INDUSTRIAL X-RAY MICROTOMOGRAPHY APPLICATIONS USING A SYNCHROTRON-BASED FACILITY

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Several applications of X-ray microtomography (XMT) characterization of composites, foams, and porous materials will be presented with emphasis on visualization and analysis of the data. Specific examples will include fiber-reinforced cement, open- and closed-cell polymer foam characterization, and polymer filler distribution. A brief description of the experimental set-up at Sector 5 (DND-Cat) of the Advanced Photon Source at Argonne National Lab will be given along with the capabilities and limitations of this arrangement.