

How to Have Outrageously Good Ideas

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Generating good ideas is critical in doing successful scientific research and many other career paths. The process of generating good ideas, however, is largely ignored in research training. Just as with other skills, the ability to generate ideas is something that can be honed and improved. In this talk I will discuss several heuristics that can be used to systematically generate creative ideas.

Bio

David Sholl is the John F. Brock III School Chair of Chemical & Biomolecular Engineering at Georgia Tech. David's research uses computational materials modeling to accelerate development of new materials for energy-related applications, including generation and storage of gaseous and liquid fuels and carbon dioxide mitigation. He has published over 350 papers that have received over 16,000 citations. He has also written a textbook on Density Functional Theory, a quantum chemistry method that is widely applied through the physical sciences and engineering, and a novel, *Polyphony*. David is a Senior Editor of the ACS journal Langmuir and he was instrumental in the development of RAPID, a \$70M DOE-funded Manufacturing Institute focused on process intensification run by AIChE. He is on the Board of Directors of AIChE and in 2020 will chair the inaugural Gordon Research Conference on Chemical Separations. More information on David's research group is available from sholl.chbe.gatech.edu

