

**Service rates of the laboratories in Planetary Spectroscopy Groups  
(Raman, FT-IR, LIBS, PEACH, and Raman imaging)**

The service rates for measurements made in the laboratories of Planetary Spectroscopy Group, including Raman, FT-IR, Laser induced breakdown spectroscopy (LIBS), Planetary Environment and Analysis Chamber (PEACH), and laser Raman imaging system are listed below. *The total fee will be calculated at a per hour basis, plus 0.5 - 1 hour for system start-up and calibrations.*

The collected lab fees from outside users will be used to cover the cost for the warrantee and the service contracts of our major equipments, the purchase of accessories and ancillary laboratory minor equipments, and the expendable supplies.

The payment can be made through fund transfer among grants or departments at Washington University, and by check from outside entities.

Graduate students and research staffs of EPSc & McDonnell Center and of other departments at WUSTL, who desire to have long-term usage of these spectroscopic labs (except Raman Imaging) for their research projects, are welcome to be trained by our lab staff. A minimum hourly rate will be calculated toward their works in the labs after they have demonstrated a satisfactory level of operating safety and skill.

**A. Microbeam Laser Raman Spectrometer KOSI NRXN-E-532**

<b>Per hour rate</b>		<b>Trained User</b>	<b>By our service</b>
EPSc & McCenter		\$20	\$50
Other Departments of WUSTL		\$35	\$80
Other Universities		\$40	\$100
Commercial Use			\$150

**B. FT-Infrared Spectrometer *Nexus 670* with four modes of operation: transmittance, attenuated total reflectance, total and diffuse reflectance**

<b>Per hour rate</b>		<b>Trained User</b>	<b>By our service</b>
EPSc & McCenter		\$20	\$50
Other Departments of WUSTL		\$35	\$80
Other Universities		\$40	\$100
Commercial Use			\$150

**C. Laser Induced Breakdown Spectrometer (LIBS) and Planetary Environment and Analysis Chamber (PEACH)**

<b>Per hour rate (w/out PEACH)</b>		<b>Trained User</b>	<b>By our service</b>
EPSc & McCenter		\$20	\$50
Other Departments of WUSTL		\$35	\$80
Other Universities		\$40	\$100
Commercial Use			\$150

**D. Planetary Environment and Analysis Chamber (PEACH)**

<b>Per hour rate</b>		<b>Trained User</b>	<b>By our service</b>
EPSc & McCenter		\$20	\$50
Other Departments of WUSTL		\$35	\$80
Other Universities		\$40	\$100
Commercial Use			\$150

January 2021 version

**E. Laser Raman Imaging system *Renishaw InVia* with 325 nm, 442 nm, 532 nm, 633 nm, 785 nm excitations**

<b>Per hour rate</b>			<b>By our service only</b>
EPSc & McCenter			\$80
Other Departments of WUSTL			\$100
Other Universities			\$150
Commercial Use			\$200