**DCS Experimental Information Collection Form**

**Laser Shock Experiment (EXAFS)**

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| **Experimental Overview** | |
| Experiment Title |  |
| Experiment Dates |  |
| Lead Experimenter  (Name / Institution / Phone / E-mail) |  |
| Other Experimenters: *Please limit onsite experimenters to two or less.* | Email Address: |
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| Scientific Objective |  |
| Number of experiments required to achieve scientific objective |  |
| List of Material(s) |  |
| **Experiment Parameters** | |
| Undulator:  U27 (Si stripe 2.1 mrad in A-Hutch mirrors and 2.4 mrad in C-mirror)  White Beam Vertical Slit: 1.0 mm | Specify materials and corresponding edge energies. (Recommended energy range 9-13 keV) |
| Horizontal Detector distance from graphite spectrometer to detector plane: | ~ 2.45 m (maximum)  (More accurate reading will be provided at the time of experiment) |
| Monitor signal ***I*0** (direct beam): | No Kapton and No sample  With only Kapton ablator (user provided)  User configuration (user provided) |
| Beam size at target: | Beam will be focused on target.  Horizontal: 80 µm  Vertical: < 50 µm |
| Target Design:  **(Users should calculate x-ray attenuation from the sample and window and optimize thicknesses accordingly. DCS can help with this, if needed.)** | Range of Sample Thicknesses: \_\_\_\_\_\_\_\_ µm  Ablator Thickness: \_\_\_\_\_\_\_\_ µm  Al-coated Kapton or  Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Interferometry Window:  None (standard)  LiF  Other:\_\_\_\_\_\_\_\_\_\_  Thickness: \_\_\_\_\_\_\_\_ mm |
| Velocimetry:  Dual Line VISAR (Single Axis) and  Dual Point VISAR | Standard Line VISAR VPFs:  2,068 & 1,160 m/s/fringe  Standard Point VISAR VPFs:  1,554 & 748 m/s/fringe |
| Detail of issues from last DCS visit: |  |
| **Lab Access and Shipping Requirements** | |
| If you request access to DCS laboratories and/or the machine shop, please specify your needs: | |
| Review [shipping requirements](https://dcs-aps.wsu.edu/shipping-instructions/). If shipping materials in advance of your arrival date, provide shipment tracking numbers to [dcs.admin@wsu.edu](mailto:dcs.admin@wsu.edu) | |
| **Publication Requirements** | |
| The [Acknowledgment Statement](https://dcs-aps.wsu.edu/publication-acknowledgements/) must be included in manuscripts for the work conducted at the Dynamic Compression Sector and published in journals, books, conference proceedings, or other printed scientific and technical media. Notification of accepted manuscripts require notification to DCS and APS. Send the copyright-free version of accepted manuscripts to [dcs.admin@wsu.edu](mailto:dcs.admin@wsu.edu) and enter your accepted manuscript into the [APS Publications Database](https://www.aps.anl.gov/Science/Publications).   1. Provide detail of in-press or published manuscripts that include any previous work performed at DCS. 2. It is the expectation that users submitting non-proprietary proposals will publish, based on any experimental work at DCS, to the open literature. What date do you anticipate an accepted manuscript and/or publication based on the results of your upcoming scheduled experimental time at DCS? | |

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| **Configuration Diagram** |
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| **Additional Requests/Information** |
| The DCS Team welcomes any additional experimental details, requests and information (attached diagrams, descriptions) that will assist in the preparation for your experimental time. |