



UEMview: Source files for UEM delay stage and detector communication

Software files for automating image acquisition in TEM

Applications

- Automation in ultrafast electron microscopy

Technology Overview

Prof. David Flannigan's research group at the University of Minnesota have developed UEMview: LabVIEW and DigitalMicrograph (Gatan) scripts for enabling communication between an optical delay stage and a digital camera mounted on a customized transmission electron microscope (TEM). The files enables automated acquisition of a series of images so the technician need not do this manually.

Related software: [UEMtomaton](#)

Phase of Development

TRL: 9. Fully functional software available for download.

Note that the LabView code for controlling the delay stage is specific to the Aerotech Soloist controller. Communication is achieved by calling the Soloist LabView code. If a different type of delay stage controller is used, the Soloist LabView file calls in the UEMview LabView code may have to be modified by the user for the specific controller being used. The software package is being supplied "as is," without any accompanying support from the University of Minnesota.

Researchers

[David Flannigan, PhD](#), Associate Professor, Chemical Engineering and Material Science

References

1. Du, Daniel X., Spencer A. Reisbick, and David J. Flannigan. , <https://doi.org/10.1016/j.ultramicro.2021.113235>, Ultramicroscopy 223 (2021): 113235.

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