CURRICULUM VITAE

1- PERSONAL DETAILS

First Name Mehdi **Surname:** Amini Married **Marital status:** Date of birth: June 20, 1980

Nationality: Iranian

Languages: Persian, English

Current Address: Mehdi Amini- School of Mining Engineering- Faculty of

Engineering- University of Tehran- Amirabad Shomali-

Tehran-Iran

Tel: (Home): +98-21-44066192

Mobile: +98-912-2269153

Fax: (Office): +98-21-88008838 E-mail: Amini chermahini@yahoo.com

2- PROFESSIONAL DETAILS

2.1 UNIVERSITY EDUCATION

• 9/2005-2/2009 PhD., Minig engineering, Rock Mechanices, University of Tehran and TOKAI university.

Supervisours:

1-Pro. Omer Aydan, Department of Civil Engineering, Tokai University, Shimizu, Japan. 2-Dr. Abbas Majdi, School of Mining Engineering, University of Tehran, Tehran, Iran.

PhD Thesis Subject:

"Static and dynamic stability assessment of roc slopes against flexural toppling failure and their stabilizations (theoritically, experimentally and case studies)"

9/2002 - 3/2005 M. Sc., Minig engineering, Rock Mechanices, University of Tehran, Tehran, Iran.

Dr. Abbas Majdi, School of Mining Engineering, University of Tehran, Tehran, Iran.

9/1998 - 9/2002 B.Sc., Mine Engineering, Shahid Bahonar University, Kerman, Iran.

Dr. Saeid Kariminasab, School of Mining Engineering, University of Kerman, Kerman, Iran.

2.2 CERTIFICATES

- Value engineering.
- Principles of writing report.

- Standing first in the university PhD. entrance examination.
- Standing first in the B.Sc. level.
- Standing first in the high school level.

2.4 Profession MEMBERSHIPS

- Iranian Society of mining engineering.
- Iranian Society of Rock Mechanics.
- Iranian Society of Geo-environmental engineering.

2.5 Computing Skills & Programming

- **Geotechnical Softwares:** Itasca package, Geoslope package, Rocksience package,...
- **Programming Language:** C++. FORTRAN
- MS-DOS and Windows 98, 2000 & XP, Microsoft office 98, 2000 & XP, Interment explorer.

2.6 Teaching Activities

• Teaching courses: Rock mechanics, Geotechnics, Static, Solid mechanics, tunneling and shaft excavation.

3- Research Activities:

3.1 Fields of Interest

- Rock slope stability.
- Soil and rock laboratory tests.
- Fracture mechanics of rock.
- Artificial neural network.

3.2 Papers

- 1. Abbas Majdi, **Mehdi Amini**, (2011), Flexural toppling failure in rock slopes: from theory to applications, International journal of mining and geo-engineering
- آرش رزمخواه-مهران قلی زاده-مهدی امینی-احمد حکمت روش، بررسی کاهش نفوذپذیری زهکش شنی سازه های فروشویی
 توده ای در اثر عامل شیمیایی، فصلنامه علمی-پژوهشی زمین شناسی و محیط زیست،
- ۳. استفاده از فرآیند تحلیل سلسله مراتبی جهت انتخاب لایه ایزوله مناسب در سازه فروشویی طارم، اولین کنگره جهانی مس –
 ایران،
- ۴. تحلیل کاهش نفوذپذیری زهکش شنی سازه های فروشویی توده ای در اثر گرفتگی شیمیایی (مطالعه موردی معادن میدوک و طارم)، اولین کنگره جهانی مس⊣یران،
 - ۵. تعیین پارامترهای برشی بین لاینر ژئوممبران صاف و لایه رس مصنوعی، اولین کنگره جهانی مس ایران،
 - ⁹. تحلیل پایداری تونلهای انحراف آب سد مشمپای زنجان با روش المان مجزا، اولین کنفرانسل تونل ایران
 - ۷. تجزیه و تحلیل نتایج آزمونهای مکانیک سنگی معدن مس طارم و انجام تستهای مربوطه، طرح تحقیقاتی
 - Amini M., Majdi, A. and Aydan O., (2009), "Stability Analysis and the Stabilization of Flexural Toppling Failure in rock slopes", Rock mechanics and rock engineering, DOI 10.1007/s00603-008-0020-2.

