

SHAHROKH POURBEYRANVAND

PERSONAL INFORMATION

- Nationality: Iranian
- Date of Birth: 1978
- Place of Birth: Tehran

EDUCATION

1997-2002	Tehran-south University-Technical faculty	Tehran
	<i>Bachelor in Mining Engineering, Exploration</i>	
2002-2005	University of Tehran-Institute of Geophysics	Tehran
	<i>MS in Geophysics, Geoelectrics</i>	
2006-2013	University of Tehran-Institute of Geophysics	Tehran
	<i>Ph.D. in Geophysics, Seismology</i>	

FURTHER TRAINING

2003	AEM (Airborne electromagnetic) methods by Fugro (Canada) NIGS, Tehran, Iran
2003	Seismic reservoir modeling using neural network by DGB (Britain) NIGS, Tehran, Iran
2003	Training full course (one week) for PMR (Proton Magnetic Resonance) by IRIS–NUMIS Instruments (France). IGUT (Institute of Geophysics, University of Tehran), Tehran, Iran
2006	Training workshop on technology management UNIDO, Tehran, Iran
2008	Training workshop on scientific writing skills (by Dr. Nakhaie from South Carolina University, USA) University of Tehran, Tehran, Iran
2008	Training workshop on Geodynamics NIGS, Tehran, Iran
2008	Training full course on GPS Malek-e Ashtar Industrial University, Tehran, Iran
2009	Training full course on seismological software (by Dr. Shomali) Institute of Geophysics, Tehran, Iran

2009 Numerical modeling in structural geology (by Prof. Burg from
ETH Zurich)
Geological Survey of Iran, Tehran, Iran

2010 workshop on scientific writing (Institute of Biochemistry and
Biophysics, University of Tehran)
University of Tehran, Tehran, Iran

2011 The origin of the universe
Uppsala University, Uppsala, Sweden

2013 workshop on scientific writing, Springer
University of Tehran, Tehran, Iran.

2013 EAGE Student Lecture Tour Middle East Tehran, Seismic
Imaging Fundamentals

2013 Network+
Specialized Academy of Science, Tehran, Iran.

2013 Translation course (English to Persian)
Harfe Akhar Institute, Tehran, Iran.

2013 Practical magnetic exploration workshop
NIGS, Tehran, Iran.

2014 Teachers Training Course (TTC)
Guya Arman Parsian (GAP) Institute, Tehran, Iran.

2014 International Computer Driving License (ICDL)
Nikou Pardazesh Institute, Tehran, Iran

2014 Tehran Faults Field trip
NIGS, Tehran, Iran.

2014 Delta Model, a new approach in strategic management
e-seminar.ir, Tehran, Iran.

2015 workshop on geodetic velocity calculation from GPS observations
and its application in geodynamic studies
Iranian Geophysical Society, Tehran, Iran

2016 Reservoir Geomechanics
Stanford online course.

2016 LPIC-1
Arjang higher education institute.

2016 Linux Shell Scripting
Sharif University of Technology, Information Technology Educational Lab

2016 workshop on the calculation of earthquake deformation by InSAR
Iranian Geophysical Society, Tehran, Iran.

PROFESSIONAL EXPERIENCE

- 1996-2002 Different Consulting Engineering Companies Tehran
Operator, Technician
■ Field and office work in land and aerial surveying and cartography projects (part-time)
- 1997-2003 Different educational centers Tehran
Teacher, education staff
■ Teaching in different levels in Mathematics, Physics, Computer, English language
- 2004-2014 NIOC Database, Exploration Directorate Tehran
Head of Geophysics group
■ Data management and personnel training, Kavoshgaran-e Zagros consultant engineers
- 2007-2008 Alaoddole Semnani institute of higher education Tehran
Visiting instructor
■ Geology and earthquake engineering fundamentals courses
- 2007-2009 Malek-e Ashtar University of Technology Tehran
Researcher
■ Research on seismology and earthquake prediction methods
- 2009-2012 Institute of Education and Research Tehran
Researcher
■ Research on seismology, earthquake prediction methods, Geophysical observatories and data centers
- 2011-2012 Keyhan Exploration & Production Services (KEPS) Tehran
QC manager
■ Quality control of the data management in NIOC exploration directorate upstream database
- 2012-2013 Kerman Graduate University of Technology Kerman
Visiting instructor
■ Seismology and Geoelectrics courses
- 2013-2014 Kharazami University Tehran
Visiting instructor
■ Seismology and Geoelectrics courses
- from 2014 International Institute of Earthquake Engineering and Seismology
Assistant Professor
■ Seismology Department

RESEARCH PROJECTS

First Phase and preliminary design of advanced sensors stations and Geophysical observatories, 2011-2013, Institute of Education and Research, Tehran, Iran.

