



Taking on the world's toughest energy challenges.™

## Positions in Computational Geomechanics and Rock Physics

ExxonMobil Research and Engineering Company has immediate openings in Computational Geomechanics and Rock Physics for research scientists at our Corporate Strategic Research Laboratory. Our lab focuses on fundamental science that can lead to technologies having a direct impact on the oil and gas industry. Our facilities are centrally located in scenic Annandale, New Jersey, approximately one hour from both New York City and Philadelphia.

We are looking for creative, resourceful individuals to join our Engineering Physics group and develop numerical methods/modeling techniques for predicting stress-dependent failure in rock, with emphasis on the effects of fracture, compaction, and chemical alteration on reservoir properties at multiple scales. The successful candidates will join a dynamic, multi-disciplinary group of world-class scientists who focus on performing breakthrough research and creating new approaches to solving our most challenging problems. Technical staff members in this position implement and report on independent research, participate in program development, and collaborate internationally with leading engineers and scientists from industry, universities, and other technical institutions.

Applicants should have a Ph.D. in applied mathematics, physics, engineering, geophysics, or a related field. Experience in theoretical geomechanics, rock failure criteria, and constitutive modeling is preferred. Candidates are expected to be proficient with numerical modeling tools and to be able to interact effectively with experimentalists. The Computational Geomechanics position requires a strong background in scientific programming and large-scale numerical methods (e.g., finite element and discrete element methods). Familiarity with geochemistry and reactive transport is preferred for the Rock Physics position. The ability to communicate and interact with internal and external groups will be an important selection criterion. Candidates should have a strong publication record, excellent oral presentation and writing skills, and show a desire and ability to grow into new science areas.

ExxonMobil offers an excellent working environment and a competitive compensation and benefits package. Please submit your cover letter and resume to our website [www.exxonmobil.com/ex](http://www.exxonmobil.com/ex) and apply to Computational GeoMechanics/Rock Physics. Additional information about these positions can be obtained by contacting Dr. Gareth Block ([gareth.i.block@exxonmobil.com](mailto:gareth.i.block@exxonmobil.com)).

***ExxonMobil is an Equal Opportunity Employer***