

CURRICULUM VITAE

Name : Samir Abdel Tawab El Sayed
Date of Birth : 3 / 12 / 1959
Nationality : Egyptian
Marital Status : Married (has three sons)
Employer : Professor Eng. Geol. Ain Shams University.
Senior Geotechnical Eng. 25 years' Experience with Dar Al Handasah
EDUCATION : PhD, Engineering Geology, Ain Shams University, Cairo, Egypt, 1989.
: MSc, Structural Geology, Ain Shams University, Cairo, Egypt, 1986.
: BSc, Geology 1982, Ain Shams Univ., Cairo, (Excellent with Honor Degree)



Present Occupation: Professor of Engineering Geology (Ain Shams University) and Freelance Consulting.

Field of Specialization : **Engineering Geologist /Geotechnical Engineer**
Languages : Arabic: mother tongue and English (very good reading and writing)
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SUMMARY OF CAPABILITIES:

Dr. El Sayed has a strong academic background complemented by wide practical experience in the fields of engineering geology, structural geology and geological mapping. His field of expertise includes design and supervisions for several projects related to stability analyses of rock cuts, geological engineering problems related to tunneling, geological engineering studies for selecting sites for large road and civil engineering projects, geophysical surveys and their interpretation, analysis of engineering problems related to geological conditions and geological/geotechnical mapping for a variety of engineering applications.

Dr. El Sayed is a Dam Expert in the Egyptian National Committee for Aswan High Dam, a committee responsible for the review and approval of all design, construction and maintenance works related to that dam. He is also member of the Egyptian Code for Soil Mechanics Committee (foundations design and construction) where he participated in writing a section on foundations on rocks.

As a Senior Tunnels Engineer, Dr. El Sayed has worked extensively on a large number of highway and tunnel projects, for both hydraulic and vehicular transportation purposes, in Saudi Arabia, Lebanon, Morocco, Yemen, and Turkey.

Tunnel Projects included:

- **Algeria: 7 twin-tube tunnels totaling 5.7 km** as part of the Autoroute Est-Ouest, for 3-lane traffic.
- Saudi Arabia: twin-tube tunnels on the 4.4 km Makkah First Ring Road.
- **Turkey: Bursa Ring Road, 2 twin-tube tunnels, 1.7 km in length;**- Yemen: 2 single-tube tunnels, 2.3 km in length.
- **Stormwater drainage tunnel in Beirut Southern Suburbs Infrastructure Project, Lebanon** (2 km long, 3.2 m in diameter in soft ground and rock formations).
- **Wade Ibrahim sewerage tunnel of Makkah, Saudi Arabia** (750 m long, 3 m diameter through rock).
- **Sewerage tunnel of Greater Casablanca, Morocco** (7.5 km, 3 m diameter through soil and rock formations).
- **7 km TBM (LOVAT) Hydraulic tunnels in Algeria Binharon Transfer Project,5m Diameter Tunnel in Karst Caved Limestone and clays.**

- Evaluation of Aswan High Dam Drainage and Monitoring Tunnels.

His involvement in the above tunnels covered the geological and geotechnical site investigation, full design of the tunnel and the design and control of the excavation/blasting patterns and techniques. Also his involvement for solving the tunnel problems of heterogeneous face and caves.

Dr. El Sayed participated in the design of the Adasiya Dam and Weir as well as several complex roads. These involved elaborate bridges, cross-drainage structures and protection embankments against flooding, impounding and sea-wave action.

**PROFESSIONAL
EXPERIENCE:**

Period of 1993 up to August 2019 :Jointed with Dar Al-Handasah Consultants (Shair and Partners),
Geotechnical Dept.

