



**Kinetic River Corp. delivers *Potomac* flow cytometer  
to the National Research Council**

*Customized cell analyzer installed in Naples, Italy  
for biomedical research and water monitoring*

**Mountain View, Calif., November 9, 2020**— Kinetic River Corporation, a leader in custom flow cytometry instrumentation, announced today the delivery of its flagship *Potomac* customizable flow cytometer to the National Research Council in Naples, Italy.

The *Potomac* flow cytometer was installed by CytoFlowService/EMC2, Kinetic River's distribution and service partners for Europe, in the Institute for the Electromagnetic Sensing of the Environment (IREA) at the National Research Council (CNR). The *Potomac* will be used to perform label-free analysis of biological samples and to run water quality tests.

The *Potomac* is a fully customizable flow cytometer with a range of customization options, including incorporation of exotic light sources, unusual excitation configurations, use of silicon photomultiplier detectors, and full ability to tailor flow conditions over a 1,000-fold range. Design and production of the *Potomac* for the IREA-CNR was carried out at Kinetic River's laboratories in Mountain View, California.

The customized *Potomac* flow cytometer for IREA-CNR was designed to use three separate light sources at 375 nm, 405 nm, and 266 nm. It features nine detection channels, including forward scatter, side scatter, and seven fluorescence channels, with three channels for future upgrades. Ultimately, this customized *Potomac* provides scientists at IREA-CNR with the ability to use lasers from violet to deep ultraviolet to excite autofluorescence in human cells for biomedical applications. The instrument can also be used to measure cyanobacteria—which are common contaminants in water reservoirs—enabling label-free analysis of water samples.

"Kinetic River's *Potomac* is a unique flow cytometer," said Dr. Romeo Bernini, Research Director at IREA-CNR. "We specifically requested a violet/UV excitation configuration, not available anywhere else, to meet our needs to use short wavelengths both to generate autofluorescence and to detect nanoparticles for biomedical applications. The instrument is very sensitive and easy to use, and furthermore provides the user with great flexibility, such as the possibility to access to raw waveform data."

Giacomo Vacca, Ph.D., president of Kinetic River, added: "We welcomed the challenge of designing this unique analyzer for IREA-CNR. The combination of all-UV/violet excitation and high sensitivity requirements was a perfect match for our platform, which is designed for flexibility and customization. Seeing our products enabling cutting-edge research and applications not supported by other manufacturers is what we're all about."

### **About Kinetic River**

Kinetic River Corp. is a product design and development company focused on flow cytometry and optics. Based in California's Silicon Valley, Kinetic River offers cutting-edge instrumentation solutions for biomedical research and the life sciences, including the *Potomac* and the *Danube*, a fluorescence lifetime flow cytometer. Kinetic River also provides a range of technical consulting services and training seminars to client worldwide. For more information, visit [KineticRiver.com](http://KineticRiver.com).

### **About EMC2**

E.M.C2 (dba CytoFlowService), a leading flow cytometry service company based in Milan and Rome, provides flow cytometry solutions to private companies and academic laboratories. In addition to offering core laboratory maintenance and service plans, EMC2 also distributes novel flow cytometry products and develops custom workflow solutions. For more information, visit [citometriaflusso.com](http://citometriaflusso.com).



The Potomac flow cytometer is a flexible platform designed for ease of modification and upgrades. Customizable from 1 to 8 lasers and from 4 to 20 detection channels, it can accommodate novel light sources, detectors, and fluidics.



Dr. Romeo Bernini, Research Director of IREA-CNR, coordinates installation of Kinetic River's Potomac in his laboratory.

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