MORCOS FARID SAMAAN ELRASHIDI, *Ph.D.*

1- PERSONAL DETAILS:

Home Address: 15 Seleem Abdou St. – Abdou Basha, Abbasis – Cairo, Egypt.
Home Tel. No.: +202-26845872, Mobile Tel. No.: +201005658857
E-mails: Morcos_farid@hotmail.com , Morcos_farid@yahoo.com.sg
Morcos.samaan@hti.edu.eg , Morcos.samaan@bue.edu.eg
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2- KEY QUALIFICATIONS:

More than twenty five years of academic and practical experience in the fields of structural analysis engineering. As academic; teaching various courses including structural analysis and mechanics, design of concrete and steel structures, implementation of software programs into structural modeling…etc. In research areas, experiences are gained first by investigating many applications including reliability analysis of reinforced concrete slabs, later by using boundary elements method as an alternate to the finite element method in the analysis of different problems like slabs, rafts …etc. On the other hand, as practical; consulting and leading teams in modeling, analysis, design and preparation/revision of tender, design and construction documents including projects supervision for both special structures as façade, curtain walls, aluminum elements, marble mechanical fixation, and also for traditional reinforced concrete and steel structures using international codes of (BS, ACI, IBC, UBC, PCI,...etc) as well as local codes (ECCS, ECP). Experienced in different types of structures including special applications such as curved and inclined curtain walls, aluminum louvers, suspended marble systems, high rise buildings, wide spans pre-stressed girders, and precast buildings

3- EDUCATION AND PROFESSIONAL QUALIFICATIONS /AFFILIATIONS:

- Professional Structural Engineer, Skill Level 1, PE, Engineers Australia, 2016.
- Consultant of Reinforced Concrete Design, Egyptian Syndicate of Engineers, 2013, Egypt.
- Ph.D. in Structural Engineering, "Dynamics/Boundary Elements", 2007, Cairo University, Egypt.
- M.Sc. in Civil (Structural) Engineering, "Reliability/Plastic Analysis", 2000, Cairo University, Egypt.
- B.Sc. Civil Engineering, 1994, Distinction Grade, Cairo University, Egypt.
  [GPA equiv. grade: Distinction, 88.5 %, Grades of all years: Distinction, Grade of project: Distinction.]
- Egyptian Syndicate of Engineers, Member, Egypt.
- Egyptian Society of Civil Engineers, Member, Egypt.

4- ACADEMIC WORK EXPERIENCE:

4-1 Full Time:

- Apr.2022 –July2022: ***Visiting Scholar***, Lawrence Technological University (**LTU**) – Southfield, MI, USA. Sponsored by USAID.
- 2007 – till now: ***Assistant Professor***, the Higher Technological Institute **(HTI)** – Ramadan 10th City, Egypt.
- 2000– 2007: ***Assistant Lecturer***, the Higher Technological Institute **(HTI)** – Ramadan 10th City, Egypt.
- 1995– 2000: ***Tutor,*** the Higher Technological Institute **(HTI)** – Ramadan 10th City, Egypt.

4-1-1 Major Teaching Courses:

- Structural Analysis and Mechanics I.
- Structural Analysis and Mechanics II.
- Structural Analysis and Mechanics III.
- Structural Analysis and Mechanics IV.
- Structural Analysis and Mechanics V.
- Selective Courses in Structural Analysis and Modelling.
- Selective Courses in Plastic Analysis.
- Computer Programming with FORTRAN.
- Structural Engineering Software Application with SAP, Etabs.

4-1-2 General Teaching Courses:

- Reinforced Concrete Design.
- Steel Design.
- Engineering Drawing.

4-2 Part Time:

- ***Lecturer*** of Boundary Elements Courses at: **Cairo University, Post Graduate Studies**.
- ***Lecturer*** of Structural Analysis Courses at: **The British University in Egypt (BUE).**
- ***Lecturer*** of Steel Courses at: **Al-Oubor High Institutes for Engineering**.
- ***Lecturer*** of Structural Analysis Courses at: **6th of October High Institute for Engineering and Technology**.
- ***Lecturer*** of Structural Analysis Courses at: **Bailbais High Institute for Engineering**.