As Senior Engineering Geologist

Responsible for site investigations, preparation of tender documents and site supervision of all geotechnical works for the following project(s):

- Qatar - Bahrain Causeway/Preliminary Environmental and Engineering Investigations and Studies, Qatar. Definition of the location and geometrical configuration of the Causeway, conducting preliminary environmental and engineering investigations, and concept design of bridges and marine works, environmental and infrastructure works, toll plazas, rest areas, customs and immigration facilities, etc. along the Causeway in such a way as to optimise the cost of construction and to ensure minimum disruption to the ecology of the area. Duties also comprised the creation of a Direct Demand Model (DDM) for traffic estimation along the Causeway and its approach roads; optimisation of toll levels, traffic diversion and modal split of Causeway traffic; evaluation of traffic impacts and road network performance for a series of potential crossing locations; and development of associated suggested network improvements needed for efficient performance of the new facility.
- Terminal 3 - Dubai International Airport, United Arab Emirates. Design and supervision of construction for a new terminal (180,000 m², linked to Concourse 2) to cater for 10 million passengers/year. The building, dedicated to the Emirates Airlines, includes 180 check-in counters and all special systems, namely passenger boarding bridges, baggage handling units, Flight Information Display (FID) and Baggage Information Display (BID) systems, security systems, building management and public address systems, CCTV, integrated systems, etc. Other facilities comprise lounges, restaurants, duty free area, clinic, hotel, and underground and surface parking areas for 3,500 vehicles. Works also included design of the road network leading to and out of the terminal, including two interchanges.
- Concourse 2 - Dubai International Airport, United Arab Emirates. Design, project management and supervision of construction of a new Concourse (490,000 m² built-up area), linked to Terminal 3, to cater for 22 million passengers/year. The building, dedicated to the Emirates Airlines passengers, has a length of 925 m and a 95-m wide steel cover shell, 4 basements, 7 upper floors, 27 contact gates including 5 A-380 aircraft stands in addition to serving 13 aircrafts at remote positions. The new Concourse accommodates ground operation services and electromechanical equipment at apron level, arriving and departing galleries, holdrooms, Automated People Mover (APM) station, 5-star (100 keys) and 3-star (150 keys) hotels, shopping mall, a 10,000 m² duty free area and all special airport systems (passenger boarding bridges, baggage handling systems (BHS), flight/baggage information display (FIDS/BIDS), security, building management and public address, CCTV, integrated systems, etc.).
- Participated in geological mapping, site supervision, geotechnical studies, including rock cut design and protection, and rock slope analysis/design and protection relevant to the following selected project(s):
- Koudiat Rosfa Dam, Algeria. Detailed design, "for construction" drawings, and supervision of construction of a 57 m-high earthfill dam, with a central clay core, intake tower, injection gallery, spillway with 51 m long overflow weir, 260 m-long and

3 m-diameter diversion tunnel, etc. Geotechnical works comprised seepage analysis, stability for all operating modes including earthquake analysis, grout curtain and cut off, foundations for intake tower, and geological assessment for diversion tunnel. Design review and construction details of an earthfill dam across Wade Fadda, 57 m in height, 300 m in length and 73 MCM in capacity; including extensive technical investigations, seismic analyses, in-situ permeability packer tests, seepage and stability analyses, and design of grout curtain to minimize seepage flow underneath the dam.

