

# NEW SPECIALTY SERVICES



SPECTRUM ANALYTICAL, INC. FEATURING HANIBAL TECHNOLOGY

# SPECTRUM ANALYTICAL, INC.

## **Remediation Products/Technology Screening (RPTS)**

Are you looking for low-cost independent testing of remediation products and technologies? Spectrum is pleased to offer a low-cost alternative to a full treatability study for your remediation design needs. The screening results will provide critical design information such as the amount of chemicals to use per gram of contamination, and the expected time and effectiveness of the treatment. This independent testing of remediation products and technologies is called the *RPTS*. The remediation technologies that we can evaluate include oxidation technologies such as permanganate, hydrogen peroxide, Fenton's reagent, solid peroxides, persulfate and catalyzed persulfate; reductive technologies such as zero-valent iron (ZVI), bi-metallic mixtures and controlled-release integrated carbon with zero valent iron (ZVI), as well as biostimulation and bioaugmentation technologies for the treatment of organic and inorganic compounds. The cost of the technology screenings vary be-

tween \$1,500 to \$4,500 per technology. Spectrum's R&D Section Team Leader, Dr. Amine Dahmani will provide free consultation regarding the potential application of these technologies to your site.

Visit Spectrum Analytical's web site at [www.spectrum-analytical.com](http://www.spectrum-analytical.com) for more information on these and other services.



## **Soil Oxidant Demand/Total Oxidant Demand (SOD/TOD)**

Planning a chemical oxidation application at a contaminated site? Spectrum recommends that you conduct testing for Soil Oxidant Demand (SOD) in order to estimate the amount of oxidant that will be needed to oxidize reduced minerals and naturally occurring organic material (NOM). You may also consider conducting Total Oxidant Demand (TOD) testing if reduced species and NOM are also present in groundwater. Spectrum Analytical can conduct SOD/TOD testing for various chemical oxidation technologies such as permanganate, persulfate, catalyzed persulfate, hydrogen peroxide, Fenton's reagent and modified Fenton's reagent. The cost of the tests range from \$700 to \$850. In addition, if you are applying persulfate chemical oxidation at a site and you need to measure persulfate concentrations, Spectrum can conduct these analyses for you. The tests cost \$35/sample. Please contact Dr. Amine Dahmani for further assistance.

## **Petroleum Forensic Project Screening (PFPS)**

Environmental analytical forensic studies can cost anywhere from \$300 to \$2,000 per sample depending on the complexity of the analytical procedures and the questions to be answered. For petroleum-related forensic studies, Spectrum now offers a low-cost Petroleum Forensic Project Screening (PFPS) test that can identify what petroleum products are present in your sample and qualitatively determine their degree of weathering. The tests are provided within two weeks as a supplement to the total petroleum hydrocarbon tests and cost an additional \$100.00 per sample. Please contact Dr. Amine Dahmani of the R&D section if you need assistance regarding these tests.