4-3 Administration Works:

- Head of Civil Department Results Control.
- Student Credit Hour Supervisor.
- ICE HTI Branch Supervisor.
- Lecturer Assistants Coordinator.
- Graduation Projects Coordinator.
- Courses Specifications – Quality Assurance.

4-4 List of Publications:

- Attia, M.M.,Khalil, A.H.H.,Mohamed, G.N., Samaan, M.F., & Katunský, D. Nonlinear behavior of bonded and unbonded two-way post-tensioned slabs pre-strengthened with CFRP laminates. Buildings 2023,13(35).
- Attia, M. M., Elshaer M.A., Shawky S.M.M., Samaan, M. F., (2022)," Replacement efficiency of steel reinforcement with FRB bars in RC beams under flexure load: experimental and FE study ", Innovative Infrastructure Solutions; 7 (5), 1-15.
- Mohamed G. N., Khalil A. H. H., Samaan, M. F., Hadad H. S. (2020),"Effect of Pre-Compression Ratio on the Flexural Behavior of Two Way Bonded Post Tensioned Slabs Pre-Strengthened with External CFRP Strips", Researcher;12(10):16-23.
- Mohamed G. N., Khalil A. H. H., Samaan, M. F., Hadad H. S. (2019):" The Flexural Behavior of Two Way Post Tensioned Slabs Pre-Strengthened With External CFRP", N Y Sci. J.;12(4):14-22.
- Samaan, M. F., Elshaer M.A. (2018),"Experimental and numerical investigation of flexural behaviour of new DSG reinforced concrete mixes reinforced with GFRP bars", Ain Shams Engineering Journal, 9 (4), 3437-3449.
- Samaan, M. F., Nassar M. E., and Rashed. Y.F. (2015), "Taylor Series Fast Multipole Boundary Element Method for Solution of Reissner's Shear Deformable Plate Bending Problems", Engineering Analysis with Boundary Elements, 59.
- Samaan, M. F., and Rashed. Y.F. (2009), "Internal Stress DRM Integral Equation for Transient Dynamics ", Advanced materials for applications for acoustics and vibrations, Cairo.
- Samaan, M. F., Ahmed, M. A., and Rashed. Y.F. (2007a), "The Dual Reciprocity Method Applied to Free Vibrations of 2D Structures using Compact Supported Radial Basis Functions", Computational Mechanics, 41(1).
- Samaan, M. F., and Rashed. Y.F. (2007b), "BEM for Transient 2D Elastodynamics Using Multiquadric Functions", Int. J. Solids Structures, 44.
- Samaan, M. F., and Rashed. Y.F. (2007c), "Free Vibration Multiquadric Boundary Elements Applied to Plane Elasticity", Appl. Math. Modeling, 33.
- Samaan, M. F., Ahmed, M. A., and Khalil, A. B., (2003), " Mechanism Generation for Solid Rectangular Reinforced Concrete Slabs", Proceedings of the tenth International Colloquium on Structural and Geotechnical Engineering, Ain Shams University, Cairo.
- Samaan, M. F., Ahmed, M. A., and Khalil, A. B., (2003), " Reliability Analysis of Solid Rectangular Reinforced Concrete Slabs", Proceedings of the tenth International Colloquium on Structural and Geotechnical Engineering, Ain Shams University, Cairo.