- Bin Haroun Transfer Project (Algeria), Design and supervision of 6000 lm TBM tunnel, Treatment of 3 km sliding masses using Miropiles and Soil nailing 40 m depth ,Gabions and deep drainage trenches. Also the project includes design drawing and supervision of installation and backfilling of high pressure (80 bars) steel pipe line of diameter of 2.6m.
- Athmania Dam (Algeria), Design drawings and supervision of dam (30 Million m³ water capacity Earth Dam) during construction and technical assistant for the Injection team.
- Rehabilitation and Reinstatement of Dam 19 and 20 (Concept Designs), Jordan. Conceptual design of alternatives and rehabilitation works for the reinstatement of the Salt Pan 0B (part of the Arab Potash Company solar evaporation project), the impoundment of which led to a catastrophic collapse of a 2.3 km stretch of Dam 19, due to foundation failure and subsequent hydraulic erosion. Works comprised reconstruction of the failed sections, and rehabilitation of the existing dikes bordering Salt Pan 0B and the Pan floor to render the solar evaporation pond operational once more.
- Astana Infrastructure Project, Kazakhstan. Assessment of existing planning and studies of the project area, development of alternative plans and economic feasibility studies, and preliminary design for the surface drainage system and groundwater table lowering of the Ishim River's left bank. Feasibility study and preliminary design for the rehabilitation of the existing sewage treatment plant and design of a new one with a new reservoir for treated effluents to cater to the City requirements up to the year 2030. Duties also included detailed geological, geophysical, geotechnical, topographical and hydrogeological investigations (6 exploratory wells, 20 piezometers and aquifer testing). Financed by KFAED.
- Zigar - Khostav - Shkev Highway, Tajikistan. Design and construction supervision of a 38 km road comprising earthworks (cut and fill), new asphalt pavement, new bridges, culverts, walls, roadside furniture and road markings. The road has a Class III asphalt pavement with a two-way traffic and a design speed of 50 km/h. The road is 12 m wide including a 7 m carriageway and 2.5 m shoulders on each side. Financed by KFAED, SFD, OPEC.
- Astana Master Plan, Kazakhstan. Preparation of a comprehensive plan for the new capital Astana to accommodate a population of 600,000 by the year 2030. Undertaken in 3 stages: survey, analysis and studies of the development context of the present city; analysis of the master plan determinants and evaluation of 3 master plan options; and preparation of the master plan with a description of its individual components and phasing arrangements. The master plan included a detailed development programme for the first phase of the development and plans for the city centre.
- Design Review and Supervision of Mujib Diversion Dam, Tunnel, Conveyors and Irrigation System, Jordan. Design review, construction documents and construction supervision for a diversion conveyance and distribution scheme covering headworks at Mujib Ghors and consisting of a conveyance system (96 km) to serve touristic, industrial and agricultural areas, and an irrigation area of 1,200 ha between Aqaba and the Dead Sea. Works comprised 3 pumping stations and 8 water tanks with complete structural design and production of detailed drawings. Geotechnical works included supervision of subsurface investigation, rock stability analyses, seepage analyses, pavement design, treatment of soil and rock for infrastructure construction, foundation recommendations for various structures, and stability and serviceability analyses for the Diversion Dam structure.

