Keynote Address: Small World Large Impact: A WIN Perspective on the Potential of Nanotechnology
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The science and engineering of materials, devices and systems with size features in the range of atoms and molecules (0.1-100 nm) has seen spectacular growth, with global funding reaching $US 18.2 B in 2008, up 15% from 07. Using the unique properties of nanoscale materials- high surface atom/bulk atom ratios and the emergence of quantum effects- together with access to new tools and methods for seeing, manipulating and creating new forms of matter and devices, research is accelerating in the areas of:

- Nanomaterials for energy storage and conversion
- OLEDS for flexible, transparent display technologies
- Nano-fluidics
- MEMS
- NEMS
- Lab-on-a-chip devices for biodiagnosis
- Nanosystems for targeted drug delivery
- Quantum nanophotonics

But what applications are likely to impact our day-to-day lives?