

Abstract Submitted  
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**Development of a low-cost small-sized scanning transmission ion microscope of moderate resolution with educational and other potential applications** ARTHUR PALLONE, Murray State University — Scanning transmission ion microscopy (STIM) has applications in many fields of study such as materials and device engineering, biological and geological sciences, and the arts. Since STIM is practiced at ion beam facilities, many persons outside of the ion beam community who could benefit from STIM are unaware of its potential. In an effort to better educate the public about STIM, an inexpensive portable demonstration unit suitable for interactive classroom use and public outreach events is under development. The required parts are readily available, mostly at local electronics and office supply stores. Progress toward completion of the demonstration unit and future efforts to modify the unit to support thin film research will be discussed. Activities that demonstrate the three modes of STIM will also be presented.

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