Google Scholar:
https://scholar.google.com/citations?view_op=list_works&hl=ar&hl=ar&user=PSaoyiQAAAAJ&sortby=pubdate

Research Gate: https://www.researchgate.net/profile/Morcos-Samaan
ORCID Record: https://orcid.org/0000-0001-6065-8080
Scopus ID: **22036548800**

4-5 Research Fields:

1- Reliability of Structures
   - Overall Buildings Statically Reliability.
   - Reliability of Solid and Flat Slabs.
2- Dynamic Analysis for Tall Buildings
   - Pushover Analysis Under Lateral Loads.
3- Boundary and Finite Elements
   - Dynamics (Free and Forced Vibrations).
   - Computations (FMM, GPU).
4- Strengthening concrete elements with FRP.

4-6 Research Activities:

1- Member of the **Boundary Elements Research Group** headed by **Prof. Dr. Youssef Fawzi Rashed**, *Deputy Secretary General, Supreme Council of Universities, Professor, Structural Engineering Department, Cairo University*.

2- Member of the Boundary Elements Software Development Program (PLPAK) headed by **Prof. Dr. Youssef Fawzi Rashed**, *Deputy Secretary General, Supreme Council of Universities, Professor, Structural Engineering Department, Cairo University*.

4-7 Conferences Attended:

- New Modeling Aspects on Structural Engineering, Dubai, UAE, 2012.
- The 10th International Colloquium on Structural and Geotechnical Engineering, Ain Shams University, Cairo, 2003.

4-8 Thesis Supervisions:

- Supervisor on two Ph.D. students and three M.Sc. students.

5- PRACTICAL WORK EXPERIENCE:

❖ Jan 1st 2016 – till now (2022):

[Founder , Consultant, and CEO of Structural Engineering Office]

Horizon for Consultancies and Engineering Services, Abbasia, Cairo, Egypt.

Duties/Responsibilities:

- Pursuing consultancy services to façade/curtain walls as well as marbles contracting companies including providing structural technical notes and other needed design/construction documentations/supervision for different structural elements.
- Estimating the overall cost for projects after studying the concept/tender drawings and documentations.
- Prepare the schedule plan for structural outputs including overall time frame, man-hours loading and submittal dates.
- Handling all project communications, modifications and updates with other parties through e-mails and technical meetings.
- Managing all structural teams throughout different project stages that include assigning analysis, design, and drafting tasks – following tasks progresses – providing technical support to solve pending issues or problems within any task.
- Reviewing of all issued structural outputs that include calculation notes, bill of quantities, structural specifications, detailed design drawings and construction drawings.
- Handle design liability by signing and stamping all issued documentations by his consultancy syndicate registered stamp.

Projects Samples:

[**Grand Egyptian Museum, GEMIII – Consultant of Alural Company**, Giza, Egypt: Representing the company in technical meetings also submitting structural technical notes to the main consultant (**PMC-EHAF-HILL**) (already get approved), for many structural elements including inclined pyramided curtain walls, internal marble cladding mechanical fixation, stainless steel capings, light roof copings, and aluminum louvers. Structural analysis and design included building the structural models against all governing loads (dead, wind, seismic,.. etc), then performing a complete design according to the specified codes for the main aluminum elements (mullion and transom), steel elements, stainless steel elements, all welded or bolted connections, stainless body anchors / steel brackets, and anchor bolts].

[**Grand Egyptian Museum, GEMIII – Consultant of Alumisr Company**, Giza, Egypt: Representing the company in technical meetings also submitting structural technical notes to the main consultant (**PMC-EHAF-HILL**) (already get approved), for many structural elements including single units and multiple units of pyramided aluminum louvers. Structural analysis and design included building the structural model against all governing loads (dead, wind, seismic,.. etc), then performing a complete design according to the specified codes for the main aluminum elements, all welded or bolted connections, steel/stainless brackets, and anchor bolts].

