What does nanotechnology hold for future of artificial intelligence?

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Today's emergence of nano-micro hybrid structures with almost biological complexity is of fundamental interest. Our ability to adapt intelligently to the challenges has ramifications all the way from fundamentally changing research itself, over applications critical to future survival, to posing small and medium as well as truly *globally existential* dangers.

Touching on specific issues such as for example how complexity relates to the catalytic prowess of multi-metal compounds, I discuss the increasingly urgent issues in nanotechnology also very generally and guided by the motto 'Bio is Nature's Nanotech'. Technology belongs to macro-evolution; for example integration with artificial intelligence (AI) is inevitable. Darwinian adaptation manifests as integration of complexity, and awareness of this helps also in developing adaptable research methods that can find use across a wide range of research – so there is justification for all this even for a narrow minded engineering mindset.

Our approach is based on an analysis and philosophy concerning the evolution of nanotechnology, which must be seen in a wide context or otherwise it would not be proper thinking about evolution at all. General evolution as 'algorithmic evolution' and sufficiently general to be self-explanatory/emergent as evolution of evolution, is fundamental, even *a priori* in the sense of being metaphysically necessary in physicalist descriptions, the 'causal creation myth' of anything finding itself embodied in its world.

Read full, original post: Adapting As Nano Approaches Biological Complexity: Witnessing Human-AI Integration Critically