

CURRICULUM VITAE

Name: Ismat Mohamed El Hassan
Place of Birth: Omdurman, Sudan
Date of Birth: Feb, 1, 1949
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ACADEMIC DEGREES

1972 B.Sc. Civil engineering, University of Khartoum, Khartoum,
Sudan.
1978 Ph.D. Photogrammetric Engineering, University of Glasgow,
Glasgow, United Kingdom.

PROFESSIONAL HISORY

1972-1974 Teaching Assistant, College of Engineering, University of
Khartoum, Sudan.
1974-1978 Post Graduate Scholar, Glasgow University, UK.
1978-1980 Assistant Professor, Civil Engineering Department, College
of Engineering, University of Khartoum, Sudan.
1980-1990 Assistant Professor, Civil Engineering, Department, College
of Engineering, King Saud University, Riyadh, Saudi
Arabia.

1990-2002 Associate Professor, Civil Engineering Department,
College of Engineering, King Saud University, Riyadh,
Saudi Arabia

2002- present Professor, Civil Engineering Department, College of
Engineering, King Saud University, Riyadh, Saudi
Arabia

DEPARTMENTAL ACTIVITIES

1980-2007 Member, Surveying engineering program committee

1980-1982 Coordinator, Text books committee

1982-1984 Member, Post graduate studies committee

1980-2000 Academic supervisor for B.Sc. students

1989-1993 Member, Academic committee

1997-2003 Member, Annual report committee

2000-2003 Member, Compute committee

2005-2007 Member, Students affairs committee

PROFESSIONAL ACTIVITIES

1978-1979 Cadastral Mapping: Extension of Khartoum University
campus, Khartoum

1980-1987 Academic supervisor for surveying camp, Civil engineering
Department, King Saud University

1984-1985 Technical Acceptance committee, King Saud University,
Deryia campus, Riyadh

1985-1987 Preparation B.Sc. program, King Saud University, Riyadh

1985-1987 Technical supervision for a project of planning neighbor
urban area, Ministry of MOMRA, Riyadh

1989-1990 Cadastral mapping of boundaries of KSU Site at Abha.

1994-1995 Fixing control net within KSU campus using GPS area

1995-1996 Evaluation of courses for Military and Geographical
Institute, Riyadh.

1997-1997 Digitization of B8-S Stereo-plotter in collaboration with
HTM British co., KSU, Riyadh.

1983-2007 Refereeing Technical reports for KAAU, Jeddah.

SCIENTIFIC ACTIVITIES

- 1- American Society of Photogrammetry 47th Annual Convention,
Washington DC, USA, 22-27 Feb 1981.
- 2- American Society of Photogrammetry 48th Annual Convention,
Denver, Colorado, USA, 14-20 March 1982.
- 3- Symposium of Desertification Studies, Center of Desertification
Studiesm KSU, Riyadh, 12-23 Nov 1989.
- 4- 18th Congress of the International Society of Photogrammetry and
Remote Sensing, Viennam Austria, 9-19 July 1996.
- 5- Workshop on Advanced Techniques of DEM, International Society of
Photogrammetry and Remote Sensing, Vienna, Austria, 9/7/1996.
- 6- Workshop on Small Scale Mapping using Digital Photogrammetry,
Vienna, Austria, 10/7/1996.
- 7- Seminar on Applications of Remote Sensing, Space Mapping Co.,
Riyadh, 4/12/1996.
- 8- First Saudi-Japanese Symposium in Remote Sensing Applications,
KACST, Riyadh, 1/6/1998.
- 9- First Saudi Conference for Arc/Info Users, Moamer GIS Co., Riyadh,
28/11/1998.
- 10- Great University Symposium, King Saud University, Riyadh, 16-
27/10/1999.
- 11- 6th Annual Meeting of Saudi Society for Earth Sciences, KACST,
Riyadh, 30/1-2/2/2002.
- 12- Workshop on Remote Sensing Technology for Exploration and
Environmental Studies, KACST, Riyadh, 1/2/2000.

