# Hussain Aziz SALEH's Curriculum Vitae

BSc. MSc. PhD. FRAS. (July 2019)



*Work contact:* 

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Syrian Nationality, born in Banias, Syria on 01/02/1964

# **CURRENT POSITION (May 2019-Present)**

• Researcher and staff member of HIESR in the Seismic Structural Engineering Department

## PREVIOUS POSTION (September 2005 return back to Syria - April 2019)

- General Director of Higher Commission for Scientific Research, Syria, (April 2017-November 2018).
- Deputy General Director of Higher Commission for Scientific Research (HCSR) Syria, (April 2014- March 2017).
- Head of the Scientific Research Commissions Department at HCSR (December 2008-March 2014)., and in charge of: supervision and evaluation the scientific research projects funded by the HCSR, preparation the annual report for scientific research in Syria, planning of the national policy based on the scientific research and technology development, and working on developing scientific technology innovation observatory for Syria. He is a member of the HCSR scientific consultancy committee, and the national committee for performing Syrian policy for intellectual property rights.
- Researcher and project developer at administrative development centre of the Syrian Ministry for Local Administration and Environment (September 2005- November 2008). Also, at the same time, he keeps working on developing his research activities with the Institute for Spatial Planning and Sustainable Mobility (AMRP) at Ghent University, Belgium in the field of developing real-life applications based on the use of spatial, regional, and environmental planning activities linked with dynamic optimization, and geo-information technology for disaster management and risk reduction.

# **EDUCATION**

- **PhD** studies in Disaster Risk Management and Planning. Institute for Spatial Planning and Sustainable Mobility (AMRP), Ghent University (UGent), Belgium. (15/09/2008-25/10/2017)
  - *Title*: Disaster Management and the Linkages between the Environmental, Regional< and Spatial Planning in Syria.
- Master in Operations Technology and Management, Faculty of Economics and Business Administration, Ghent University, Belgium. (06/10/2003-26/09/2004) "With Distinction" Title: SAP post-implementation, evaluation & Impacts: an empirical survey in an industrial company. (The management project, which was carried out at SIEMENS Company (Huizingen, Belgium), covered a detailed ICT Audit of the company and has provided new lines of research on large scale).
- **Post-Doctorate** Marie Curie Fellowship (MCF) studies, Institut de Recherches Interdisciplinaires et de Developpements en Intelligence Artificielle (IRIDIA), Université Libre de Bruxelles (ULB), Belgium (01/10/2001-30/09/2003).
  - Title: Artificial Intelligence for optimising the use of Geo-information technology.
  - (This research is supported by a European Community MCF (CEC-IHP No. HPMF-CT-2000-00494) and by the "Metaheuristics Network", a Research Training Network funded by the Improving Human Potential programme (CEC, grant HPRN-CT-1999-00106).
- **PhD** studies in Satellite Survey and Operational Research. School of Surveying, University of East London, UK. (17/06/1997-28/06/2000)
  - Title: A Heuristic Approach to the Design of GPS Networks.
  - (The developed techniques in this PhD were practically applied in August 1998 to design the geomatic network of the Seychelles and gave excellent results in a practical environment. In the final academic year 1998/99 of his PhD, a full fee of £6,200 was originally charged, but in recognition of the successful completion of his empirical work in less than two years, the university in appreciation of his diligence and competence subsequently charged a reduced fee of £250).
- **MPhil/PhD** transfer degree in Satellite Survey and Operational Research. School of Surveying, UEL, UK. (01/10/1996-17/06/1997) "With Excellent grade".
- **Postgraduate** studies in Surveying, Department of Geomatic Engineering, University College London UCL, UK. (01/09/1993-30/09/1996).
  - Title: Improvements to the GPSdemUCL Simulation Software.
  - (This study consisted of: 1- a program which used as a part of the MSc Surveying course in the Department of Geomatic Engineering at UCL, and 2- software procedure to help in rebuilding the Westminster Abbey (London) in case of any disaster.
- **Undergraduate** studies in Civil Engineering. Faculty of Civil Engineering, Tishreen University, Lattakia, Syria. (01/09/1983-01/11/1987) "With Good grade"
  - Title: Structural Analysis of the 3D Engineering Constructions.

#### SCIENTIFIC RESEARCH INTERESTS

• Dynamic optimization (using artificial intelligence and geo-information technology) of real-life applications that combine sustainable integrated water resources management, climate change, early warning systems, risk analysis and the linkages between the environmental, regional, and spatial planning for disaster management and risk reduction.

