

CURRICULUM VITAE

Personal Information

Name: ADEL ALFREHAT
Date of Birth: 28 December 1974
Marital Status: Married

Contact Information

Office Address: Ministry of Housing and Urban Development
Directorate of Surveying & Geomatics
Higaz, Damascus, Syria
Present Position: Supervisor and designer geomatic engineer

Home Address: Third Floor, Seef Building, Al Wahda, Garamana, Damascus, Syria
Telephone: 00(963)115624081 - Mobile: 00(963) 955354237
Email: ALFREHAT1974@YAHOO.COM - RANDOGPS84@HOTMAIL.COM

Academic Education

- **PhD degree in Geomatic Engineering (Satellite Geodesy - GPS) 2001-2005:** Technical University of Kosice, Faculty of Mining, Ecology, Control and Geotechnology, Institute of Geodesy and Geographic Information Systems, Department of Geodesy, Slovakia.
- **Civil Engineering 1992-1997:** University of Damascus, Faculty of Civil Engineering, Department of Topography

Brief Biography

- **1997- 2001: Ministry of Housing and Utilities.** Supervisor and executive engineer in the field of surveying, production of digital topographic maps designed for urban infrastructure, housing, GIS applications and utilities purposes in many Syrian topographic projects.
- **August 2005 – April 2006: Ministry of Housing and Utilities.** Supervisor engineer in the field of developing surveying standards and books of conditions and follow up and audit of projects done by 3rd parties.
- **April 2006 – up to now: Ministry of Local Administration and Environment – Directorate of Surveying & Geomatics –Dept. Geomatic Technologies.**
 - Survey many Syrian regions and infrastructure (topographic survey, deformation monitoring, GPS surveying, GIS application development, applications of remote sensing).

- **September 2013 – up to now: Ministry of Housing and Urban Development** : Supervisor engineer in the field of developing surveying standards and books of conditions and follow up and audit of projects done by 3rd parties.
 - Processing and Adjustment of many geodetic networks measured by GPS and traditional survey in many Syrian regions.
 - **Developing standards and books of conditions in the field of digital maps, GIS, GPS, and Total Stations...**
 - Design of urban infrastructure, follow up and audit of projects done by 3rd parties and acceptance of projects.
 - Establishment of many geodetic control networks for many regions in Syria using GPS and traditional techniques and detail survey and full plan preparation.
 - Performing a GPS Survey for determination precise ground control points for orthorectifying the satellite and photogrammetric images for Syrian Eastern Region Development Program and GIS applications.
 - Follow up and audit of maps carried out by Photogrammetry.
 - **Training a team in the field of GPS survey, processing GPS data, least squares networks adjustment, quality control and coordinates transformation.**
 - **Lecturer of Geodesy and Surveying at Faculty of Civil Engineering – University Of KOSICE – SLOVAKIA through PhD Study.**
 - **Lecturer of Geodesy and GPS at Engineering Technological Institute of Damascus University-2009.**
 - **Lecturer of Geomatics subjects of GIS Lectures at Faculty of architect Engineering – University of Damascus -2014 -MSc**
 - **Lecturer of Surveying and documentation of architecture at Faculty of architect Engineering – University of Damascus -2014 - 2015**
 - **Yarmouk Private University- Faculty of architect and civil and environment Engineering-Surveying**

Memberships, Workshops, and Conferences:

- Professional Engineer in the Order of Syrian Architects and Engineers – Damascus since 2014
- Practitioner Engineer in the Order of Syrian Architects and Engineers – Damascus since 1997
- Member of the national action group to monitor seismic disaster using remote sensing techniques and other information systems, representatives of the Ministry of Local Administration and Environment since 2007.
- Conference of Topical Trends in Geodesy, Cartography, GIS and Real Estate Register under new conditions of European Union - Herfany – Slovakia –13. -14. October 2004
- Conference of Geodesy - Karlovice - VŠB-TU Ostrava – Czech Republic -2004
- International Conference of Geodetic Networks – Institute of Geodesy and Cartography of Bratislava – Tatry – Bodbanske – Slovakia – 2001

ADEL ALFREHAT, PhD.