[**Grand Egyptian Museum, GEMIII – Consultant of Demarble Company**, Giza, Egypt: Representing the company in technical meetings also submitting structural technical notes to the main consultant (**PMC-EHAF-HILL**) (already get approved), for many structural elements including a number of museum marble signs, about 12 different sizes Arabic and English guiding signs including the design of steel chase and their mechanical fixation, Structural analysis and design included building the structural model against all governing loads (dead, wind, seismic,.. etc), then performing a complete design according to the specified codes for the marble units, main steel elements, all welded or bolted connections, steel/stainless brackets]

[Ski Plaza – Consultant of Alural Company, 6th of October, Egypt: submitting structural technical notes to the main consultant (**MA**) (already get approved), for all elevation curtain walls. Structural analysis and design included building the structural model against all governing loads (dead, wind, seismic,.. etc), then performing a complete design according to the specified codes for the single and double glass panels, main aluminum elements (mullion and transom with steel insertions), bolted connections, steel brackets, and anchor bolts].

[Cloud Hub – Consultant of Alural Company, 6th of October, Egypt: submitting structural technical notes to the main consultant (**SHAKER**) for all elevation curtain walls. Structural analysis and design included building the structural model against all governing loads (dead, wind, seismic,.. etc), then performing a complete design according to the specified codes for the single and double glass panels, main aluminum elements (mullion and transom), bolted connections, steel brackets, and anchor bolts in both concrete and bricks].

[New Capital Administration Buildings, Block 9B&10B, AIB Bank, Command Control Center – Consultant of Alural Company, New Capital, Egypt: submitting structural technical notes to the main consultant (**dar**) (already get approved), for all elevation curtain walls and louvers. Structural analysis and design included building the structural model against all governing loads (dead, wind, seismic,.. etc), then performing a complete design according to the specified codes for the single and double glass panels, main aluminum elements (louver blades and boxes -mollion and transom with steel insertions), bolted connections, steel brackets, and anchor bolts].

[New Capital Administration Buildings – Consultant of Elsoadaa Group Company, Red Sea Company, Samcrete Company, Siac Company, Alumisr Company – All Ministries curtain walls Eagle Signs and Arabic and English Title Signs Fixation System , New Capital, Egypt: submitting structural technical notes to the main consultant (**dar**) (already get approved), for all light steel/aluminum hanging structural systems including eagles, title singes, louvers, landscape marble pyramid and CW brackets. Structural analysis and design included building the structural model against all governing loads (dead, wind, temperature,...etc.), then performing a complete design according to the specified codes for the single and double glass panels, main aluminum elements (louver blades and boxes - mullion and transom with steel insertions), steel chases, bolted connections, steel brackets, and anchor bolts].

[Miscellaneous Projects in UAE, Egypt, and other countries – For example: Analysis, Design and producing construction drawings and calculation sheets for many projects such as **Al Ain Zoo** at Al Ain, UAE, **and Planked Factory** located at Badr City, and **Saint Mark Hospital** Located at Minia City, Egypt].

❖ Jan 1st 2014 - Jan 1st 2016:

[Partner, Consultant, and Head of Structural Department]

StepUp for Engineering Services, Nasr City, Cairo, Egypt.

Duties/Responsibilities:

- Estimating the overall cost for projects after studying the preliminary drawings and documentations.
- Prepare the schedule plan for structural outputs including overall time frame, man-hours loading and submittal dates.
- Handling all project communications, modifications and updates with other parties through e-mails and technical meetings.
- Managing his structural team throughout the whole project stages that include assigning analysis, design, and drafting tasks – following tasks progresses – providing technical support to solve pending issues or problems within any task.
- Reviewing of all issued structural outputs that include calculation notes, bill of quantities, structural specifications, detailed design drawings and construction drawings.
- Handle design liability by signing and stamping all issued documentations by his consultancy syndicate registered stamp.

