



The only DLS/Imaging Plate Hotel on the Market

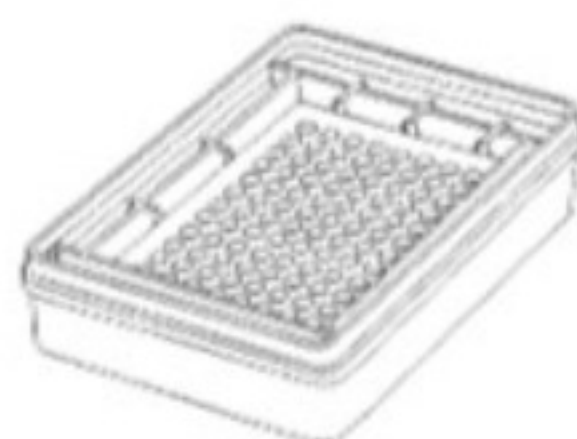
SpectroQ combines for the first time the analysis of sample quality by Dynamic Light Scattering (DLS) in plates with a fully automated plate storage and delivery system (plate hotel). With sample volumes between 0.8 - 0.08 $\mu\text{l}/\text{well}$, the system offers unrivalled versatility in terms of sample throughput and efficiency.

Using a wide range of standard plates, the SpectroQ system can be easily combined with existing liquid sample handling systems, such as dispensing robots, for seamless integration into existing laboratory environments.

96 well glass sealed plates. Min. sample volume $\sim 1\mu\text{l}/\text{well}$



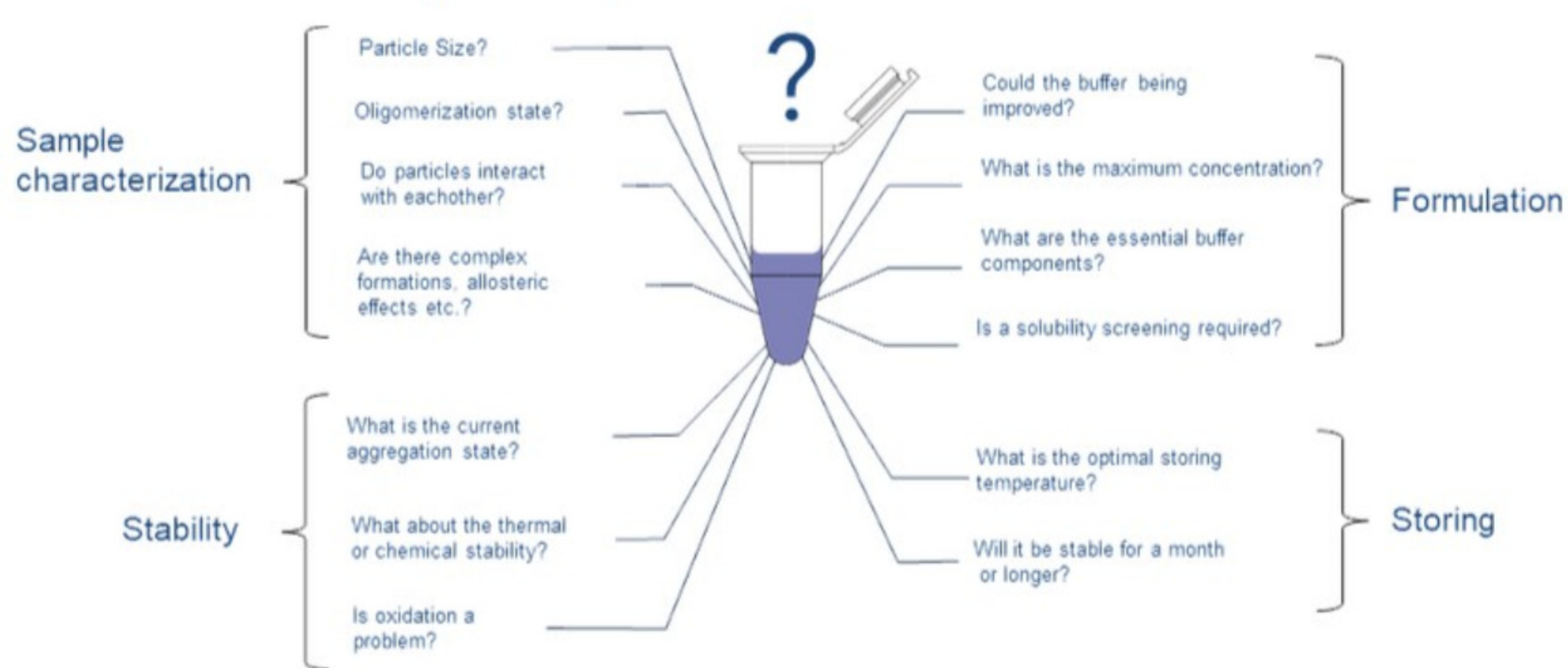
Batch crystallization plates, paraffin oil sealed. Min. sample volume 0.08 $\mu\text{l}/\text{well}$