Design of Geophysical Monitoring System with Defense Application, National Elites Foundation, 2016.

Study of stress and strain rate in Central Alborz by inversion of earthquake focal mechanisms and GPS data, International Institute of Earthquake Engineering, 2016.

Stress studies in the transition zone between the Zagros and Makran, International Institute of Earthquake Engineering and Seismology, 2017

Automatic determination of earthquake focal mechanisms in Iran by using waveform modeling, International Institute of Earthquake Engineering and Seismology, 2017

COMPUTER SKILLS

Experienced in using seismology related software such as SEISAN, SAC, Taup, GMT, experienced in LINUX, programming, and scripting in csh, Python, MATLAB, C++ etc.

Some experiences in GeoFrame (Charisma) and Geoview (Hamptons Russell) software packages on workstation (SUN) systems.

Geoelectrical software packages such as IPI2WIN, Res2D, WINSEV, Geosoft etc. for potential field data processing and interpretation.

Some experiences in GIS software such as ArcView and ArcInfo and ArcMap.

Experienced in general engineering software packages such as AutoCAD, Microstation, Surfer etc.

General computer information with knowledge of operating systems such as Windows, Unix and good Internet skills and also experienced in using office software package.

PUBLICATIONS

Sh. Pourbeyranvand and N. Kamalian, 2005, EM effects of earthquakes (Oral), 23rd symposium on Geosciences, Tehran, Iran.

Sh. Pourbeyranvand and M. Nabi Bidhendi, 2005, Calibration of logs for synthetic seismogram generation (Poster), 23rd symposium on Geosciences, Tehran, Iran.

Sh. Pourbeyranvand, M. Nabi Bidhendi and M. Sedigh Arabani, 2006, Well log preparation for synthetic seismogram generation, 12th NIGS(National Iranian Geophysical Society) Geophysical conference, Tehran, Iran.

Sh. Pourbeyranvand, 2007, Geomagnetic anomalies associated with

earthquakes, IUGG XXIII general assembly, Perugia, Italy (accepted abstract).

Sh. Pourbeyranvand, M. Gheitanchi and M. Nemati, 2007, Investigation of crust in Yazd province, central Iran, revealed from local seismic network data, IUGG XXIII general assembly, Perugia, Italy (accepted abstract).

Sh. Pourbeyranvand, 2008, A new approach in identification of interplanetary magnetic field anomalies related to earthquakes, 37th COSPAR Scientific Assembly, Montreal, Canada (accepted abstract).

Sh. Pourbeyranvand and M. Gheitanchi, 2008, A new method to identify the geomagnetic anomalies related to earthquakes, IAGA WG 1.2 on Electromagnetic Induction in the Earth 19th Workshop Beijing, China (accepted abstract).

Sh. Pourbeyranvand and A. Bali Lashak, 2008, Investigation of geomagnetic anomalies related to two earthquakes and introducing a new noise reduction method (Oral), ep2008, 1st conference on earthquake prediction, International Institute of Earthquake Engineering and Seismology, Tehran, Iran.

Sh. Pourbeyranvand, M. Sarajian and Z. H. Shomali, 2008, Investigation of geomagnetic anomalies related to several earthquakes in data recorded by the DEMETER microsatellite (Poster), 3rd conference on disaster management, University of Tehran, Technical faculty, Tehran, Iran.

Sh. Pourbeyranvand and A. Bali Lashak, 2010, Introduction of VAN earthquake prediction method, Pazhuheshyar journal, Malek-e Ashtar University of Technology, Tehran, Iran.

A. Bali Lashak, M. Zare, M. Gholamrezanezhad and **Sh. Pourbeyranvand**, 2010, Moment tensor inversions of nine events in Iran Evaluating the INSN data for calculating source parameters, Journal of Seismology, DOI 10.1007/s10950-010-9197-4.

Sh. Pourbeyranvand and Z. H. Shomali, 2012, Focal mechanism stress tensor inversion in Makran region, Iran, Iranian Geophysical Journal, No.1, Vol. 6.

Sh. Pourbeyranvand, 2012, A new method for the processing of the geomagnetic observatory data for reducing the environmental noise, Workshop On Geomagnetic Observatories and their Applications Islamabad, Pakistan (Oral -accepted abstract).

Sh. Pourbeyranvand, B. Lund, Z. H. Shomali, Th. Árnadóttir and M. Tatar, 2012, Stress and strain studies in the Zagros region, southwest Iran, Geophysical Research Abstracts, Vol. 14, EGU2012-PREVIEW, EGU General Assembly (Oral-accepted abstract).

