

Abstract for an Invited Paper
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How Advances in Science Are Made

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It is seldom the case that one can anticipate where great breakthroughs in science will occur, and even harder to anticipate where these breakthroughs will find applications to benefit mankind. In this talk the speaker will trace the development of NMR as an example of a development for which the applications were not at all obvious. He will then address the question of how discoveries in science occur, and will present a set of research strategies that can substantially increase the chances that one will make such a discovery. Finally, he will use his own discovery of superfluidity in liquid ^3He to show how most discoveries depend essentially on contributions, often many, made by the progress of the scientific community at large.