Standard SBS crystallization plates, polymer film sealed (partially used for DLS)



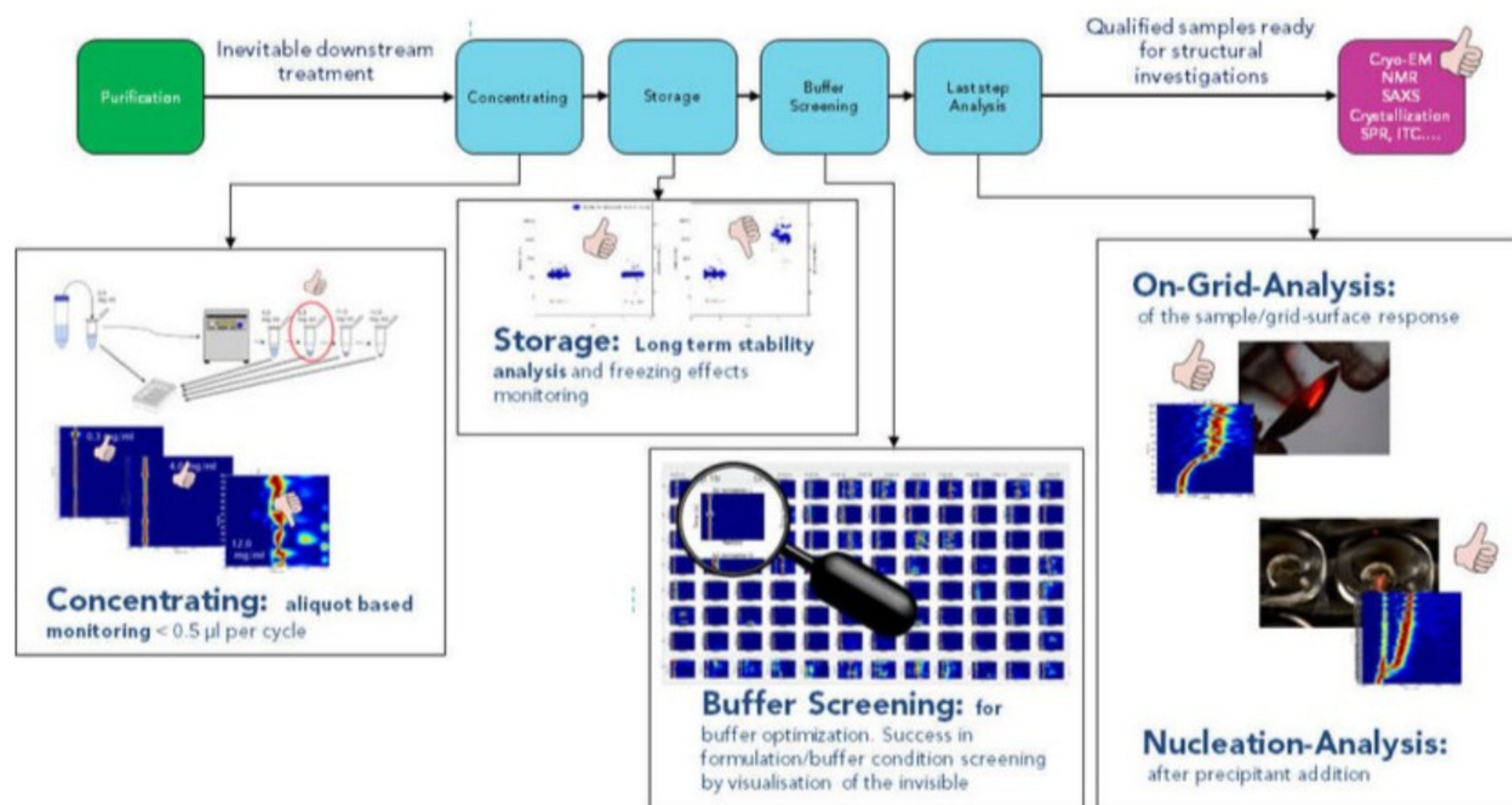
Key quality indicators of sample identity and integrity can be obtained by particle size analysis via DLS. Determination of the absolute size and some additional quality indicators can be achieved with minimal sample consumption.