- **Wadi Ibrahim Sewerage Tunnel, Saudi Arabia.** Planning, surveys, design and supervision of construction for the sewerage system of Wadi Ibrahim, including a 3 m diameter, single-tube, 900 m long tunnel through rock, with geological and geotechnical site investigations, engineering geological mapping, and design and control of the excavation blasting patterns and techniques.
- **Greater Casablanca Sewerage Scheme, Priority Areas, Morocco.** Geotechnical investigations, design and construction documents for 3 sewage treatment plants, 3 sewage pumping stations, 2 long sea outfalls, interceptor sewers and a 7.2 km sewerage tunnel 3 m in diameter passing through soil and rock formations. Financed by IBRD.
- **King Abdul-Aziz Sabeel, Saudi Arabia.** Design and supervision of construction for a storage reservoir, pumping stations, water transmission pipeline 7 km long and stormwater drainage facilities, including rock excavation (200,000 m³) by blasting and cut slope geometry and support system.
- **Arafat Fire-Fighting Tunnels, Saudi Arabia.** Design and supervision of construction of 2 water reservoir tunnels (450 m long) with a capacity of 100,000 m³ each, a pumping station, all required pipelines, valves, connections and 1 km long 8 m wide road to the tunnels. Works also included geological mapping, rock mass classification, tunnel design, rock classification for tunnel support design, geological profile along tunnels, portal rock cut slopes and support, evaluation of the geotechnical report including foundation recommendation and the design and construction guidelines based on geotechnical calculations and stability analysis.
- **Arafat Fire-Fighting Network - Design, Saudi Arabia.** Design of the road networks and pedestrian services to access the fire-fighting network, including 35 km of approaches and links in addition to the preparation of the new Arafat base map. Works also included geological mapping, rock mass classification, foundation design parameters, planning of site investigation programme, preparation of tender documents for site investigation, supervision of borehole drilling, soil sampling and field testing, evaluation of factual site investigation report, evaluation of the geotechnical report including foundation recommendation and the design and construction guidelines.
- **Conveyor 800, Lebanon.** Preliminary design of a main and secondary conveyors (total length of 147.4 km) from the Qaraoun Dam on the Litani river, for the irrigation of 15,000 ha and water supply to 99 villages. Works included soil survey, socio-economic survey, feasibility study, development of a GIS system as decision making tool in addition to reservoirs, tunnels and other hydraulic structures. Concept design and sizing of the irrigation distribution networks from the farm turnout downstream up to the main supply lines for 12 irrigation areas totaling 15,000 ha.
- **Muzdalifah Infrastructure - Design and Construction Supervision of Roads and Bridges, Saudi Arabia.** Design and supervision of construction for the following works: 1.5 km long, 30 m wide road (with a barrier and metal fence for the separation of pedestrian and vehicular traffics) connecting an existing slaughterhouse near King Fahd Street with a new slaughterhouse; 2 bridges (130 m and 120 m long, spans from 16 to 22 m) with 1,100 m retaining walls and 5 staircases to connect the bridges' entrances with the adjacent areas; grading of 1,000,000 m² in Muzdalifah to provide additional camping areas for pilgrims' accommodation (phase 3), including 23 km long roads (360,000 m²) with all necessary lighting to serve the camping area. Geotechnical works included supervision of subsurface investigation, road pavement design, stability of cut slopes and preparation of a geotechnical report.
- **Development of Arafat and Muzdalifah, Saudi Arabia.** Design and supervision of construction for 50 km of roads, 550,000 m² of car-parks, 35,000 m² of bridges and 2 interchanges, including 3 MCM of earthwork with high rock cuts, and drainage system comprising 27 km of open channels and closed culverts. Geotechnical works included supervision of subsurface investigation and preparation of a geotechnical report covering all the structures.
- **Design and Supervision of Terraces in Muna, Saudi Arabia.** Design and supervision of works for the provision of 75,000 m² of camping terraces by grading of Muna mountain at east and west Shoabs, including the construction of 1,200 m retaining

walls (2 to 11 m height), 18,200 m² of roads (total length of 1.3 km) in addition to all required infrastructure utilities for camping areas (drainage structures, sewerage, water supply, lighting and desert coolers). Geotechnical works included geological mapping of the area, stability of slopes, and recommendations for the structures foundations.

