

PRESS RELEASE
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ORYL PHOTONICS UNVEILS THE ORYL F1

On Wednesday, May 21 2025, ORYL Photonics introduces the ORYL F1, a novel automated laser-based platform for the measurement of solubility and aggregation of drug molecules in the Life Science industry. This is a significant achievement for the fast-growing Swiss company and for the solubility and aggregation community. The laboratory instrument enables researchers to make faster decisions and gain a deeper understanding of their samples, which is essential for reducing drug development and production costs.

“We are very happy to officially launch today our first instrument for the life science industry. This is the first platform dedicated to sensitive and high-throughput solubility and aggregation measurement, that requires minimal amount of sample” shares Orly Tarun, CEO & Co-founder. The instrument is based on second harmonic scattering, a laser-technology known for its unparalleled sensitivity in probing the structure of materials at molecular level, and for the study of particles in liquids. The ORYL F1 brings it to an automated format adapted to 96 and 384 well-plates.

This instrument is the achievement of several years of technological development. The technology was born at EPFL, Switzerland, and further developed and matured in close collaboration with customers (pharmaceutical companies, screening facilities, university laboratories) as well as with experts and key opinion leaders in the field of solubility and aggregation. It has already achieved market recognition as it is used repeatedly by two large pharmaceutical companies via the ORYL measurement services. The result of this maturation in close contact with end-users is the first solubility screening platform, able to measure a full 384 well-plate in 15 minutes, increasing throughput and unlocking solubility and aggregation measurement at scale. The F1 can typically measure 100x faster than HPLC-based systems and 10x faster than SLS/DLS systems, while requiring respectively 100x less and 10x less compound per solubility/aggregation datapoint. It achieves these significant cost savings by simplifying drastically the measurement process, while preserving the samples for orthogonal measurements and kinetics studies.

The F1 is an excellent platform that can profile solubility of small molecules across various conditions (pH, buffers, solvents, salts, ...) or measure the aggregation of larger molecules. It excels for instance in profiling High Concentration Liquid Formulations. “ORYL Photonics is excited to make a world impact through its light-scattering based technology that fills a gap in the market offering of solubility and aggregation measurement. The F1 will empower researchers in the pharmaceutical, chemical and life science industries to achieve more in their work, with sustainability and performance in mind” shares Orly Tarun.

ABOUT ORYL PHOTONICS

ORYL Photonics is a fast-growing and innovative technology company, a spin-off from [EPFL](#), that aims to be the reference in solubility and aggregation measurement for the Life Science industry. Applying its proprietary “second harmonic scattering” laser technology, ORYL Photonics has developed a laboratory instrument to measure how drugs dissolve in liquids, providing critical information in R&D and pre-production for pharmaceutical and biotech companies, while saving precious resources.



To know more

www.orylphotonics.com

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