Projects/Proposals Samples:

[**Jabal Omar Development - Road E Bridge Redesign** Proposal, KSA: The required design scope encompasses the redesign of the road bridge E within the existing area development to sustain the cooling towers transferred from nearby towers to the new location on top of the road bridge E. Additional deck will be added above the traffic deck to carry the moved cooling towers. It was asked from all candidate offices which included ours to submit a financial and technical proposal for the new bridge design. I investigated all aspects related to the new requirements. I then calculated the total cost of design and constructing the bridge including total estimation breakdown includes all related tasks. Then I finalized the needed form for the proposal and submitted it on time]

[**Palm Hills Houses' Modifications** Project, Egypt: I was tracking modifications done by each client's house to study the modifications' impact on safety of different structural elements. I put plans and strategies to the assigned teams to deal with any modification. Based on study and checking of safety of affected existing RC elements (slab-beam-column-footing-tie beams) through computer models and design calculations, I took decisions whether to keep the original

system and/or replacing it with another one to cope the new modification consequences and transferring loads through different new load paths. After work completion, I make final revision and stamping the final drawings/calculations with my registered consultancy stamp]

[**Mivida City Design Review** Project, Egypt: As consultant office we were assigned by the client to be a third party reviewer to check and confirm/adjust the original design prepared by the RC structural design office, EHAF. I conducted with my team a separate standalone new design of the houses. We made our own models, calculations, and designs according to the governing codes, geotechnical reports, and specifications of the project. Then I compared our output with the original one. I found that most of the original design was correct, however, some houses were found underestimated for some elements which needed either increasing of concrete dimensions and/or reinforcement ratios]

❖ Jan 1st 2013 - Dec 31st 2013:

[Partner and Head of Design & Supervision Sector]

Horizon for Engineering Design and Consultancies, Hurghada, Egypt.

Duties/Responsibilities:

- General Management of all design phases including: estimating project overall costs, preparing the governing codes and specifications, selecting/verifying the analysis and design softwares, and reviewing design drawings and calculations.
- General Management of all supervision phases including: preparing construction documents, reviewing and approving of shop drawings, material sheets, vendor lists, and bar lists provided by the contractors, assuring quality control in construction process, and inspecting/confirming each construction stage.
- Monitoring of all projects' procedures, work progress, and final completion to meet assigned time frames.
- Provide technical support for structural teams and guiding them to solve any problems in professional ways.
- Registering all issued design documentations from the authorized agency.
- Peer reviewing and issue design review reports in third parties projects.
- Represent the office in all other parties' communications, meetings, or contracting related to his specialization.

Projects/Proposals Samples:

[**Irrigation Network & Associated Civil Works at Hail Al-Ghaf,** Project, Oman: It was a design and built project. A complete civil works for the project was required. Elevated tank, side ditches, and precast RC inspection chambers are included in the design and shop drawings. I instructed my team to check all cases of loadings for water and earth loadings. I established special mathematical 3d model to consider the main items connectivity. I constructed the related design spread sheets for cast-in-situ and precast elements and then verified them for usage. I reviewed all design and detailed drawings along with the bar lists. I represented the office in the regular meetings with the client and other parties. I participated in a small operation group that was responsible for prompt solutions for site problems. Based on the stand-by plan, the project was operated successfully and we were awarded for the achievement]

[**Balteem Building Inspection and Validation** Project, Egypt: I was invited by the building's owner to make a validation report that judge the status of a damaged building located at Balteem city and its ability to be used. After visiting the building site and observing the current situation of the building, I noticed that as the building was suffering from many serious tensile cracks in main elements as columns or beams. The main reason for the cracks existence was the foundation differential settlement that was occurred due to drifting of supporting soil by sea ground flow. I gave the recommendation of Not-Safety case for current time. I advised to conduct a re-habitation process of the building and to perform supporting for the foundations by box solution to isolate them from sea underground flow]

[**Minia Motrania Hospital** Project, Egypt: The office was selected to be the structural design consultant for the hospital. I studied and coordinated with all architectural and MEP design drawings. I oriented our design team for choosing the most suitable statical system. I had chosen the flat slab system for horizontal elements, the column-core wall system for vertical elements, and the raft for foundations. Careful considerations were taken in zones with openings to avoid stress concentrations. During the construction period, I reviewed and corrected detailed drawings that provided by the contractor. I also regularly visited the site location to inspect work quality and give technical solutions to execution problems]

❖ Aug 1st 2011 - Sep 13st 2012:

[Chief of Principal Structural Engineers & Member of Technical Reviewing Comities]

Al-Amar Consulting Group (**AMG**), Cairo, Egypt.