- Design and Supervision of Bridges in Muna, Saudi Arabia. Design and supervision of construction for the following works: a dual-carriageway road (930 m long) with a median as well as a 250 m long, 20 m wide bridge to serve Muzdalifah slaughterhouses up to the dumping area with all necessary ramps (230 m), and lighting and drainage works; 300 m long, 30 m wide bridge with median and shoulders, having a 20 m span and post-tensioned precast beams with precast slabs and used to connect the new slaughterhouse road. Geotechnical works included supervision of subsurface investigation and preparation of a geotechnical report that covers all the relevant structures.
- Pyramids Heights Touristic Complex, Egypt. Site Planning, detailed design and construction documents for a 5-star 289-rooms hotel and a country club as well as a leisure lake and chalets within the Pyramids Heights Development Projects. Geotechnical works included slope stability analysis, geological mapping, site supervision and design for stabilizing the high rock cuts.
- Marsa Alam Resort, Egypt. Master plan, design and construction documents for a fully integrated tourist resort on a 250 ha site on the Red Sea, including assessment of natural flushing, circulation and water quality in several lagoons totalling 20 ha using mathematical models; preparation and supervision of bathymetric, hydrographic and underwater surveys; geological mapping; landsat image classification and interpretation; flash flood hazards evaluation; site investigation supervision; preparation of geotechnical reports and foundation recommendations; development of all earthwork specifications; design and preparation of pavement specifications; and detailed environmental impact assessment study.
- Beirut Southern Suburbs Infrastructure, Lebanon. Design and supervision of construction for the complete urban upgrading of the congested 2,000 ha area, serving a population of 600,000, including a 2 km long stormwater drainage tunnel, 3.2 m in diameter in soft ground and rock formations. Works included supervision of the geotechnical aspects.
- Nation-wide Study on Quarries and Crushers, Lebanon. The establishment of a nation-wide database for existing quarries and their legal status, formulation of legislation procedures for their future operation and restoration, identification of suitable areas for future quarries (whilst safeguarding the environment) and their environmental impact.
- Autoroute Est - Ouest (Hamiz - Lakhdariah), Algeria. Design review, preliminary design and environmental impact assessment for 5 tunnels totalling 4 km (one of 1.8 km), as part of a 38 km double 3-lane motorway with 4 interchanges, 12 underpasses and overpasses, 5 viaducts totalling 1.85 km and reaching 50 m in height, and 40 culverts. Detailed design and construction documents for a 15-km section between Hamiz and Larbaatache. Works also included site investigations, design of foundations for 4 interchanges, and a geotechnical report for the earthworks and structures.
- Antelias - Maameltein (A2) Motorway, Lebanon. Fundamental design, including geological and geotechnical studies, for 280 m of twin-tube tunnels and 4 long-span special bridge structures, as part of a 14.5 km, dual 3-lane motorway with 5 grade-separated, semi-directional interchanges. Geological studies and assessment along possible alignment corridors. Discontinuity surveys along chosen alignment. Design of support requirements for 280 m twin tube tunnels, and design of cut and fill slopes. Foundation design for 4 long span bridges.
- Rabat - Fès Autoroute, Morocco. Design and construction documents for a 190 km dual 2-lane expressway with 7 interchanges and 4 service areas, 7 toll areas, 2 maintenance areas, 37 bridges of various sizes and several high cut/embankment sections. Geotechnical works included preparation and supervision of geotechnical investigations, preparation of a geotechnical report for earthwork stability, pavement design and foundation recommendations for different structures and bridges.

- **Reconnaissance Study for Al-Kurr - Al-Hada Road, Saudi Arabia.** Study for improvement and widening of the existing 37 km road to a dual-carriageway road running through an escarpment, including refinement of highway geometry and geotechnical study for stabilising the mountain sides and inhibiting hazardous rock falls. Works comprised comprehensive geological and discontinuity survey through the escarpment. Stereographic projection for detailed design of high rock cuts, preparation of drawings, tender documents, and foundation design for the viaducts and rockfall shelters.
- **Sayhut - Al-Ghaidha Road, Yemen.** Feasibility study, geological surveys, cross-sections and evaluation of the groundwater and design for a 220 km road along steep escarpments, including 2 tunnels 1,945 m in total length. Works comprised alignment studies, including geological surveys, and assessment of soil conditions; planning of site investigation; design of road sections through mobile sand dune areas; and design of cut slopes in steep escarpment sections. Financed by AFESD.
- **Nahr El-Kalb Motorway Realignment, Lebanon.** Design for rock protection, reclamation and slope protection works, materials survey, planning and preparation of tender documents for bathymetric and hydrographic surveys, seashore protection of embankments and reclamation, as part of the design and supervision of construction for an 8 km, dual 4-lane coastal freeway.
- **Muzdalifah Parking, Phase 1, Saudi Arabia.** Design and construction supervision of vehicular parking facilities and pedestrian piazza as part of an urban development scheme. Works included geological mapping, design and supervision of rock blasting, rock cut design and supporting measures supervision.
- **Parcels No 5 and 6, Rawabi Ajyad, Saudi Arabia.** Heavy earthwork operations and rock blasting work (200,000 m³) over tunnels formerly designed and supervised by the Firm, including stability measures for the safety of the existing tunnels on the sides and below the excavated area.
- **Autoroute Est - Ouest, Tronçon Lakhdariah - Bouira, Algeria.** Design, supervision of construction and environmental impact assessment for a 33 km dual 3-lane motorway, including 2 tunnels (260 m and 1,360 m), 3 interchanges, 3 viaducts (254 to 708 m), 33 bridges, 19 drainage structures, 9 retaining walls and 8 wadi deviations 850 m long. Geotechnical works consisted of landslide assessment and stability analyses for cut sections in soils and various types of rock in a tectonically disturbed region, and design of protective measures for stabilising slopes, including stabilisation of slide area by a pile wall. Geological studies at the locations of tunnel portals, and foundation designs for the various structures. Financed by IDB, EBRD.
- **Taiz - Jabal Sabr Road, Yemen.** Design review and supervision of construction for a 22 km, mountainous 2-lane, single carriageway. Works include study of mountain stability and slope protection on both sides of the road. Geological and geotechnical assessment for widening of a single lane mountain road. Studies included design of cut slopes in highly weathered conglomerate rock, and design of retaining structures and slope protection measures.
- **Bursa Ring Road, Turkey.** Design and tender documents for a 62 km motorway (passing through the most critical seismic zone) with 11-grade-separated interchanges, 2 twin-tube tunnels, 5 viaducts, 125 box culverts, 9 overpasses, 31 underpasses, 5 motorway bridges, 6 river bridges, and parking, service and toll areas and an elaborate stormwater drainage system. Geotechnical works included foundations design and recommendations, rock excavations, excavation support systems and slope protection, reviewing site investigation programme and stability analysis for earthworks.
- **M216 Hotel, Saudi Arabia.** Design and supervision of construction for a 1,100-room, 3-star hotel, including 3 underground floors housing a 4,500 m³-capacity water tank, pump room, mechanical workshop, cold rooms, kitchen, etc.; a ground floor and a mezzanine for the restaurants and other hotel facilities; a mechanical floor; and 25 floors dedicated to guest-rooms. Geotechnical works included design of deep foundations and retaining system, and preparation of detailed geotechnical report.
- **M213 Hotel Design Review, Saudi Arabia.** Supervision of site investigations, geological and geotechnical mapping for the excavation side slopes, and design and supervision of rock excavation and supporting measures for a multi-storey hotel in Makkah.

