**Dr Asem Ahmed Hassan**

**Assistant Professor at College of Science, University of Diyala, Diyala, Iraq**

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## EDUCATION

**School of Engineering and Computing Sciences, Durham University** — *Durham*
*P.hD. in Engineering geology* — *Oct 2010 to Sep 2014*

Thesis Title: Electrical Resistivity Method for Water Content Characterisation of Unsaturated Clay Soil

**Department of Geology, College of Science, University of Baghdad** — *Baghdad*
*M.Sc. In Geophysics* — *Mar 1990 to Jul 1992*

Thesis Title: Application of Resistivity Method for Studying the Hydraulic Properties of Groundwater in Himrin Area, Iraq

**Department of Geology, College of Science, University of Baghdad** — *Baghdad*
*B.Sc. in Geology* — *Jul 1984 to Jul 1988*

## MEMBERSHIPS

Iraqi Geological Society

## SOFTWARE/SYSTEM SKILLS

- Operating Systems: Windows, Linux
- Software: MS Office
- ZondST2d: 2D seismotomography interpretation
- ZondST3d: 3D seismotomography interpretation
- Resistivity interpretation: RES2DMOD, RES3DMOD, RES2DINV, RES3DINV, ZondIP1d, ZondRes2d, ZondRes3d,

## LANGUAGE SKILLS

Mother Tongue: Arabic
Other Language: English (Reading: Good, Writing: Very Good)

## PUBLICATIONS

- Hassan, A. and Toll, D. G. (2013). Electrical resistivity tomography for characterizing cracking of soils. Geo-Congress 2013: Stability and performance of Slopes and mbankements, Meehan, C., Pradel, D., Pando, M. and Labuz, J. F. (Eds.), California, American Society of Civil Engineers ASCE, pp. 818-827.
- Toll, D. G., Hassan, A. A., King, J. M. and Asquith, J. D. (2013). New devices for water content measurement. Proceedings of the 18 th International Conference on Soil Mechanics and Geotechnical Engineering, Paris, France, pp. 1199-1202.
- Hassan, A. A. and Toll, D. G. (2014). Investigation of the directional dependence of soil resistivity in cracking clays. Unsaturated Soils: Research & Applications- Khalili, Russell & Khoshghalb (Eds.) London: Taylor & Francis Group, pp. 137-142.
- Toll, D. G. and Hassan, A. (2014). Data acquisition and control software for automated resistivity measurements, 2 nd International Conference on Information Technology in Geo-Engineering ICITG, D.G. Toll et al. (Eds.), IOS Press, pp. 170-176.
- Hassan, A. A. and Toll, D. G. (2015). Water content characteristics of mechanically compacted clay soil determined using the electrical resistivity method, the XVI ECSMGE Conference, Edinburgh (Accepted).
- Toll, D., Mendes, J., Hassan, A., Glendinning, S., Hughes, P., Chambers, J., Gunn, D., Dijkstra, T, Hughes, D. and Smethurst, J. (2015). Water content relationships for infrastructure slopes, the XVI ECSMGE Conference, Edinburgh (Accepted).
- Toll, D.G., Asquith, J.D., Fraser, A., Hassan, A.A, Liu, G.,Lourenço, S.D.N, Mendes, J, Noguchi, T., Osinski, P., Stirling, R. (2015). Tensiometer techniques for determining soil water retention curves, Unsaturated Soils:Research & Applications China GuiLin 2-4 July 2015 (Accepted)