Prof. **ADEL AHMED DIF CURRICULUM VITAE**

GENERAL BIOGRAPICAL INFORMATION

Structural Engrg. Dept., El-Mansoura University Faculty of Engineering, El-Mansoura – EGYPT.

BIRTHDATE: December, 5, 1957

CITIZENSHIP: Egypt

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El-Mansoura-35111 - EGYPT.

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ACADEMIC BACKGROUND

- 1. Hanover University, Germany and Mansoura University, Egypt, channel program, Ph.D. in Structural Engineering in Sept. 1990. Ph. D. thesis entitled "Anisotropic Behavior of Cohesive Expansive Soil".
- 2. El-Mansoura University, El-Mansoura, Egypt. M. Sc. in Structural Engineering in April 1986. M. Sc. thesis entitled "Application of the Boundary Element Method in Soil Media with Multiple Tunnels/Cavities".
- 3. El-Mansoura University, El-Mansoura, Egypt. B. Sc. in Civil Engineering with general grade of appreciation Excellent with Honor's Degree (ranked first among 550 students class) in May 1980.

LANGUAGES

- Arabic (speaking, reading)
- English (speaking, reading)
- German (speaking, reading)

PROFESSIONAL HISTORY

ACADEMIC EXPERIENCE

07/2001 - Present : Professor of Geotechnical Engineering, Structural Engineering
 Department, Faculty of Engineering, El Mansoura University, El Mansoura, Egypt.
11/95 - 07/2001 : Associate Professor, Structural Engineering Department, Faculty of
 Engineering, El Mansoura University, El-Mansoura, Egypt.
11/90 - 11/95 : Assistant Professor, Structural Engineering Department, Faculty of
 Engineering, El Mansoura University, El-Mansoura, Egypt.

10/80 - 12/80 &

04/82 - 11/87 : Teaching Assistant, Structural Engineering Div., Civil Engineering

Department, El-Mansoura University, El-Mansoura, Egypt.

2009 – 2011 : Dean, Faculty of Engineering, El Mansoura University, El-Mansoura, Egypt.

PROFESSIONAL EXPERIENCE

07/79 – 10/79 : Practical work in the extension and maintenance Dept. of the Water Supply System of the city of Athens, at the Society Anonyme Hellenique Des Eaux, Ilissia, Athens, Greece.

01/81 - 03/82: Military service in the Egyptian Army.

11/86 – 12/86 : Training program on "Tunneling and Deep Excavations in Soil", by Prof. Dr. Z. EISENSTEIN, the University of Alberta, Canada, at the National Authority for Tunnels in Cairo, Egypt.

08/80 – 04/85 : Part-Time Senior Engineer in "Engineering Research and Consultation Bureau", Maadi, Cairo, and El-Mansoura, Egypt.

05/90 - Present : General Manager of Boden Consulting Engineers, El-Mansoura, Egypt.

10/90 – Present : Part-time Consultant Engineer in "Consulting and Research Office ", Faculty of Engineering, El-Mansoura University, El Mansoura, Egypt.

1993 – Present : General Supervisor of Soil Mechanics Laboratory Faculty of Engineering, El-Mansoura University, El Mansoura, Egypt.

1996 – Present : Consultant Engineer in Soil Mechanics and Foundation Design.

2002 – Present : General Supervisor of Centrifuge Laboratory Faculty of Engineering, El-Mansoura University, El Mansoura, Egypt.

2001 – 2007 : The Engineering Consultant for Dakahlia Governorate.

PROFESSIONAL SOCIETY MEMBERSHIPS

- 1. Egyptian Society of Civil Engineers, Member.
- 2. International Geotextile Society (IGS), Member.
- 3. American Society of Civil Engineers (ASCE), Member.

SCHOLARSHIPS and HONORS

- 1. The International Association for the Exchange of Students for Technical Experience Fellowship, 1979.
- 2. Deutscher Akademischer Austauschdeinst (DAAD) Fellowship, 1987-1989.

ACADEMIC RESEARCH POJECTS

- 1. Study of Rising Ground Water Problem in Egyptian Cities and Villages. Arab Republic of Egypt, Academy of Scientific Research and Technology, 2004, Member of the "Project Implementation Team"
- 2. Use of Centrifuges as Educational Tools and Base for Virtual Laboratories in Civil Engineering, Arab Republic of Egypt, Ministry of Higher Education, Project Management Unit (PMU), Higher Education Enhancement Project Fund, (HEEPF), 2004, Member of the "Project Implementation Team"

BOOKS:

- Soil Mechanics- part I;
- Soil Mechanics- part II;
- Foundation Design;
- Pile Foundations.