- Makkah First Ring Road, Saudi Arabia. Design and supervision of construction for 7 twin-tube tunnels and 8 grade-separated interchanges, as part of a 4.4 km, dual-carriageway road. The project included traffic study, route selection and geological and geotechnical surveys.
- Makka High Towers project, Design and technical assistant of Gabal Qala Project and Abraj Al Beet Project. The work includes slope stability analyses, tunnels and foundation recommendation.
- Group Leader of Geotechnical Investigation and Testing of King Saud Univ. for Health Sciences in Riyadh, Jeddah and Al Hassa. The work includes geological mapping and in situ tests of permeability. The site activities include more than 300 Boreholes of depths ranges between 20m and 40 m.
- Geological Mapping and site Geotechnical recommendations for the Knowledge Economic City Project at Al Madenah.
- Group Leader of Geotechnical Investigation and Testing of Princes Nora University in Riyadh. The work include geological mapping and in situ tests (Plate load tests, Pile load tests and geophysical survey) .The site activities include more than 300 Boreholes of depths ranges between 20m and 40 m. Soil treatments of collapsible soils ,detecting caves and sinkholes and cement grout of detected caves.
- Senior Geotechnical Engineers for all geotechnical activities in Saltanet Oman (Bid-Bid Sour mountain high cut Road part1 section 1A). Cuts height reach to 130 m by benching control blasting. Supervise all pile testing and construction as well as side slope cut protection by anchors, shotcrete and wiremesh.
- Geotechnical Lead and Group Leader of dar team for reviewing the preliminary design of 9 phases of Oman Rail Way Project. The project has more than 2000 Km rail,30 Tunnel 400 Viaduct Bridge.
- Senior Geotechnical Engineers for all geotechnical activities in Sultanate Oman (Bid-Bid Sour mountain high cut Road part1 section 1B). Cuts height reach to 130 m by benching control blasting and tunneling. The slope cut protection measures include rock bolts, fiber shotcrete, shotcrete and wiremesh and secure cable hexagonal netting.

