Alpha Spectra, Inc.
Special BGO Detectors Data Sheet

Alpha Spectra has designed many different special detectors. Our detectors have been used in applications that include: Homeland Security, Oil and Gas Exploration, Health Physics Applications, Astrophysics, Medical Imaging, Industrial Gauging, Particle Physics, Material Science, Unmanned Space Flight and Ultra-Low Background Counting.

The Alpha Spectra detector designs satisfy specifications that challenge the limits of detector technology. Our detectors meet strict requirements needed to qualify for unmanned space flight. Our detectors are used in rugged high-temperature geophysical exploration. Our Ultra Low Background design will improve your detection capabilities.

This data sheet gives some examples of some of our special designs. We encourage you to discuss your detector needs with us. We would like to tell you more about our capabilities. The challenge of satisfying detectors specifications is what makes our work interesting.

Figure 1. BGO Annulus and "Backcatcher" Detectors.

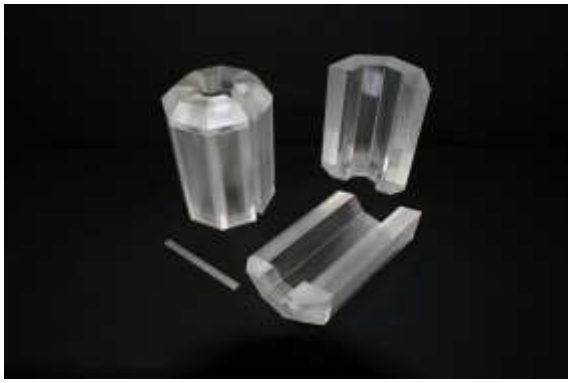

Figure 2. Segmented BGO Crystal Blanks for the Detectors shown in Figure 1.

Figure 3. BGO Compton Suppressor for the Clover System at LLNL.

Figure 4. Special large Compton Suppressor with Side and End Well for INEL

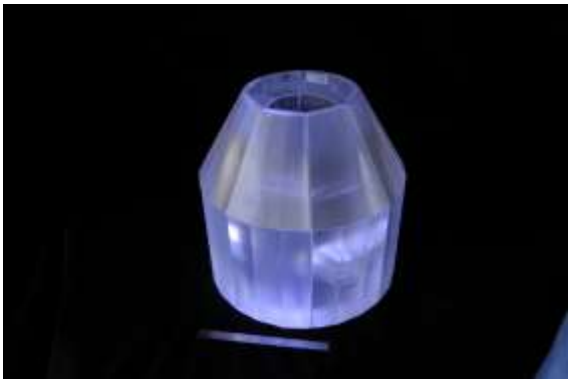

Figure 5. INEL BGO Annulus Segmented Crystal Assembly Shown Before Final Packaging

Each system is tested in our final quality control test area to ensure that the performance specifications are met. A Final QC Test Data Sheet is delivered with each detector that Alpha Spectra, Inc. manufactures.

Figure 7. Another BGO Annulus Design Shown with "Backcatcher" Detectors

Please contact Alpha Spectra, Inc. so that our design team may help you design a custom detector configuration for your application. Our high-quality detectors are assembled utilizing techniques that have been developed with over 100 years of combined working experience. Contact Alpha Spectra, Inc. for your scintillation detector requirements and be assured that you will get personal attention.

Alpha Spectra, Inc.
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