Such key quality indicators are:

- Particle size [nm],
- Frequency of occurrence [N],
- Mass ratio of different particle populations
- Polydispersity index [%],
- Diffusion constant D [m²/s]
- Solvent viscosity [cp]
- Molecular weight [kDa]
- Peak integral ratio [AU]
- Mean particle distribution [nm]
- Cumulant fit radius [nm]
- Cumulant fit rmsd [%]

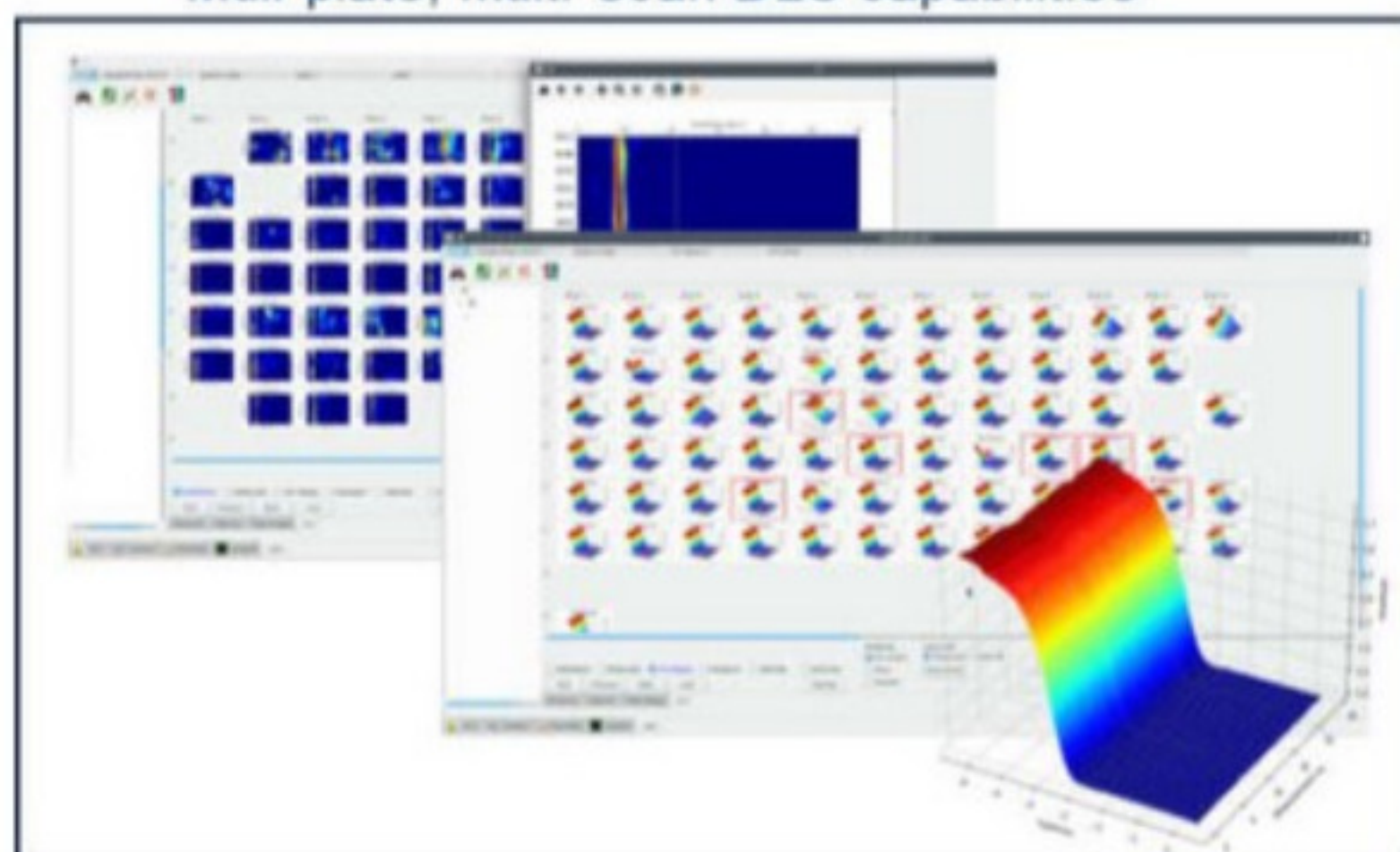
Essential steps in the life cycle of a sample can be monitored after purification. These include over-concentration avoidance, optimal storage temperature identification, multiple condition screening and some experimental applications such as on-grid DLS and nucleation studies.