PUBLICATIONS:

- 1. **Dif, A.,** Abdellah, G. and Abdalla, M., "Study of Soil Media with Multiple Tunnels or Cavities using the Boundary Element Technique", *VI Australian Tunneling Conference, Melbourne, March 1987.*
- 2. **Dif, A.,** and Blumel, W., "Laboratory Evaluation of Lateral Swelling Pressure", Discussion in *Journal of Geotechnical Engrg., ASCE, Vol. 117, No. 9, 1991.*
- 3. **Dif, A.,** and Blumel, W., "Expansive Soils under Cyclic Drying and Wetting", *Geotechnical Testing Journal, ASTM, Vol. 2, 1991.*
- 4. Kishk, M., **Dif**, **A.**, Aggag, Y. and Mubarak, A. "Reinforced Embankments on soft Ground A Comparative Study", *International Sym. on Applications of Geosynthetic Technology, Jakarta, Indonesia, November 23-24, 1992.*
- 5. Kishk, M., **Dif, A.**; Aggag, Y. and Mubarak, A. "Behavior of Reinforced Embankments Constructed Compressible Foundation soils", *Proc. the Fifth Arabic Conference of Structural Engineering, El-Fatih University, Libya, November, 1993.*
- 6. **Dif, A.**; and Kishk M., "Reinforced Embankments On Soft Soils A Parametric Study", *Proc. of the Second Geotechnical Conference, Cairo University, Egypt, January, 1994.*
- 7. Dif, A. E., "Analysis of a Replacement Layer Over Soft Soils", *Proc. Mansoura Engineering First Conference*, 28-30 March, 1995, Faculty of Engineering, El-Mansoura University.
- 8. Dif, A., and Kishk, M., "Solution of Contact Problems Using the Finite Element Method", *Proc. Mansoura Engineering First Conference*, 28-30 March, 1995, Faculty of Engineering, El-Mansoura University.
- 9. El-Sharawy, K. A.; **Dif, A. E.,** and Hassanien, A., "The Ideal Design of Dewatering Networks", *Proc. Second Alexandria Conference on Structural and Geotechnical Engineering*, 18-20 April, 1994, Faculty of Engineering, Alexandria University.
- 10. **Dif, A. E.,** "Response of a Soft Clay Stratum Loaded by a Strip Footing", Engineering Research Journal, Faculty of Engineering & Technology, Helwan University, Mataria, Cairo, Vol. 6, December, 1994.
- 11. **Dif, A. E.,** "Features and Applications of Modern Triaxial Apparatuses", Engineering Research Journal, Faculty of Engineering & Technology, Helwan University, Mataria, Cairo, Vol. 7, Febrauary, 1995.
- 12. **Dif, A..** E.; El-Sawaf, M.; and Mahmoud, N. S., "Finite Element Analysis of Raft Foundations A Parametric Study", *Engineering Research Journal, Faculty of Engineering & Technology, Helwan University, Mataria, Cairo, Vol. 7, Febrauary, 1995.*

13. El-Sawaf, M.; **Dif, A.**; Rabi, M.; Kassem, M.; and Mahmoud, N., "Analysis of Raft Foundations Using a Simplified Technique", the Sixth Arabic Conference of Structural Engineering, Syria, October, 1995.

PUBLICATIONS Cont.:

- 14. Ibrahim, A., and **Dif**, **A.**, "Geotextile-Reinforced Earth Walls Constructed On Soft Soils", *Proc. of the Third Geotechnical Conference, Cairo University, Egypt, January*, 1997.
- 15. **Dif, A.**; Rageh, O. S.; and Sarhan, T. E., "Finite Element Analysis of The General Cargo Quay at Damietta Port", *Proc. The Second International Engineering Conference Mansoura'* 1997, 8-10 April, 1997, Faculty of Engineering, El-Mansoura University.
- 16. **Dif, A.**, "Environmental Uses of Geotextiles", *Proc.* 4th Interbuild Conference, Cairo, 26-30 June, 1997 (In Arabic).
- 17. **Dif, A.**, "Non-Linear Finite Element Analysis of Reinforced Soil Walls", *Accepted for Publication in the Seventh Arabic Structural Engineering Conference*, Kuwait, 24-26 November, 1997.
- 18. **Dif, A.** and Farouk, A., "Soil-Rigid Raft Interaction A Comparative Study", *Accepted for Publication in the Seventh Arabic Structural Engineering Conference*, Kuwait, 24-26 November, 1997.
- 19. Harraz, A. Meligy, M. and **Dif, A.** "Reliability Analysis of Tunnels", *Alexandria Engineering Journal, Faculty of Engineering, Alexandria University, Egypt, Vol.* 37, No.6, November, 1998.
- 20. Harraz, A. Meligy, M. and **Dif, A.** "Probabilistic-Based Codified Design of Tunnels", Journal of Engineering and Applied Science, Faculty of Engineering, Cairo University, Egypt, Vol. 46, No.5, October 1999, PP. 853-872.
- 21. **Dif, A.** and Seleam, S., "Groundwater level control under cities, the problem and the solution.", *The 2nd International Conference on Groundwater Control Level on Urbanized Areas, Mansoura University- Mansoura, Egypt. November, 1999.*
- 22. Mansour, S., **Dif, A.,** El Nimr, A. "Purification of Contaminated Groundwater Bodies", *The 2nd International Conference on Groundwater Control Level on Urbanized Areas, Mansoura University- Mansoura, Egypt. November 1999.*
- 23. El Nimr, A., **Dif, A.** and Mansour, S., "A three phase model for contaminated groundwater disinfection", *Proc. Of The 10th International Conference on Computer Methods and Advances in Geomechanics, Tucson, Arizona, USA, Vol. 1, pp. 801-805, 7-12 January, 2001.*
- 24. Dif, A. S., "Non-linear finite element analysis of pile-soil cap interaction", Engineering Research Journal, Faculty of Engineering & Technology, Helwan University, Mataria, Cairo, Vol.74, April 2001.

