

Scenarios Explore Urban Nanotechnology Futures

Will resource-efficient corporate campuses provide gentrified and convenient places to work, live and play in Phoenix? Will alleys become zones for creative and communal encounters blending private and public space? Both futures are plausible given Phoenix's historical and emerging socio-technical trajectories.

Visualized scenarios offer a way to imagine how a city's future might play out – here supported by information collected in the Nanotechnology in City Environments (NICE) database (<http://nice.asu.edu/>) and by design proposals that cohesively captures the technical, cultural, and aesthetic influences acting on a city.

The product of a unique collaboration between CNS-ASU and ASU's Design School, contrasting scenarios offer imaginaries of the interplay between emerging technologies and the environmental, economic, and social fabric of the city. Scenarios also provide a way to consider how current R&D, policy decisions, and public deliberations influence future urban landscapes and social dynamics.

At a recent seminar in Washington, DC, Darren Petrucci, professor in the ASU Design School, and Rider Foley, postdoctoral scholar with CNS-ASU, presented visualized scenarios as a new tool for science policy. A video of the DC-CSPO presentation and the scenario video are available on the CNS-ASU Vimeo channel at: <http://vimeo.com/88409526>

One scenario depicts the integration of work, live, and play on a corporate campus in a futuristic Phoenix.



Photo by ASU Design School

Dr. Arnim Wiek and his team conduct research in the Thematic Research Cluster (TRC 2) on Urban Design, Materials, and the Built Environment. The group addresses the question: *How can nanotechnology be innovated and governed in responsible ways and with sustainable outcomes?* They employ system analysis, scenario construction, assessment, and intervention research methods to explore theories of anticipatory governance, sustainability, and responsible innovation.

Wiek, A., Guston, D.H., van der Leeuw, S., Selin, C., & Shapira, P. (2013). **Nanotechnology in the city: Sustainability challenges and anticipatory governance.** *Journal of Urban Technology*, 20(2), 45-62.