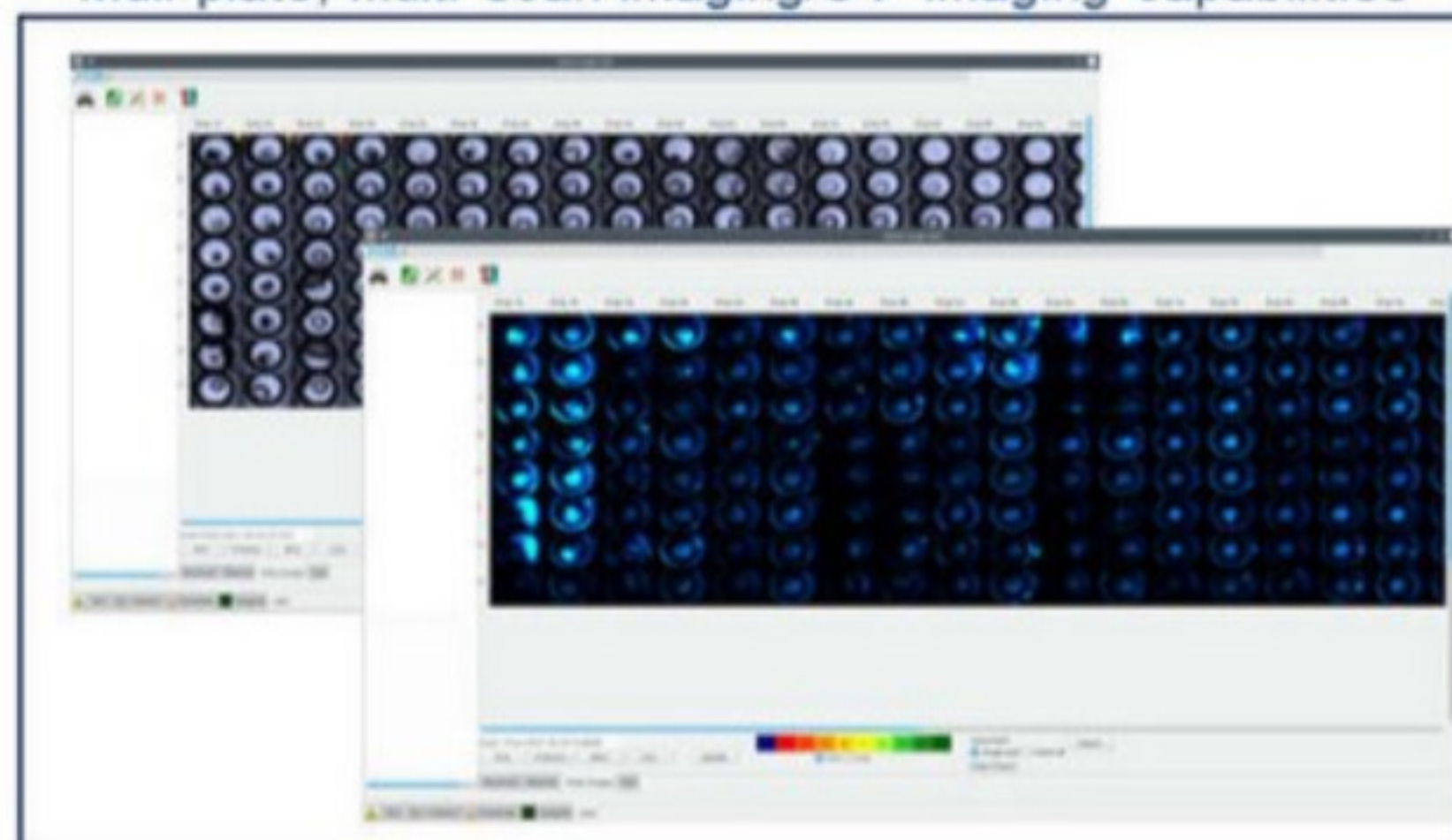
The ability to handle a large number of plates fully automatically, combined with long-term sample storage, provides deep insight into sample stability or long-term particle interactions.



Muli plate, multi scan DLS capabilities



Muli plate, multi scan imaging/UV imaging capabilities



Please visit our website for a closer look at the fascinating capabilities of SpectroQ: <https://www.xtal-concepts.com/product/spectro-q-imaging/>

Your XtalConcepts Team

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