

NEWS RELEASE

Alluxa, Inc.

3660 N. Laughlin Road
Santa Rosa, CA 95403
Contact: Peter Egerton, CCO
Toll-Free Phone: +1 855-425-5892
E-mail: info@alluxa.com
Web Site: www.alluxa.com

Media Contact: Marlene Moore

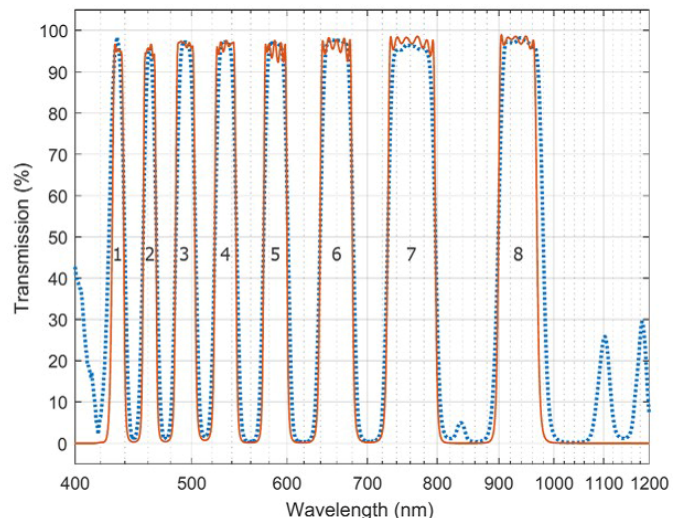
Smith Miller Moore
Phone: 818-708-1704
www.smithmillermoore.com
info@smithmillermoore.com

For Immediate Release

Alluxa Develops Innovative 15-Band Optical Filters for ETSI Astronomy Project

- The company's unique multi-band optical filter design is integral to Texas A&M's Exoplanet Transmission Spectroscopy Imager (ETSI) instrument.

Santa Rosa, Calif. – June 30, 2021 – Alluxa, Inc., a global leader in high-performance optical coatings and filters and thin-film deposition technologies, announces the ground-breaking development of 15-band optical filters for use in the **Exoplanet Transmission Spectroscopy Imager (ETSI)** instrument at Texas A&M University, Mitchell Institute for Fundamental Physics and Astronomy, and Department of Physics & Astronomy (<https://physics.tamu.edu/>). ETSI is the first precision instrument that can examine hundreds of exoplanet transmission spectra from a modest ground-based, observatory utilizing small to medium-class telescopes.



The ETSI makes use of a new characterization technique called common-path multi-band imaging (CMI). The optical design of the instrument includes a prism and Alluxa's novel multi-band optical filters to simultaneously image 15 bandpasses on two detectors (from 430 nm - 975 nm) during exoplanet transits of a bright star. This pioneering design enables ETSI to achieve unprecedented photometric precision during transit spectroscopy measurements.

Mike Scobey, a co-author of the paper and CEO at Alluxa, notes, "The Alluxa engineering team developed the custom 15-band technology for Texas A&M for this groundbreaking

ETSI project to detect the atmospheres of exoplanets of distant stars. The technique should also scale into larger and more sensitive telescopes with the potential to facilitate detection of the first habitable planets outside our solar system. We are extremely pleased to have contributed to this important endeavor and look forward to seeing the future results.”

“ETSI and the CMI technique may offer a gateway for characterizing almost all transiting exoplanets and potential habitability from ground-based observatories,” according to the collaborative white paper from Texas A&M University and Alluxa, Inc. To learn more about the Exoplanet Transmission Spectroscopy Imager, download the white paper here: <https://arxiv.org/pdf/2012.00795.pdf>.

INSERT: Graph showing transmission of the custom multi-band filters designed by Alluxa for the ETSI instrument. Also shown on page 9 of the above white paper PDF.

ABOUT THE COMPANY:

Alluxa (www.alluxa.com – Santa Rosa, CA) designs and manufactures next generation, hard-coated optical filters using a proprietary plasma deposition process. The company’s unique, purpose-built deposition platform and control systems were designed, developed, and built by our team to address the demanding requirements of the next generation of systems and instruments. Our objectives are to increase production capability and continue to provide > 99% on-time delivery while creating the world’s most challenging filters at breakthrough price points.

#