.M., Tews, I., Kolek, S. and Shaw Stewart, P.D., IUCrJ 13 (2026).

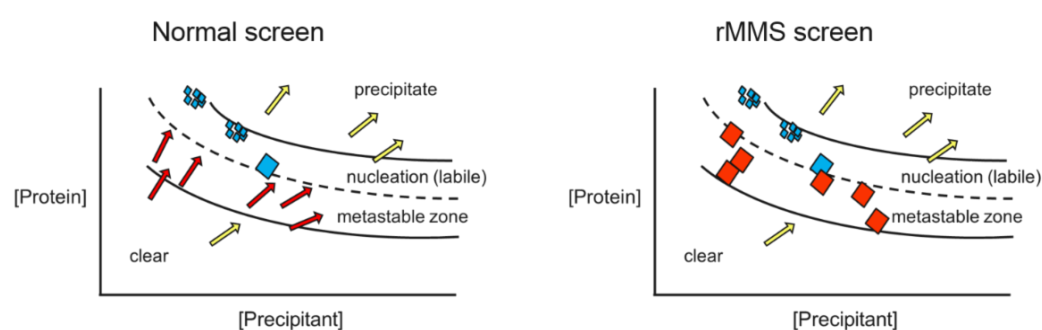
Open-access: <https://doi.org/10.1107/S2052252526000448>

Douglas Instruments has collaborated with the University of Southampton and Diamond Light Source to develop a fast and very simple method to generate phase diagrams of *your* proteins, which in practice often look very different from the "classical" phase diagrams that appear in textbooks.



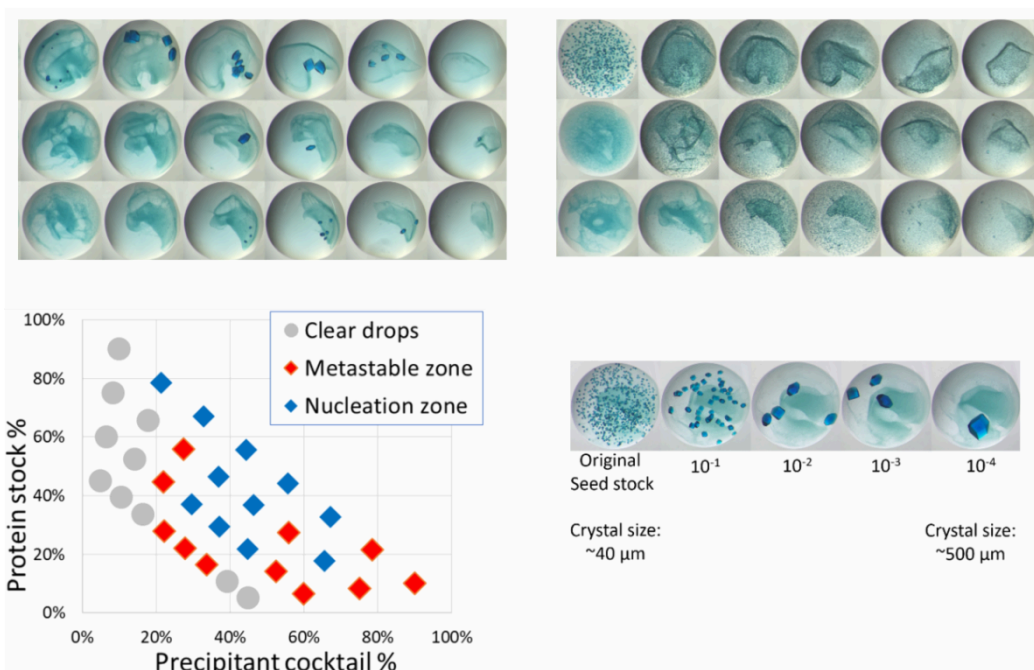
Sample preparation workflow:

1. Start with random screening.
2. Use **rMMS screening** - add a seed stock to the same random screens.



3. Optimize if necessary. For example, additive screens and **2-D grids** can be set up with seeding.
4. Now run **phase diagrams**. Start with the broadest possible experiment – cover the whole area where crystals might grow (*image below*).

5. Zoom in on the interesting areas; dilute the seed stock to get the number and size of crystals that you want (*image below*).



Meetings, Conferences and workshops

Visit our booth for the latest on our new experiment scripts for phase diagram optimization and other developments.

Also pick up a free microseeding tool kit for [rMMS](#).

[BCA Spring Meeting, Leeds, UK](#)

30 March - 1 April 2026

[RApi Data 2026, SLAC - Stanford, USA](#)

4 May - 9 May 2026

[IUCr 2026, Calgary, Canada](#)

11 August - 19 August 2026

[ISBC2026, Granada, Spain](#)

4 October - 9 October 2026

We look forward to seeing you there!

Best regards,

Douglas Instruments
Newsletter@douglas.co.uk

