



### *A Guide to Nanotechnology for Colorado's **Economic Developers***

- **As a science, nanotechnology involves the manipulation of matter on an extremely small scale** (1 to 100 nanometers) to create structures, devices and systems with novel and unique properties and functions that become possible because of their small size. A nanometer is one billionth of a meter, about 75,000 times smaller than a human hair. At this scale, different laws of physics apply; material properties change and new material behaviors come into existence.
- **As an economic driver, nanotechnology is no 'small matter'.** Over the next 10 to 20 years, it is anticipated that nanotechnologies will change almost every product on the market today and create unique new products with features and benefits applicable to nearly every aspect of human endeavor. By 2014, nanotechnology will be incorporated into 15% of global manufacturing output totaling \$2.6 trillion. With market growth rates exceeding biotech and infotech, nanotech is forecasted to produce a \$1 trillion global market by 2015 and create 7 million U.S. jobs.
- **Nanotechnology is extremely important to Colorado's economic future.** It is a cross-cutting science with applications in many technology industries including aerospace, defense/homeland security, biomedicine, electronics information technology, and energy. At least 75 Colorado companies are already working in nanotechnology and 32.6% of survey respondents say it will be critical to company profitability within 10 years.
- **The "Colorado Nanotechnology Roadmap"** was released in September, 2006, by the Leeds School of Business at CU-Boulder. This comprehensive report provides the state's business, academic, research, economic development and government leaders with an action plan to ensure a strong future technology-based economy that maximizes the benefits of responsible development and deployment of nanotechnology.
- **Colorado Nanotechnology Alliance is** a not-for-profit corporation with a broad-based Board of Directors that will lead, coordinate and enable partner organizations to complete the action steps necessary to improve Colorado's competitive position in five target areas: leadership, business growth, research & technology transfer, workforce development and public education & societal change.
- **Colorado's competitive position:** The ultimate goal of the Colorado Nanotechnology Roadmap is to advance Colorado's future technology-based economy through business retention, expansion, attraction, generation and growth; resulting in economic wealth and quality high-waged jobs for Colorado citizens. As an enabling, cross-cutting technology, nanotechnology is essential to the future growth of all of Colorado's technology industry sectors. In order to realize our potential, Colorado needs to help companies access our nanotechnology capabilities including researchers, specialized laboratories and equipment, and company products and services.
- **Colorado's economic developers** are important to our success. Nanotechnology has the potential to create economic growth in every area of the state and in diverse industry sectors important to state and local economic development organizations. Economic developers will be a critical component in promoting Colorado's nanotechnology capabilities and resources to help local businesses grow and encourage new companies to locate here.

**This is no small task...get involved today.**