- Participation in many symposiums set up by the Order of Syrian Engineers and Syrian Computed Society in the field of GIS, Remote Sensing and Geomatics.
- Participation in the regional, urban, transportation planning dialog training program within the project of modernization municipal administration in the Ministry of Local Administration and Environment sponsored by the European Union.
- Participation in workshops and study project sponsored by the Organization of Swedish Land Management.

Research Interests:

- GPS for cadastral surveying
- Deformation Monitoring
- Network RTK & GNSS, GIS, Remote Sensing applications
- Geoid Determination and Transformation of GPS coordinates.

Computer, Software Skills:

- Windows operating system, Microsoft Office (Word, Excel, PowerPoint)
- Engineering Geodetic and Surveying Software
 - Topcon Pinnacle Processing GPS software.
 - Trimble Geomatic Office and GPSurvey GPS Post-processing software.
 - Leica Geo Office combined Terrestrial and GPS Post-processing software.
 - Sokkia GPS Spectrum Survey Processing and GPS planning software.
 - Ashtech Solutions, Thales Navigation Software
 - AutoCAD Land Development
 - StarNet Plus, GeoLab Adjustment Software, CAT
 - Photomod Photogrammetric Software
 - ArcGIS – ESRI.
 - MathCAD and Maple Mathematic Software
 - Google Earth
 - ERDAS EMAGINE Software
 - Photo Modeler Software
 - Autodesk Raster Design.
- Working with navigation and geodetic GPS receivers (Topcon, Sokkia Leica, Trimble, Garmin) and other receivers if they are available.
- Working with Global, Local and European survey standards and specifications.
- Experience with many types of mapping projections and transformation of GPS coordinates into local coordinate systems, processing GPS data in World Geodetic System WGS-84, ITRFyy and in many civilian and military systems.
- Languages
 - Arabic (Mother Tongue)
 - English (very good), Slovak (very good), Czech (good).

Other Abilities:

Teaching in the following subjects: GPS, Adjustment Computations, Geodesy, Surveying, Space Geodesy, Cartography, Coordinate Systems, Map Projection, Photogrammetry, Remote Sensing, GIS, Cadastral Surveying and Mapping.

Papers and Publications:

- **Alfrehat, A., Mojzeš, M., Sabová, J.: A new Slovak Mapping Projection Compatible with GPS**, Acta Montanistica Slovaca, Košice, Year (2006).
- **Alfrehat, A., Sabová, J., Mojzeš, M.: Derivation of Some Geometric Parameters from GPS Measurements**, Acta Montanistica Slovaca, Košice, Year 10 (2005), No.3, Page 310-316.
- **Alfrehat, A., Mojzeš, M., Sabová, J.: Computation of the Ellipsoidal Height related to the Bessel Ellipsoid**, Conference of Herľany (2004), Acta Montanistica Slovaca, Košice, Year 10 (2005), No.2, Page 63-68.
- **Alfrehat, A., Sabová, J.: Determination of Distances in S-JTSK Slovak Coordinate System from GPS Survey**, Prague, Uhlí-rudy-geologický průzkum. vol. 53, no. 3 (2005), p. 22-24. ISSN 1210-7697.
- **Alfrohat, A., Mojzoč, M., Sabová, J.: GPS and a New Slovak Projcction**, Transactions of the Universities of Košice : Research report from the Universities of Košice. č. 3-4 (2004), s. 20-25. ISSN 1335-2334.
- **Sabová, J., Alfrehat, A.: Positioning Accuracy of the Points Determined using GPS Technique**, Společnost dulních měřičů a geologu, institut geodézie a dulního měřictví, HGF, VŠB-TU Ostrava. Conference of Karlovice, 5.-7. 10. 2004.
- **Alfrehat, A. Exchange of Geomatic Data in the field of Urban and Regional Planning**, Order of Syrian Engineers – Al-Swida –Syria.2006.
- **Alfrehat, A. Using of Modern Geomatic Techniques in the field of GIS Applications**, Syrian Computer Society – Al-Raka –Syria.2008.