## PROFESSIONAL & TEACHING EXPERIENCE

- Lecturer in Disaster Management, (For MSc students), Department of Civil Engineering, Damascus University (01/10/2011- present).
- Geodesy lecturer, (For MSc students and qualified surveyors of the Royal Institution of Chartered Surveyors (RICS), School of Surveying, University of East London (01/09/2000-15/06/2001).
- Member of the Operational Research Society Local Search Study Group, Department of Computing, City University, London, UK, (10/03/1999- present).
- Surveying lecturer, School of Applied Science, Waltham Forest College, London, UK (15/09/1997-30/05/1998) during his PhD studies.
- Hardware and software installation engineer, Syntax Integration Ltd. London, UK (01/06-30/09/1994 during his postgraduate studies).
- An executive engineer and planner on the research and construction projects of the Syrian Ministry for Housing and Utilities (1988-93).

### SUPERVISION EXPERIENCE

- The participation in supervising of PhD studies (starting September 2014) at the High institute for Seismic Studies and Research, Damascus University, Damascus, Syria. The title: The development of a strategy for earthquake risk management and reduction: A case study (Kafarsouseh region -Damascus).
- The participation in supervising of PhD studies (starting September 2011) at the Agriculture Faculty, Tishreen University, Syria. The title: Using hydrological modelling techniques in integrated management of Al Kabir Al Shemalie Basin.
- Participation in supervising of MSc studies (2009) at the Faculty of Civil Engineering, Tishreen University, Syria, and he resumes his PhD studies in Germany.

## NATIONAL & INTERNATIONAL TRAINING COURCES

 Attending the UNESCO Chair Programme on Cultural Heritage and Risk Management, International Training Course (ITC) on Disaster Risk Management of Cultural Heritage 2014, 9th year, 6-22 September, Institute of Disaster Mitigation for Urban Cultural Heritage, Ritsumeikan University, Kyoto, Japan (Selected as one of the 14 participants from among 134 applications worldwide).

- Giving training courses and practical exercises for the state senior public servants on hazards and disasters management at Institut National d'Administration INA, Damascus, March-April, 2010-11 (INA is the outcome of Syria's belief in achieving the firm foundations of administrative reform, development and modernizing the public sectors in ministries and public institutions).
- Giving training courses on the use of Space Technology Applications for Disaster Management and Risk Reduction in Arabic Countries, Tunis city, Tunis, 17-19 March, 2009 (I participated as a trainer and coordinator for this course which was supported by UNESCO, ESCWA, and CRTEAN (Tunis)).

#### **HONORS**

#### **Scientific awards**

- Awarded the Arab MENA Challenge of the European Satellite Navigation Competition, 2013, Germany. Title of the topic "The design of the Global Navigation Satellite Systems (GNSSs) Positioning Networks using Dynamic Optimisation for Real-Life Applications based on Disaster Management and Risk Reduction" (ID 130883).
- Nominated as international professional of the year 2005 by the International Biographical Centre, Cambridge, England.
- Selected as one of the leading achievers in his field by "Who's Who in Science and Engineering", MARQUIS Who's Who 2005-06 (8th Edition)
- The Performance Prize for the "best talk" at the Marie Curie Scientific Workshop, 4th-5<sup>th</sup> June, 2002. Brussels, Belgium. Co-organised by the Ministry of Flanders-Science Division and by the European Commission. "By Competition".
- The European Community Marie Curie Fellowship, by the European Community funded Improving Human Potential programme. October, 2000.

#### Grants

- Grant Award from Prince Sultan Research Centre for Environment, water and Desert to attend the 4<sup>th</sup> International Conference on Water Resources and Arid Environment (ICWRAE 4), Riyadh, Saudi Arabia, 5-8 December., 2010.
- Grant Award from the Civil Defence in Saudi Arabia to attend the International Symposium on Disaster Management, Riyadh, Saudi Arabia, 3-7 October, 2009.
- Grant Award from the Stockholm International Water Institute SIWI to attend the World Water Week, Stockholm, August 16–22, 2009.
- Grant Award from the Kuwait Institute for Scientific Research (KISR) to attend the 1<sup>st</sup> Regional Conference on Ge-oinformatics for Disaster Management and Early Warning Systems, State of Kuwait. November 24–26, 2008.
- Grant Award from the United Nations Office for Outer Space Affairs (UNOOSA) & Iranian Space Agency (ISA) to attend the Iranian Space Agency/UN-SPIDER Regional