- 13- Workshop on Leica 500 GPS applications, Commercial and Marketting Saudi Co., Riyadh, 24/11/200.
- 14- International Conference on Water Resources and Arid Environment, Remote Sensing Applications, Prince Sultan Center for Water, Desert and Environmental Researches, KSU, Riyadh, 5-8/12/2004.
- 15- International Conference on Applications of Developed Remote Sensing systems for Earth Monitoring, KACST, Riyadh, 8-11/5/2005.
- 16- Workshop on Airborne Laser Technology for Spatial Information, KACST, Riyadh, 7/5/2005.
- 17- Workshop on Merging of Remote Sensing Data, KACST, Riyadh, 8/5/2005.
- 18- Workshop on GIS Technology, Geo-Tech Group, Riyadh, 12/5/2005.
- 19- First National Symposium on Information Technology, College of Computer Science and Technology, KSU, Riyadh, 6-8/2/2006.
- 20- Workshop on Geometric Corrections for Remote Sensing Imageries, Geography Department KSU, Riyadh, 27-29/2006.

PUBLISHED RESEARCH

1980 - 1989

- 1- El Hassan, I.M. 1981. "The us of Skylab S190-B photographs for small scale mapping". ASP 47th Annual Convention, Washington D.C., USA, pp. 536-543.
- 2- El Hassan, I.M. 1981. "Analytical techniques for use with reconnaissance frame photography". Photogrammetric Engineering and Remote Sensing, Vol. 47 No. 12, pp. 1733-1738.
- 3- El Hassan, I.M., 1982. "Polynomial correction for focal plane shutter distortion". ASP 48th Annual Convention, Denver, Colorado, USA, pp. 159-163.

- 4- El Hassan, I.M., 1982. "Geometric analysis of reconnaissance frame photography". Photogrammetric Record, Vol. 48, No. 9, pp. 591-598.
- 5- El Hassan, I.M., 1982. "Rotary focal plane shutter distortion". Photogrammetric Engineering and RS., Vol. 48, No. 9, pp. 1463-1465.
- 6- El Hassan, I.M., 1982. "Analytical relative orientation, computer program". KSU, College of Engineering Research Center, Report No. CE-3/1402, 13 pages.
- 7- El Hassan, I.M., 1983. "Analytical strip formation, computer program". KSU, College of Engineering, Research Center, Report No. CE-5/1403, 11 pages.
- 8- El Hassan, I.M., 1985. "A photogrammetric application of Shepard's interpolation". The Sudan Engineering Society Journal, No. 28, pp. 5-8.
- 9- El Hassan, I.M., 1986. "An analytical solution of resection problem". ASCE Journal of Surveying Engineering, Vol. 112, No. 1, pp. 30-35.
- 10- El Hassan, I.M., 1987. "Irregular boundary area computation by Simpson's 3/8 rule". ASCE Journal of Surveying Engineering, Vol. 113, No. 3, pp. 127-132.
- 11- El Hassan I.M. and M.I. Ozone, 1987. "Status of surveying education in Saudi Arabia". Proceedings of the xiith National Surveying Teachers Conference, University of Wisconsin, Madison, USA, pp. 257-269.
- 12- El Hassan, I.M., 1988. "Geometric investigation of space lab metric photography". Australian Journal of Geodesy, Photogrammetry and Surveying, No. 49, pp. 73-90.

- 13- El Hassan, I.M., 1989. "Correction of heights from parallax bar using finite element approach". Journal of KSU, Engineering Sciences, Vol. 1, pp. 29-38.
- 14- El Hassan, I.M., 1989. "Analysis of the three-point resection accuracy". The Australian Surveyor, Vol. 34, No. 7, pp. 716-727.

1990-1999

- 15- El Hassan, I.M., 1990. "Population estimation of Riyadh city using aerial photogrammetry". Australian Journal of Geodesy, Photogrammetry and Surveying, No. 53, pp. 75-90.
- 16- El Hassan, I.M. and A.E. Ali, 1991. "Experiment on accuracy of optical theodolites". Journal of Surveying Engineering, ASCE, Vol. 117, No. 4, pp. 143-150.
- 17- El Hassan, I.M. and A.E. Ali, 1994. "Investigation of Almaz radar imagery for topographic mapping in Saudi Arabia". Research Report No. CE-2/1414, KSU, College of Engineering, Research Center, Riyadh, 82 pages.
- 18- El Hassan, I.M., 1995. "Monitoring development of Riyadh center from aerial photographs". Geocarto International Journal, Vol. 10, No. 1, pp. 57-63.
- 19- El Hassan, I.M. and A.E. Ali, 1995. "Radaragrammetry with Almaz SAR imagery". Geomatic Research Journal, Australia, No. 62, pp. 63-92.
- 20- El Hassan, I.M., 1996. "Distribution pattern of mosques in Riyadh city for the period 1968-1989 using aerial photography". Journal of KSU, Engineering Sciences, Vol. 8 No. 2, pp. 25-38.
- 21- El Hassan, I.M., 1996. "Planimetric area determination using Almaz SAR imagery". International Conference of the International Society of Photogrammetry and RS, Vienna, Austria, 8 pages.