Duties/Responsibilities:

✓ **In-Hand Projects** (the group is the project consultant):

- Estimating the overall cost for projects after studying the preliminary drawings and documentations.
- Prepare the schedule plan for structural outputs including overall time frame, man-hours loading and submittal dates.
- Handling all project communications, modifications and updates with other parties through e-mails and technical meetings.

- Managing the structural teams throughout the whole project stages that include assigning tasks – following tasks progresses – providing technical support to solve pending issues or problems within any task for all stages.
- Reviewing of all issued structural outputs whether they are design packages or construction packages.
- Carrying project design liability by signing and stamping all issued documentations by his consultancy syndicate registered stamp.

✓ **External Projects** (the group is the approval consultant):

- Approve/Comment the project preliminary issued documentations that include (the design criteria, the project code, specifications, materials, construction method).
- Approve/Comment the project stages issued Models, Calculation Notes, and Design Drawings.
- Issue a review report at 50% progress of the project and a final 3rd party peer review report upon project completion.
- Approve/Comment the Vendors list selection based on delivered profiles, CVs, and previous experiences in similar project.
- Approve/Comment the Main Contractor and Sub-Contractors selection based on delivered profiles, CVs, and previous experiences in similar project.
- Approve/Comment the Miscellaneous Material data sheets and samples submitted by the contractor's vendor supplier.
- Approve/Comment construction method of statements and site excavation drawings submitted by the contractor.
- Approve/Comment all construction documentations based on the approved detailing code that include detailed shop drawings (formworks and reinforcement details), and reinforcement bending lists submitted by the contractor.
- Approve/Comment any design modifications that proposed by the contractor due to any in situ changes that deviate from the original design.

Projects/Proposals Samples:

[**Cairo Festival City (CFC)** Project, Egypt: As a sample for in-hand project is CFC; which was spanning a land area of over 3 million sq. m (700 acres) that includes district cooling towers buildings. AMG consultation role was to produce construction documentation package for the contractor and get the main consultant approval. The work lasted for about one year. Due to the work complexity where the project consisted of many buildings, I put a plan to deal with the project. I highlighted major important outlines to manage the teams all the track of work flow done in each building. These outlines included prior orientation for the team, cooperate with the team leader in the development and verification of used spread sheets or software programs, regular meetings with the team to update them of any modification consequences or to solve pending issues, and final peer review of the issued construction package outputs. The stated plan was perfectly succeeded and we were able to meet every building submittal date and even complete the whole work before its time. As a result, about 90% of our submittal got approved with Code A (accepted), and the rest of them got Code B (accepted with minor comments).]

[**Village Gardinia Katamia** Project, Egypt: As a sample for external project, VGK; Village Gardens Katameya was a residential community sitting on 285,000 square meters in New Cairo. AMG was the construction general consultant. Our role was to approve, comment or reject all construction documentations that related to each stage from site excavation through shop drawings until finishing materials. I had chosen and given permission from my boss to be the stand-alone consultant that sign and stamp the contractor submittals with either approval (with or without comments) or rejection. It was common that there is always a gap of detailing between design drawings and construction drawings, in which contractors usually try to minimize their quantities to achieve their maximum profit outcome. My role as the consultant in this area was to ensure that every engineering concept and provisions included in the design is to be perfectly fulfilled in the construction outputs. Thus, a careful monitoring of this issue was done during the project different stages.]

❖ Jun 30th 2008 - Jun 21st 2011:

[Senior/Principal Structural Engineer]

e.Construct FZ-LLC (Also J.V.: **A&A - e.Construct**), Dubai, U.A.E, Cairo office, Egypt.

