

Listen to the complete interview: Nobel Laureate Douglas Osheroff

[J.G. Jackson and C.J. Wood Professorship in Physics](#)
[Professor of Physics and Applied Physics](#)
[Stanford University](#)

Introduction Track: Keywords / Phrases

- Astrophysics
- Low-temperature lab
- Superfluids
- Helium 4, Helium 3
- Transition Temperature
- Absolute zero
- Viscosity
- Quantum mechanics
- Macroscopic
- Heat capacity
- Thermal conductivity
- Isotope
- Tritium

All sample questions are designed in order to apply internet search as a basis for exploring and discovering new information.

Sample Questions

- Professor Osheroff describes superfluids as “pretty amazing things”. What makes these type of fluids different from normal fluids?
- Professor Osheroff talks about work in a low-temperature lab. What information are you able to find about the type of research which goes on in low-temperature labs?
- Professor Osheroff provides an example of how sometimes even world leading scientist do not fully appreciate the substantial implications of their discoveries. What specific example does he provide?
- Why is an understanding of transition temperatures important? How can a knowledge of transition temperatures be used to inform scientific study?
- What is an isotope? Why is an understanding of isotopes important in Physics?