

## NEWS RELEASE

### OptiGrate's new filters enable a breakthrough in advanced Raman instrumentation

Orlando, FL (September 24, 2010)

OptiGrate Corp, an Orlando-based high tech company, has launched a complete product line of new ultra-narrow notch and bandpass filters for Raman spectroscopy applications. The filters have a bandwidth less than  $10\text{ cm}^{-1}$ , which is about 10-20 times narrower than other notch and bandpass filters commercially available for these applications today.



“This new filter technology will make a crucial impact on the Raman instrumentation world,” comments OptiGrate’s CEO Dr. Alexei Glebov. “The filters enable measurements of ultra-low frequency Raman bands with “standard” instruments, while earlier, it was only possible with more complex, bulky, and obviously more expensive tools. This will largely facilitate an access to ultralow frequency Raman studies, which are vital for many applications in nanotechnology, pharma, semiconductor processing, and so on.”

Earlier this year, the new **BragGrate™ Notch Filters** and **BragGrate™ Bandpass Filters** have been tested and qualified for production units by HORIBA Jobin-Yvon, the world leading manufacturer of Raman instruments. The qualification results, presented at International Conference for Raman Spectroscopy (ICORS) in Boston in August 2010, demonstrated feasibility of measuring Stokes and Anti-Stokes frequencies down to  $4.5\text{ cm}^{-1}$  with a set of BragGrate™ filters using a single stage spectrometer. The Horiba’s new UltraLow Frequency Unit with BragGrate™ filters is now available on the market. For more information, please, refer to: <http://www.horiba.com/scientific/products/raman-spectroscopy/news-events/ultra-low-frequency-module-advances-raman-spectroscopy>.

The BragGrate™ filters are based on reflecting volume Bragg gratings (VBG) formed in proprietary photosensitive glass material, the technology developed by the OptiGrate founders and protected by a portfolio of issued and pending patents. The filters are formed by holographic techniques in a bulk of glass, with no organic, thermally or optically unstable materials. Therefore, in addition to providing the narrowest filter line, the filters show outstanding environmental stability, with no humidity or light induced degradation, and can withstand temperatures up to  $450^{\circ}\text{C}$ . The filters are available for a wide range of Raman laser source wavelengths such as 488, 514, 532, 633, 785, and 1064 nm. Any custom wavelengths in the range from 450 nm to  $2\text{ }\mu\text{m}$  are also available.

OptiGrate will present the new line of BragGrate™ filters at the tradeshow conducted at the annual meeting of the Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) in Raleigh, NC, on October 17-21, 2010.