Open Call: Fulbright Specialist Program
Engineering Education Open Project

The Fulbright Specialist Program (FSP) is seeking a highly qualified professional to serve as a Specialist for a
42 day project, ‘Seismological Applications of Fracture Mechanics Problems’ to take place in Uzbekistan.

The Fulbright Specialist Program (FSP), part of the larger Fulbright Program, was established in 2001 by the
U.S. Department of State, Bureau of Educational and Cultural Affairs (ECA). The program pairs highly
qualified U.S. academics and professionals with host institutions abroad to share their expertise,
strengthen institutional linkages, hone their skills, gain international experience, and learn about other
cultures while building capacity at their overseas host institutions. Grant benefits include international
round-trip economy class airfare, transit allowance, all applicable visa fees, a daily honorarium, enrollment
in a limited health benefits program, lodging, meals, and in-country transportation.

Host Institution: Institute of Mechanics and Seismic Stability of Structures
Project Title: ‘Seismological Applications of Fracture Mechanics Problems’ (P008274)
Proposed Timeframe: Any 42 days between September or October, 2023, with flexibility pending the
selected applicant’s availability.
Location of Project: Tashkent, Uzbekistan

Project Description:
The study of the fracture processes in the earth's crust, in addition to general educational purposes, is of
great importance in connection with the solution of several specific practical tasks for many critical
construction projects such as high-rise buildings, dams, as well as stability of the sides of deep quarries.
Establishing quantitative relationships between the main parameters of fracture processes and
determining other characteristics of tectonic fields will allow us to better understand the nature of
geodynamic processes occurring in the bowels of the earth. Therefore, it is very important to learn how to
analyze the conditions of interaction between individual arbitrarily oriented discontinuities, identify the
most dangerous areas of their interaction and growth, as well as calculate seismic impacts arising from
earthquakes for the safe functioning of critical construction facilities.

Project Activities:
- Host classes and seminars on seismic fractures, their related effects and processes, and critical
  construction objects
- Participate in trainings and lectures to explain methodologies for modeling the intersection of active
  fault zones in Uzbekistan and crack propagation mechanisms and its calculation.
- Review articles and participate in the editorial board of the journal “Problems of Mechanics”

Preferred Qualifications
The Host Institution would prefer a Specialist with a high degree of language proficiency in Russian;
however, Russian is not required. They would like a Specialist with knowledge of fracture mechanics,
geodynamic processes, and crack propagations in continua during earthquakes or explosive impacts.
Lastly, they would like the Specialist to help them submit a joint local or international project toward
assessment and re-education of seismic risk for civilian infrastructure in the Central Asian region.

How to Apply
Applicants must meet all program eligibility criteria, including U.S. citizenship. A complete list of U.S.
applicant eligibility criteria can be found at https://fulbrightspecialist.worldlearning.org/eligibility-specialists.

Applicants must submit a CV and Statement of Interest (400-word limit) via email to fulbrightspecialist@worldlearning.org no later than Monday, July 10, 2023.

Please note that if you are selected as a potential candidate for this project, you will be required to submit an official application to join the Fulbright Specialist Roster in order to serve as the Specialist for this project. For more information regarding this process and the program, visit https://fulbrightspecialist.worldlearning.org/application-specialists/.