Duties/Responsibilities:

- Studying the original/preliminary project documentations to set up the project design criteria (the project design code, specifications, materials, construction method).
- Conducting a feasibility study of the project data to determine all alternative applicable systems that suits the project location, local materials and labors, constructability factors, and overall cost.
- Preparing the project plan that include a chart for the roles and assignments associated with the involved team and describing the individual and global responsibilities.
- Monitoring project progress and confirm man-hour consumptions and continuously evaluate the project level of consistency and correctness.
- Daily technical support to facilitate any technical problem arises within the work and advice for optimum paths for task achievements.
- Performing a final revision for every stage output before official submittals.
- Conducting regular meetings with the assigned teams to follow the work progress, point out any required modifications, and to figure out the main obstacles that face the work flow and how to overcome them.

- Representing the company in any project communications whether through formal E-mails or through indoor or outdoor meetings with other project parties and have the capability of taking any required major decisions after contacting management to have their approvals.
- Supervising on the project construction stage that includes regular travelling to the project site to inspect and assure the quality of the construction operations.
- Keep up to date with relevant field researches, on job training and orientation of staff with technology and information transfer.

Projects/Proposals Samples:

[**Alrayyan High Rise Towers** Project, Sharjah, UAE: The project was part of Alrayyan-Giant Shopping Mall and Residence at Al Nahda – Sharjah. The complex buildings were consisting of basements (mall parking), ground floor (hyper market), mezzanine floor, mall floor, four parking floors, podium floor (swimming pool, coffees & gym.), and four typical tower floors (33 floors), roof floor, and top roof floor. e.Construct was invited by the contractor/client to carry out value engineering study for the tower & podium areas in order to arrive to the most efficient structural system that achieve economy and better structural performance. We were mainly focusing on minimize the overall cost and duration of the project construction by providing smart solutions. The main system of the original design was traditional cast in situ flat slab for podium and tower for horizontal elements, columns, core and shear walls for vertical elements, and raft on piles for foundations. It was really a challenge to substitute the original system with another. Among several alternative solutions, I selected the best optimized system and presented the value engineering report. The report conclusion was the reduction of shear walls thickness and reinforcement, and converting the cast in situ slabs with precast pre-stressed hollow-core slab system with cast in situ structural topping rested on precast pre-stressed band beams. I was asked to arrange for a meeting with him to present our concept in details, explain and convince him with our system. I prepared my presentation and travelled with my manager to Dubai. The presentation was very effective and we succeeded to convince the consultant with our proposal.]

[**Sheikh Jaber El-Ahmad Hospital Buildings** Project, Kuwait: The project consultant was GULF CONSULT, and the contactor was THE ARAB CONTRACTORS and the client was the KUWAIT MINISTRY OF HEALTH. In this project, our team was concentrated on one from its buildings which was the underground car parking. The primary goal of our work was to substitute its current system for internal columns and beams from cast in situ system to be precast one instead, which targeted to reduce the total construction cost and period. My mission was to prepare and finalize a complete presentation that includes our vision, methodology and procedure for project construction which are supported with design verifications. I began my comprehensive study for alternative solution. I constrained myself with many parameters to guide me through my study. These parameters were: local materials and their suppliers, types of system usually used in the country, labor cost, soil-structural interaction, construction equipment's costs and facilities, and environmental factors. Then, I emerged to the solution: The proposed system consists of full height precast columns that support the precast beams by their corbels and those by their turn support the flooring systems which are the double T slabs with band beams in basement floors and hollow core slab with I-beam girders for ground floor. Representing the company, I travelled to Kuwait to present a presentation to the client. Finally, I succeeded to obtain approval for our proposal.]

❖ Sep 1st 2005 - Sep 1st 2007:

[Senior Structural Engineer]

Concrete Consultative Office, Engineering Design Office (Dr. Mostafa Abdel-Latif),Cairo, Egypt.

