

snapshot: LCLS construction

These photos represent an eye blink in the evolution of the Linac Coherent Light Source, a groundbreaking facility taking shape at SLAC National Accelerator Laboratory. During the past two years, workers excavated more than 180,000 cubic yards of earth and added more than half a mile of tunnel to the lab's existing linear accelerator to accommodate the world's first hard X-ray free electron laser. Its short, bright pulses will allow researchers to watch molecules in action and make freeze-frame movies of the chemistry of life as it unfolds. A range of fields stand to benefit from this new tool, including materials science, chemistry, biology, medicine, and environmental science. In September 2008, with civil construction completed and scientific equipment about to move in, the empty facility had a beauty all its own—sparse and utilitarian, crafted expertly into a unique and sophisticated subterranean home for a remarkable machine. [More photos of this facility are online in *symmetry*.](#)

Text and photos: Brad Plummer