Sh. Pourbeyranvand and M. Tatar, 2014, Variation of stress in the Zagros by using focal mechanism stress tensor inversion, Geosciences (ISI indexed), Vol. 93.

Sh. Pourbeyranvand, 2014, Stress and strain investigations in the Zagros". 2nd International Conference on Petroleum and Mineral Resources, Koya, Kurdistan, Iraq, (accepted abstract).

Sh. Pourbeyranvand, B. Lund, M. Tatar and T. Arnadottir, 2015. Spatial variations of stress and strain in the Zagros region, southwestern Iran, International Conference and School on Structure, Tectonics and Earthquakes in

the Alborz-Zagros-Makran Region, Tehran, Iran.

Sh. Pourbeyranvand, B. Lund, I. Abdollahie Fard, and A. Javaherian, Stress studies using 3D seismic interpretation and earthquake focal mechanism in an oil field, Southern Iran, 2015, 76th EAGE Conference & Exhibition, Spain, Madrid.

Sh. Pourbeyranvand and H. Dehghani, 2015, Noise reduction in geomagnetic records, Research Bulletin of Seismology and Earthquake Engineering (ISC indexed), 18, No. 2, 11-26.

Sh. Pourbeyranvand and M. Tatar, 2016. Aerial and maximum shear strain rate variations in the Zagros by using GPS data The 34th National and 2nd International Geosciences Congress, Tehran, Iran.

Sh. Pourbeyranvand and M. Tatar, 2016. Stress studies in Central Alborz by inversion of earthquake focal mechanism data, 2nd National Conference of Geology and Exploration of Resources, Shiraz, Iran.

Sh. Pourbeyranvand, 2016. Strain rate variations in the Zagros by using GPS data, 2nd National Conference of Geology and Exploration of Resources, Shiraz, Iran.

Sh. Pourbeyranvand, 2016. Simultaneous use of seismometers and GPS receivers for an earthquake early warning system, 7th International Conference on Integrated Natural Disaster Management, Tehran, Iran.

Sh. Pourbeyranvand, 2016. Preliminary implementation of VAN geoelectrical method for earthquake prediction, 1st Conference on New Horizons in Electrical Engineering and Energy in Iran, Tehran, Iran.

Sh. Pourbeyranvand, Gholami Dargahi, M., 2016. Stress investigations in Qeshm island by inversion of earthquake focal mechanism data, 17th Geophysics Conference of Iran, Tehran, Iran.

Sh. Pourbeyranvand, Tatar, M., 2017. Investigation of stress and strain rate variations in the Central Alborz by using earthquake focal mechanisms and GPS velocity vector data, Geosciences, 27, No. 108, p57-66.

Sh. Pourbeyranvand, 2019. Stress studies in Central Alborz by inversion of earthquake focal mechanism data, Acta Geophysica, doi: 10.1007/s11600-018-0207-1.

AWARDS AND HONORS

Financial support of M.S. thesis from R&D unit of the Ministry of Petroleum of Iran, 2004

First ranked accepted candidate in Ph.D. entrance examination, University of Tehran, 2005

Doctoral scholarship from MSRT (ministry of science, research and technology), Iran, Industrial University of Kerman graduate studies, 2009

Six-month scholarship for short period studies in Sweden, awarded by MSRT and Uppsala University, Uppsala, Sweden, 2010

Two-month grant as a guest researcher, awarded by Uppsala University,

Uppsala, Sweden, 2011

Financial support of Ph.D. thesis from Pars Oil & Gas Company (POGC),
Tehran, Iran, 2013

Achieving selected graduates requirements from Iran's National Elites
Foundation (INEF) and passing a research project instead of the military
service, Iran, 2014

Scientific Committee member of SEE8 international conferences

PROFESSIONAL MEMBERSHIPS

European Association of Geophysicists and Engineers (EAGE)

National Iranian Geophysical Society (NIGS)

National Iranian Mining Engineering Organization, Tehran Province (IME)

Iranian Scientific Society of Engineering Electromagnetics (ISSEEM)

IAGA Division VI - Electromagnetic Induction in the Earth and Planetary
Bodies

Iranian Society of Crystallography and Mineralogy

LANGUAGES

Persian, English, Arabic, French

REFERENCE

Dr. B. Lund, Professor of Seismology
Uppsala University, Uppsala, Sweden
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Dr. A. R. Javaherian, Professor of Geophysics
Amir-Kabir University of Technology (Tehran Polytechnic)
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