

SYMPOSIUM ON NEW TECHNOLOGIES FOR FUTURE SPACE ASTRONOMY MISSIONS (A7)  
Technology Needs (3) (4)

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## TECHNOLOGY FOR FUTURE EXOPLANET MISSIONS (INVITED)

**Abstract**

A central theme in NASA's and ESA's vision for future missions is the search for habitable worlds and life beyond our Solar System. This presentation will review the current state of the art in planetfinding technology, with an emphasis on methods of starlight suppression. At optical wavelengths, Earth-like planets are about 10 billion times fainter than their host stars. Starlight suppression is therefore necessary to enable measurements of biosignatures in the atmospheres of faint Earth-like planets. Mission concepts based on coronagraph, starshade, and interferometers will be described along with their science objectives and technology requirements.