

CHEMICAL PHYSICS

ACADEMIC PROGRAM INFORMATION



A PERSON INTERESTED IN CHEMICAL PHYSICS CAN CHOOSE FROM A VARIETY OF OCCUPATIONS, INCLUDING SPECTROSCOPIST, PHYSICAL CHEMIST, METALLURGIST, OR PHYSICIST.

THE PROGRAM

The theoretical basis of some branches of chemistry and physics overlap considerably. For example, it is sometimes difficult to distinguish between condensed matter physics and physical chemistry since both use the similar mathematical models to describe the behavior of matter. Students take core chemistry and physics courses (first-year and sophomore level), as well as courses in advanced physics and physical chemistry. Students have some choice in their advanced courses to pursue areas more closely aligned with their interests (e.g., optics, quantum mechanics, inorganic chemistry). Students also achieve a strong foundation in mathematics.

CAREER AREAS IN CHEMICAL PHYSICS

A person interested in chemical physics can choose a career that deals with branches of the physical sciences involving the physical and theoretical nature of matter. Generally, students interested in these branches of physical science continue their studies in a graduate program. Centre students have an outstanding record of gaining admission to graduate programs and excelling in their graduate studies.

INTERNSHIPS

Valuable skills within the field are gained through on- and off-campus research experiences such as internships, summer programs at national laboratories, and university summer institutes.

FACULTY

JEFF FIEBERG (B.S., Centre College; M.S., University of Illinois; Ph.D., University of Texas), Associate Professor of Chemistry. Current professional interests: nanoscience and photochemistry.

PHIL LOCKETT (B.A., Centre College; M.S.E., University of Pennsylvania; Ph.D., University of Kentucky), Professor of Physics. Current professional interest: astrophysics.

JASON NEISER (B.S., Centre College; Ph.D., University of Rochester) is an optical physicist whose doctoral work involved designing and investigating optical resonators in silicon. Current professional interest: silicon photonics.

EMERITUS FACULTY

BILL CRUMMETT (B.S., West Virginia Institute of Technology; M.S., Ph.D., West Virginia University), Professor of Physics. Current professional interests: physics education and novel electronic materials.

ED MONTGOMERY (B.A., Berea College; Ph.D., University of Kentucky), Professor of Physics and Chemistry. Current professional interest: quantum mechanics of confined systems.

PAXTON MARSHALL WILT (B.A., Centre College; Ph.D., Vanderbilt University), Professor of Chemical Physics. Current professional interests: laser spectroscopy and physics pedagogy.

VISIT CENTRE

The best way to judge Centre is to tour the campus, talk to the professors and students, attend a class, and spend the night in a residence hall. We invite you to visit and encourage you to contact the Admission Office if you have any questions.

FOR FURTHER INFORMATION ABOUT THE CHEMICAL PHYSICS PROGRAM AT CENTRE, CONTACT:

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