Freelance Consultant/Engineering Geologist. In charge of the following projects in Egypt:

- Engineering geological studies for the causes of groundwater overflow at the underpass of Heliopolis Underground line (Kobbry El-Koba Sector).
- Engineering geological studies on the groundwater overflow and slope stability analysis of the Basalt Quarries deep excavation at Abu Zaabal area.
- Geological and Geotechnical Maps for:
 - Mokattam region (1:20,000).
 - East Cairo, Maadi and Helwan (1:50,000).
 - Minia - Maghagha District/Eastern Desert (1:100,000).
- Geological and geotechnical studies for the mitigation of flash floods hazards of the Eastern Desert and the Sinai peninsula.
- Geotechnical studies on the claystone foundation bedrocks of some new settlements (co-operation with ASRT).
- Geotechnical study of the sewerage tunnel through limestone formation, Ain El-Sira, Helwan site.
- Geotechnical/geophysical studies on the causes of building subsidence and rotation of El-Sahab Sector, El-Sabah New City, Suez Governorate.
- Stability study of Failure at El Herafeen city north east of Mokattam city.
- Mapping and studying the geotechnical properties of the construction of natural building stone and building materials (co-operation with EGSMA).
- Planning and reconstruction of the national highway of Wadi Feran, St. Catherine, Sinai.
- Site selection and geotechnical studies of new touristic villages in Sharm El-Sheikh, along the Gulf of Aqaba including geological mapping, study of rock cuts and slope stability.

- Site selection for water power station along the Gulf of Suez Coast, Ain Al-Sukhna Area.
- - Stability of rock slopes along the Upper Mokattam Plateau.
- Studies on shore deposits at new developed touristic areas along the Red Sea, Suez and Aqaba Gulfs (in co-operation with ASRT).
- Studying the engineering geological problems of:
 - New Minia City.
 - 15th May City.
 - El-Qattamia City.
 - Mokattam region.
- Studying the global meteorological changes, by the examination of the quaternary and recent desert and fluvial deposits (co-operation and funding by UNIS Co.).
- Stability study of 500 Km of Jazan Abha Highway road (side slope stability design for rock cuts and tunnels).
- Al Meaad Tower Makkah high rise building Hotel slope stability and support measures supervision.
- Azahker High Towers Buildings Makkah area side slope stability and foundation treatment.
- High Speed Railway Harmen Project Saudi Arabia design and supervision the side slope cuts.
- Turky Gotork Airport Engineering Geological studies and geotechnical supervision.
- Makkah underground Metro project Saudi Arabia.
- Design the rock cut stabilization of Mountain water reservoirs at Sultanate of Oman.
- Design the rock cut stabilization measures of high cut Mosandam Governorate Sultanate of Oman.
- Geotechnical Design and site investigation work follow up of Monorail Project 6th October to New Administration Capital City.

ACADEMIC EXPERIENCE:

1997 to date With Ain Shams University, Cairo, Egypt, Associate Professor of Engineering Geology.

AWARDS:

1993 EREX Petroleum Company Award

1991 Egyptian Association of Geology Award

1993 Nominated by the National Committee of Geological Sciences (ARST) for the 1993 UNESCO Award for Young Scientists.

2003 to 2012 Member of Egyptian code (Foundation on Rock)

2012 Head of Structural and applied Geology Unit Ain Shams Univ. Dept of Geology.

From 2012 up to date listed as Reviewer of Geot. Eng. Journal, South Africa Geological Journal, Indian Geological Journal and Engineering Geology Journal.

PUBLICATIONS:

1. Moustafa, A. R., Yehia, M. A. and Abdel Tawab, S., "Structural Setting of the Area East of Cairo, Maadi and Helwan", Middle East Research Centre, Ain Shams University, Cairo, Egypt, Vol. 5, pp. 40 - 64., 1985.
2. Moustafa, A. R. and Abdel Tawab, S., "Morphostructures and Non-tectonic Structures of Gebel Mokattam", Middle East Research Centre, Ain Shams University, Cairo, Egypt, Vol. 5, pp. 65 - 78., 1985.