- 9. <u>Amini, M.</u>, Amini, A., Bahrami Samani, F., Zuger M. (2006), "Presenting a technical-economical solution for rock fall control in section I Tehran-Fasham road",4th Asian Rock Mechanics Conference.
- Amini M., Aydan O., Majdi, A. (2009), "An experimental study in rock slope against dynamic flexural toppling failure", 7th International Symposium on Rock-burst and Seismicity in Mines.
- 11. Aydan O., <u>Amini M.,</u> (2009)"An experimental study on rock slopes against flexural toppling failure under dynamic loading and some theoretical considerations for its stability assessment', Journal of the school of marine science and technology, Tokai university, Vol. 7, No. 2, pp 25-40.
- 12. Majdi, A., Amini M., (2008), "A new analytical method for analysis of flexural toppling failure in rock slopes", 42nd US Rock Mechanics Symposium and 2nd U.S.-Canada Rock Mechanics Symposium.
- 13. Majdi, A., **Amini M.**, (2008), "Effects of geo-structural weaknesses on flexural toppling failure on the bases of fracture and solid mechanics", ISRM International Symposium.
- 14. Majdi, A. and <u>Amini M.</u>, (2007), "Prediction of triaxial compressive strength of intact rock samples by Artificial neural network", 60th Canadian geotechnical conference.
- 15. Majdi, A. and <u>Amini M.</u>, (2006) "Effect of structural defects on the analysis of flexural toppling (Based on fracture mechanics)", (in Persian), Journal of Transportation Research, Vol. 3, PP 206-222.
- Majdi, A. and <u>Amini M.</u>, (2006), "An investigation on mechanism of VANA landslide", (in Persian), 4th Iranian Geo-environmental engineering conference, Tehran, p. 256-266.
- 17. Amini A. and **Amini M**., (2006), "Engineering geology aspects of DASTCAN dam", (in Persian), 4th Iranian Geo-environmental engineering conference, Tehran, p. 494-505.
- 18. Majdi, A. and Amini M., (2006), "Slope stability analysis of DOPOLAN dam and channel", (in Persian), 4th Iranian Geo-environmental engineering conference, Tehran, p. 520-528.
- 19. Majdi, A. and <u>Amini M.</u>, Amini, A., (2009), "An investigation on mechanism of copper heap leaching structures, case studies: Sarcheshmeh leaching heap 2 and Tarom heap leaching structures", Journal of Hazardous Material, 165 (2009) 1098–1108.
- Majdi, A. and <u>Amini M.</u>, Kariminasab, S., (2007), "Adequate drainage system design of copper heap leaching structure, case study: Sarcheshmeh heap leaching structures", Journal of Hazardous Material, 147-288-296.
- 21. Majdi, A. and <u>Amini M.</u>, (2005), "Design of drainage net for copper heap leaching structures", (in Persian), First Iranian mining engineering conference, Tehran, p. 1651-1666.
- 22. Majdi, A. and <u>Amini M.</u>, (2005), "Application of block to block stability analysis in construction of copper heap leaching structures", (in Persian), Second Iranian Open Pit Mine Conference, Kerman, p. 81-90.
- 23. Majdi, A. and <u>Amini M.</u>, "Block to block stability analysis of copper heap leaching structures (A new method)", (in Persian), Journal of Faculty of Engineering, Vol. 40, No. 1, May 2006, PP 55-65.

4- Professional Experience:

4.1 Professional Affiliation

- Rock mechanics engineers of TAMAVAN consultant enginners, (2006- till now) Moshampa, Mehtar, Kavar, Gezel tapeh and Nargesi dams.
- **Head of Geotechnical Lab.,** (2006-2008), Chase-Mandro Geotechnical consulting engineers, Thran, Iran and Landon, England.
- Research Assistant and Rock and soil Mechanics Project Manager, (1/04 6/05), Infrastructure Division, Transportation Research Institute, Tehran, Iran.
- **Site Engineer** (1/03 9/03), Khavar Tunnel Consultant Engineering, Shahid Madani St., Tehran-Iran

- **Site Engineer** (9/02- 11/02), Sarcheshmeh Copper Mine Industrial Complex, Kerman, Iran.
- Geotechnical engineer of DASTCAN dam, (2005), ZAMAB consulting engineers.
- Geotechnical engineer of SHAIKH MOSA and ESHKEVAR water-electrical powerhouse, (2002), TARHAFRA consulting engineers.
- Geotechnical engineer of DOPOLLAN dam, channel and powerhouse, (2000), PARSAB consulting engineers.
- Geotechnical engineer of TAROM copper industrial company, Ariahangard consulting engineers.
- Geotechnical engineer of MIDUK heap leaching structure, CANYMES company.

4.2 Handling and management of laboratory tests of projects such as (more than 100 project):

- Tarom heap leaching structure
- Sargaz heap leaching structure
- Abbas-Abad heap leaching structures
- Miduk heap leaching structures
- Pars LNG on-shore investigation Tombak
- Pars LNG near-shore investigation Tombak
- Persian LNG on-shore Soil Investigation Tombak.
- Persian LNG near-shore Soil Investigation Tombak.
- SCM-Upgrade of Tailings Disposal of Sarcheshmeh copper mine
- Investigations of Bushehr Port Development Bushehr
- Investigations of Godar Khosh Dam Ilam.
- Investigations of Tang-e-Hale Reservoir Dam Khoram Abad.
- Vanak City Center High building.
- Neka Dry Dock- Iran.

4.3 Other Skill

- Determination of borrow resources of copper heap leaching structures
- Normally soil tests such as: Uniaxial and Triaxial Compression Tests, Direct shear, CBR, Compaction, Pin hole, Grain size, Water content, Permeability, Consolidation, Hydrometer, Soil description, ...
- Especially soil tests such as: Isotropic consolidation, anisotropic consolidation, unsaturated triaxial test, dynamic triaxial test.
- Rock tests such as: Brazilian Test, point load, triaxial, direct shear, swelling, Bending, water content, porosity,...
- Aggregate tests such as: Water absorption, Los Angels, Soundness, G_S.
- Concrete tests such as: Uniaxial compressive Strength.
- Familiar with laboratory electronic equipment such as: Pore pressure, transducer, suction pressure, electronic velum change, data logger, digital full control triaxial jack, electronic load cell, ...