Duties/Responsibilities:

- Setting out Structural Statical Systems for vertical/horizontal elements.
- Structural - Architectural/MEP drawings coordination.
- Building and Analyzing the Structural Computer Model.
- Design of all concrete elements according to the Egyptian/BS Codes.
- Preparing and finalizing the detailed/permit structural drawings including the associated calculation notes.
- Represent the office in any technical/coordination meetings.
- Preparing the final Construction Package that includes shop drawings, project specifications, and bill of quantities.

Projects role brief:

[I was a leader of a group of four engineers. And I was reporting to my principle engineer who was responsible of the whole office structural division works. In any project, I usually prepare the work plan that includes time duration, priorities and progress percentages for each task. Then after I have the management approval for the plan, I distribute the project tasks on my team. Those tasks included: coordination process with other disciplines drawings, setting up the statical structural system for vertical and horizontal main supporting elements, constructing preliminary structural drawings, building computer models, analysis of structural elements internal stresses and strains, design of all structural elements, and finalizing detailed structural drawings with calculation notes. I always select most critical tasks to be done by myself like: review of computer models, preparing and verifying design sheets according to governing codes and specifications, and design of main supporting elements.]

5-2 Part Time:

[I began my practical experience at FERROMETALCO, the Egyptian Branch of the German Steel Company (DSD) Cairo, Egypt) from 1994 to 1995. I was working partially at project departments. My duty was assisting the relevant engineer in preparing quotations and performing technical analysis and design for metal vessels under pressure. After that, I was working as Junior Structural Engineer at Engineering Design Office (Dr. Asad Ibrahim Salama) from 1995 to

1998, and at Engineering Design Office (Eng. Adel Youssef Bassili) from 1998 to 2005. My main tasks was modeling, analysis, design, and drafting of several reinforced concrete buildings and houses. The Analysis and design of all elements was made under different combinations of vertical and lateral loadings.]

5-3 List of Projects:

✓ **For Full Time periods since 2005 till now**:

- Kindly refer to the attached HR letters.

✓ **For Part Time periods since 1995 to 2005:**

- Steel Vessels, Hamburg, Germany.
- King-Faisl International Bank, Dokki, Giza, Egypt.
- Meridian Hotel, Sharm-Elshaikh, Egypt.
- Maadi Mall- Maadi, Cairo, Egypt.
- Portsaid High-Rising Building, Portsaid, Egypt.
- Mossadak Building, Giza,, Egypt.
- Mobinil Transition Towers, Cairo, Egypt.
- Mobinil Mini Cell Towers, Cairo, Egypt.
- Residential buildings, El-Obour, Egypt.
- Residential buildings, New Cairo, Egypt.
- Residential buildings, Cairo, Egypt

6- REFERRENCES:

6-1 Academic:

1- Dr. Ahmed Azmy, Professor of Structural Analysis, the Higher Technological Institute (HTI), Egypt.
Mobile: +201002551181, Email: dr_ahmed_azmy@hti.edu.eg

2- Dr. Mena Bebawy, Associate Professor of Structural Analysis, Lawrence Technological University (LTU),
Mobile: +12484700823, Email: mbebawy@ltu.edu

3- Dr. Maguid M. Hassan, Faculty of Engineering's Dean of the British University in Egypt, (BUE), Egypt.
Mobile: +201001488836, Email: mhassan@bue.edu.eg

6-2 Practical:

1- Dr. Eng. Mostafa Abdel-Latif Mostafa, Owner of Concrete Consultative Office
Mobile: +201006053625, Email: drmostafasaad@yahoo.com

2- Eng. Moemen Ibrahim Kamal, Senior Engineer at eConstruct Fz LLC
Mobile: +201001476087, Email: moemenmiali@gmail.com

3- Eng. Khaled Saleh A El Fattah, General Manager of STEP UP for Engineering Service
Mobile: +20100 175 2219, Email: ksaleh@ses-eg.com