# Third Winner Iranian Researcher Resident Abroad



## **Project Title:**

Contribution from Molecular and Cytogenetic Approaches in Epidemiology to Cancer Risk Assessment and Prevention

### Researcher:

Firouz Darroudi (Ph.D.)

#### **Country of Residence:**

The Netherlands

### **University:**

Leiden, The Netherlands

Dr. Firouz Darroudi graduated from Leiden University in Radiation Genetics and Chemical Mutagenesis in 1991. He has been able to develop and apply different biological assays relevant for detecting the radiation overexposure doses, as well as to elucidate on the mutagenic, co-and antimutagenic potential chemicals. He has already published 134 articles in international scientific journals. In the present project, he aims at some goals such as developing, validating and applying state of art technology for example, fluorescence *in situ* hybridization (FISH) and premature chromosome condensation (PCC) to elucidate the formation of radiation-induced chromosome aberrations, their distribution within the genome, the repair kinetics of chromosomal damage within different cell cycle stages, individual susceptibility to radiation damage, assessment of biological dosimetry immediately following an accidental overexposure and for retrospective dosimetry.