- 22- El Hassan, I.M., 1997. "Evaluation of height measurement accuracy of IFSAR imagery". First Saudi-Japanese Symposium on Application of RS, KACST, Riyadh, pp. 161-172.
- 23- El Hassan I.M. and A.S.H. Aguib, 1999. "Comparative study of upgraded analytical AC-1 and Analogue B8-S photogrammetric instruments". Scientific Bulletin of Faculty of Engineering, Ain Shams University, Vol. 34, No. 3, pp. 173-183.
- 24- El Hassan, I.M., 1999. "Development of surveying engineering education and its effect on overall development of Kingdom of Saudi Arabia". The Great University Symposium, KSU, Riyadh, 16-27 October, 1999, 12 pages.

2000 – 2005

- 25- El Hassan I.M., 2000. "Creation of digital elevation models using Wild B8-S Aviograph connected to EK-22 digitizing system". Journal of KSU, Vol. 12, Engineering Sciences (2), pp. 315-319.
- 26- Algarni, D.A. and I.M. El Hassan, 2001. "Comparison of thin plate spline, polynomial, C^1 -Function and Shepard's interpolation techniques with GPS-derived DEM". JAG Journal, Vol. 3, No. 2, pp. 155-161.
- 27- El Hassan, I.M., 2002. "Two-dimensional resection – a survey of analytical techniques". The Australian Surveyor, Vol. 47, No. 1, pp.14-23.
- 28- El Hassan, I.M. and A.E. Ali, 2003 "Computation of irregular boundary area by Simpson's 2/45 rule". Journal of KSU, Vol. 15, Engineerin Sciences (2), pp. 169-180.
- 29- El Hassan, I.M., 2004. "Desertification monitoring using remote sensing technology". The International Conference on Water Resources and Arid Environment, 5-8 December 2004 , Prince

- Sultan Center for Environment, Water and Desert Research, Riyadh, 17 pages.
- 30- El Hassan, I.M. and A.S.H. Aguib, 2004. "Assessment of Some Interpolation Techniques Using Limited GCP in Developing DEM". CERM, Vol. 26, No. 1. pp 73-85, Al-Azhar University, Cairo, Egypt.
 - 31- El Hassan, I.M., 2005. Monitoring Forest Fires Using Remote Sensing Techniques. Kuwait 1st International Remote Sensing Conference, 26-28 September 2005, Kuwait.
 - 32- El Hassan, I.M., 2005. Introduction to Professional and Legal Surveying. A text book in Arabic, Research Report No. 9/425, Research Center, College of Engineering, KSU, Riyadh.
 - 33- El Hassan, I.M., 2007. "Digital Image Processing in Remote Sensing". A text book in Arabic, Research Report No. 6/427. Research Center, College of Engineering, KSU, Riyadh.
 - 34- El Hassan, I.M., 2007. "Comparative study between some spline interpolation techniques". Accepted for publication in Sudan Engineering Society Journal.

PUBLISHED BOOKS

- 1- El Hassan, I.M., 1987. "Curves planning and setting out". A text book in Arabic, Royal Institute of Technology, Riyadh, 89 pages.
- 2- El Hassan, I.M., 1987. "Applied surveying". A text book in Arabic, Royal Institute of Technology, Riyadh, 76 pages.
- 3- El Shair, I.M. and I.M. El Hassan, 1993. "Estimating population from space using remote sensing technology", translation of of a Ph.D diisertation by Michel Stern, Research Center, Faculty of Arts KSU, published by Dar Al Bashir, Amman, Jordon, 128 pages.
- 4- El Hassan, I.M., 2000. "Introduction to Photogrammetry", A text book in Arabic, Khartoum University Press, Khartoum, Sudan, 212 pages.

5- El Hassan, I.M., 2005. "Hydrographic Surveying", A book in Arabic,
Khartoum University Press, Khartoum, Sudan, 174 pages.

MEMBERSHIP OF SCIENTIFIC ASSOCIATIONS

- 1- American Society of Photogrammetry and Remote Sensing, member.
- 2- British Society of Photogrammetry, member.
- 3- Sudan Engineering Society, member.