Environmental parameters laboratory measurements with virtual instrumentation

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This article presents a virtual instrument developed for relieving the laboratory analyzing of environmental parameters. The laboratory has been developed and equipped with high performance equipment available on the market for the measurement of a series of pollutants found in water, air, soil and for measuring noise from various companies. To reduce the work of studied laboratory personnel and to prevent some human errors we developed specialized software using the LabView programming environment. The virtual instruments can turn the computer into a "command server" of a network of measuring devices able to communicate through a specific protocol. Thus, connecting laboratory devices to a computer and implementing the specialized software we can command all this devices, namely we command taking, recording and processing results. In this way the laboratory is brought one step higher in performance.