

THE JAMES FRANCK INSTITUTE

Director

- Margaret Gardel, Physics

Professors

- Paul Alivisatos, President, Chemistry
- Cheng Chin, Physics
- David DeMille, Physics
- Aaron Dinner, Chemistry
- Todd Dupont, Computer Science
- Greg Engel, Chemistry
- Laura Gagliardi, Chemistry
- Margaret Gardel, Physics
- Philippe Guyot-Sionnest, Chemistry
- William T. M. Irvine, Physics
- Heinrich M. Jaeger, Physics
- Woowon Kang, Physics
- Ka Yee Lee, Chemistry
- Kathryn J. Levin, Physics
- Michael Levin, Physics
- Peter B. Littlewood, Physics
- David A. Mazziotti, Chemistry
- Sidney R. Nagel, Physics
- Jiwoong Park, Chemistry
- Norbert F. Scherer, Chemistry
- Steven J. Sibener, Chemistry
- Dam Thanh Son, Physics
- Dmitri Talapin, Chemistry
- Bozhi Tian, Chemistry
- Andrei Tokmakoff, Chemistry
- Suri Vaikuntanathan, Chemistry
- Vincenzo Vitelli, Physics
- Gregory A. Voth, Chemistry
- Paul Wiegmann, Physics
- Linda Young, Physics
- Luping Yu, Chemistry

Associate Professors

- Dion L. Heinz, Geophysical Sciences
- Arvind Murugan, Physics
- Wendy W. Zhang, Physics

Assistant Professors

- Luca Delacretex, Physics
- Sarah King, Chemistry
- Andrew Higginbotham, Physics
- Elizabeth Jerison, Physics
- Zoe Yan, Physics

Emeritus Faculty

- R. Stephen Berry, Chemistry
- Laurie J. Butler, Chemistry
- Karl F. Freed, Chemistry

- Donald H. Levy, Chemistry
- Gene F. Mazenko, Physics
- Stuart A. Rice, Chemistry
- Thomas A. Witten, Physics

ABOUT THE INSTITUTE

The James Franck Institute (<http://jfi.uchicago.edu/>) is the premier institute in the U.S. for interdisciplinary research at the intersection of physics, chemistry and materials science. The Institute is home to scientists from condensed matter physics, physical chemistry, synthetic materials chemistry, atomic, molecular, and optical (AMO) physics, geophysics, and biophysics. Most of the faculty in the Institute are also associated with the University of Chicago Materials Research Science and Engineering Center (<http://mrsec.uchicago.edu/>) (MRSEC), Center for Quantum Sensing for Biophysics and Biosengineering (QuBBE (<https://qubbe.uchicago.edu/>))—a Quantum Leap Challenge Institute, the Center for Living Systems (<https://centerforlivingsystems.uchicago.edu/>)—A Physics Frontier Center, The Center for MXenes Synthesis, Reactivity and Tunability (<https://chemistry.uchicago.edu/news/phase-1-of-m-star-center-gets-investment-from-national-science-foundation/>) (M-STAR)—a Phase I Center for Chemical Innovation, and the NSF-Simons National Institute for Theoretical and Mathematical Biology (<https://www.nitmb.org/>) (NITMB).

The James Franck Institute was established after World War II as the Institute for the Study of Metals, with the present name being adopted in 1967 to reflect the emerging wider range of research activities covering the full spectrum of solids, liquids, and gases. Today, high-profile experimental and theoretical research in the Institute covers the areas of nanoscience, phase transitions, far-from-equilibrium phenomena, granular materials, low-temperature transport phenomena and superconductivity, ultracold atomic matter, quantum information, electronic structure, hydrodynamics, active matter, biophysics, and networks.

The Institute provides a stimulating environment for scientists of different disciplines to interact and aid each other's research. This facilitates pre- and postdoctoral researchers working jointly with mentors from different academic backgrounds. The intellectual environment in the Institute is further enriched by Senior Scientists, Senior Research Associates, Research Scientists and Visiting Scholars. Active colloquium and seminar series, as well as a more informal weekly "bag lunch", stimulate information exchange. Housed in the Gordon Center for Integrative Science building, the Institute provides office and state-of-the-art laboratory space which operates a number of specialized research facilities. These include a low-temperature (cryogenics) laboratory, materials preparation and spectroscopic facilities, scanning probe and electron microscopes, and extensive shop facilities.

In an age where much cutting-edge research lies at the boundaries between traditional disciplines, the James Franck Institute fosters creative interdisciplinary work at the forefront of science.

