

Abstract Submitted
for the DFD07 Meeting of
The American Physical Society

Low Flow Jet Sources for Serial Crystallography D.P. DEPONTE, U. WEIERSTALL, R.B. DOAK, J.C.H. SPENCE, D. STARODUB, G. HEMBREE, Dept. physics, Arizona State University, J. WARNER¹, M. HUNTER, Dept. Chemistry, Arizona State University — Motivated by the need for a high particle density, water encapsulated protein source we have examined the low-flow regime of thin jets in a co-flowing gas [1] as well as Rayleigh jets. The former method is a reliable source of micron size drops whereas the latter method was found to be unreliable for drop production less than twenty micron due to clogging. For a source consisting of two concentric tubes, we examine the high density region of the jet and effects of triggering, alignment, aperture size flow rate and pressure external to the source.
[1] A.M. Ganan-Calvo Phys. Rev. Lett. 80, 1998

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Date submitted: 07 Aug 2007

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