3. El-Nahhas, F., Moustafa, A. R. and Abdel Tawab, S., "Geotechnical Characteristics of Limestone Formations of Gebel Mokattam Area", 1st Alexandria Conference on Structural and Geotechnical Engineering, ASCGE, December 1990.
4. Moustafa, A. R., El-Nahhas, F. and Abdel Tawab, S., "Engineering Geology of Mokattam City and vicinity, Eastern Greater Cairo, Egypt", Bulletin of Engineering Geology, Vol. 31, pp. 327 - 344, 1991.
5. Abdel Tawab, S. and Ibrahim H. A. M., "Engineering Geological Problems in the 15th May City", Proceedings of the 7th Symp. Phanerozoic Development, Egypt, pp. 37 - 44, 1990.
6. Abdel Tawab, S. and Ibrahim H. A. M., "Unfavourable Geologic Setting of the New Minia City, Upper Egypt", Journal of Engineering and Applied Science, Vol. 39, pp. 421 - 429, 1991.
7. Abdel Tawab, S. and Mahmoud, A. A., "Geotechnical Problems in the Area Between Mansheit El Sadr and El Quba, East Cairo, Egypt", Journal Geology, Vol. 36, No. 1 - 2, pp. 131 - 141, 1992.
8. Abdel Tawab, S. and Shendi, E. H., " Geotechnical and Geophysical Studies on the Building Subsidence of a Building at El Sahab Sector, Suez Governorate, Egypt", Annals of the Geological Survey of Egypt, Vol. XIX, pp. 525 - 543, 1993.
9. Korany, E. M., Shendi, E. H. and Abdel Tawab, S., "Integrated Detection of the Problem of Groundwater Overflow in Abu Zaabal Basalt Quarries, Egypt", Journal of Geophysics, Vol. 6 - 18, pp. 161 - 180, 1993.
10. El Etr, H., El-Rakaib, M., Hamdan, A., Abdel Tawab, S., Salah, A. and Ashmawy, M., "Regional Study of the Drainage Basins of Sinai and the Eastern Desert, Egypt, with a Preliminary Assessment of their Flash Flood Potential", Proceedings of the International Conference on Hazard Mitigation (Emergency, 90), Egyptian Academy of Science and Technology, Cairo, Egypt (in press), 1990.
11. El Etr, H. Salam, A. and Abdel Tawab, S., "Mitigation of Flash Flood Hazards of Wadi Feiran Basin, Western Sinai, Egypt", International Conference on the Studies and Achievements of Geosciences in Egypt, held in Cairo (in press), 1993.
12. Abdel Tawab, S., Helal, A. M. A., Dewidar, H. and El-Sayed, A., "Surface Tectonic Features of the 12 October, 1992 Earthquake, Egypt, at the Epicentral Area", Bulletin of the Faculty of Science, Ain Shams University, Egypt, Special Issue, pp. 124 - 136, 1993.
13. Abdel Tawab, S., "A Geotechnical Evaluation of El-Minia - Maghagha Area, Upper Egypt", Journal of King Abdulaziz University, Earth Sciences, Vol. 7, 1994.
14. Abdel Tawab, S., "Rock Mass Properties of Wadi Ibrahim Sewer Tunnel, Holly Makkah, Saudi Arabia", M. E. R. C. Ain Shams University, Earth Sciences Series, Vol. 8, pp.188 - 198, 1994.
15. Abdel Tawab, S., "Determination of Rock Transmission Factor and Charge/Distance Blasting Charts of Holly Makkah Igneous Rocks, Saudi Arabia", Lebanese Scientific Research Report, Vol. 1, No. 3, pp. 47 - 57, 1996.
16. Abdel Tawab, S. and Darrag, A., "Some Geotechnical Problems of Mixed Ground Face Tunneling, Beirut Stormwater Tunnel", Ain Shams University, Egypt, Earth Science Series, Vol. 11, pp.81 - 93, 1997.
17. Darrag, A. and Abdel Tawab, S., "Improved Q. System for Design of Underground Openings in Rocks", Ain Shams University, Egypt, Earth Science Series (in press), 1998.
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