25. Ibrahim, A., El Nimr, A., and **Dif**, **A.**, "Effect of Percentage of Fines on Sand Liquifaction", *III Regional Conference on Civil Engineering Technology*, ACSE-EGS, Egypt Section, Cairo, Egypt, 8-10 April 2002.

PUBLICATIONS Cont.:

- 26. El Nimr, A., **Dif, A.**, and Ibrahim, A., "Effect of Percentage of Fines on Sand Liquifaction in Arid Regions", *Geotechnical and Geoenvironmental Engineering in Arid Lands*, *Alawaji (ed.)*, 2002 Swets & Zeitlinger, Lisse, ISBN 90 5809 514 2.
- 27. El-Emam, N., El-Meligy, M., and **Dif, A.,** "Nonlinear 3-D Analysis of Deep Excavations", *Fifth Alexandria International Conference on Structural and Geotechnical Engineering, ACSGE5, Faculty of Engineering, Alexandria University, Alexandria, Egypt, 20-22 December 2003, PP: GT27-GT44.*
- 28. Abdel Aziz, G., A., El Nimr, A., **Dif, A.,** Naguib, M., and El Baglaty, S., Effect of Retaining Wall Dimensions on Soil-Struture Interaction", Fourth Mansoura International Engineering Conference, Faculty of Engineering, Mansoura University, Mansoura Sharm El-Shiekh, Egypt, 20-22 April 2004.
- 29. Elgamal, A., El Nimr, A., **Dif, A.**, and Gabr, A., "Predicting axial pile load capacity", *Physical Modelling in Geotechnics Springman, Laue & Seward(eds) 2010 Taylor&Francis Group, London, ISBN 978-0-415-59288-8. Volume 2, PP:757-761.*
- 30. **DIF, A.**, IBRAHIM, A., ALLAM, R., "LATERAL DEFLECTION OF CANTILEVER SECANT PILE IN SOFT CLAY" Mansoura Engineering Journal, Faculty of Engineering, Mansoura University, Egypt, Vol. 37, No. 2, June 2012.
- 31. Elgamal, A., El Nimr, A., **Dif, A.**, and Gabr, A., "Prediction of Pile Bearing Capacity Using Artificial Neural Networks", *Mansoura Engineering Journal, Faculty of Engineering, Mansoura University, Egypt, Vol. 37, No. 3, September 2012.*
- 32. Kamal, Z., Arab, M. and Dif, A., "Numerical Study of Arching Phenomenon of Bored Piles in Sand", International Conference on Advances in Structural and Geotechnical Engineering, ICASGE'15, April 2015, Hurghada, Egypt.
- 33. Kamal, Z., Arab, M. and Dif, A., "Numerical Study of the Arching Phenomenon of Bored Piles in Sand" Alexandria Engineering Journal. Volume 55, Issue 3, September 2016, Pages 2639–2645
- 34. Elshehawy, E., Altahrany, A. and Dif, A. "BEARING CAPACITY OF PILE GROUP AND PREDICTION OF NEUTRAL PLAN" International Journal of Civil Engineering & Technology (IJCIET), Volume 10, Issue 12, December 2019, pp. 205-214.
- 35. Arab, M., Abdelmoghni, M., Akl, S., Dif, A., "Numerical Modeling of Unfavorable CFA Pile Drilling Conditions" International Journal of Geotechnical and Geological Engineering, Springer Nature Switzerland AG 2020, July 2020, https://doi.org/10.1007/s10706-020-01475-3.