- Workshop on "Building Upon Regional Space-based Solutions for Disaster Management and Emergency Response", Tehran, Iran. October 6–8, 2008.
- Grant Award from the Interfaculty Council for Development Cooperation, K. U. Leuven to attend the International Conference on Water and Urban Development Paradigms, Leuven, Belgium, September 13–19, 2008.
- Grant Award from the Stockholm International Water Institute SIWI to attend the World Water Week in Stockholm & the 18<sup>th</sup> Stockholm Water Congress on "Progress and Prospects on Water: For a Clean and Healthy World", Stockholm, August 17–23, 2008.
- Grant Award from the International Union for Geodesy and Geo-physics IUGG07, to attend the XXIV IUGG General Assembly, Perugia, Italy. July 2–13, 2007.
- Grant Award from the UNEP, Regional Office for West Asia (ROWA) to attend the Regional Conference on "Disaster Relief and Management International Cooperation and Role of ICT", Alexandria, Egypt. April 14–17, 2007.
- Grant Award from the American Association for Artificial Intelligence (AAAI) to attend the Genetic and Evolutionary Computation Conference 2000 (GECCO-2000), The Riviera Hotel, Las Vegas, Nevada, USA. July 8-12, 2000.
- Performance Prize for Poster Presentation at the "Post Graduate Association Conference PGA2000". University of East London, 9<sup>th</sup> June 2000.
- Departmental Prize at the "Post Graduate Association Conference PGA99". University of East London, 2<sup>nd</sup> November 1999.

# Invited Speaker at Research Seminars & Scientific Sessions of

- Civil Defence in Saudi Arabia: "Scientific Research and Technology Development for Disaster Management". In the International Symposium on Disaster Management, Riyadh, Saudi Arabia, 3-7 October.
- Environment General Authority: "Environmental Issues and Ethics of Scientific Research". In the Arab Network for Environmental Ethics. Tripoli Libya7-9 July 2009.
- Iranian Space Agency/UN-SPIDER Regional Workshop: "Artificial intelligence for optimising the use of space technology for disaster management". In the Iranian Space Agency/UN-SPIDER Regional Workshop: Building Upon Regional Space-based Solutions for Disaster Management and Emergency Response. Tehran, Iran, 6-8 October. 2008.
- Development Centre of the Ministry of Local administration and Environment: "Optimal Decision Support for Natural & Environmental Disasters Management and Reduction using Early Warning and Geo-Information Technology", Damascus, 21 May, 2008.
- The Joint Regional Conference On: Disaster Relief & Management Workshop: International Cooperation & Role of ICT: "Innovative Decision Support System based Artificial Intelligence and Spatial Planning for Risk Reduction". Alexandria, 14-17, April.
- Syrian Society for Informatics: "Geographic Information Systems and Global Satellite Navigation Systems for Important Geodetic Applications", Homes, Syria 15 March, 2006.

- Royal Observatory of Belgium: "Artificial Intelligence for optimising complex geomatic applications with dynamic nature (Mission to Mars)". Bruxelles, 23 April, 2003.
- 5th Annual General Meeting of the Marie Curie Fellowship Association: "Development of the advanced Space Technology based on Artificial Intelligence for real life applications", 5th April, Bruxelles, 2003
- IRIDIA: "Metaheuristics for GPS surveying network design", Université Libre de Bruxelles, Belgium, 23 May, 2002
- Cultural & Media Institution: "Satellite technology for geomatic applications". Damascus, 20 August 2001.
- Graduate School of Business and Management Research Seminar: "GPS Surveying Network Scheduling by Heuristic Techniques". American University of Beirut, Lebanon. 21st December. 1999.
- Cavendish School of Computing Science Research Seminar: "Heuristics design of the Seychelles GPS Surveying Network". University of Westminster, London, UK, 3<sup>th</sup> November.1999.
- Department of Environmental Science and Mathematics: "The use of Operations Research (OR) in optimising the scheduling activities of GPS surveying", University of East London, UK, 25<sup>th</sup> June. 1997.
- School of Surveying: "A Heuristic approach for GPS surveying networks", University of East London, UK, 18<sup>th</sup> March. 1997.
- Key-note speaker at 11YOR- Eleventh Young Operational Research: "Local Search Strategy to task scheduling the Logistics of a GPS Surveying Network". Fitzwilliam College, Cambridge, England, UK, March 28-30, 2000.

# **ORGANIZATION & EDITORIAL ACTIVITIES**

- Co-organiser of the "Early Warning Systems & Expert System for Disaster Management" session in the 9<sup>th</sup> International conference on Information Systems for Crisis Response and Management, ISCRAM12, Vancouver, Canada, April 22-25, 2012.
- Co-organiser of the "Open Track" session in the 8<sup>th</sup> International conference on Information Systems for Crisis Response & Management, ISCRAM11, Lisbon, Portugal, May 8-11 2011.
- Co-organizer of the regional workshop on "Marine Research in Eastern Mediterranean". High Institute of Marine Research, Tishreen University, Syria, 26-29 September, 2009.
- Co-organizer of the "Natural Hazards & the role of Satellite Observations" session in the International Conference on Oceanic Manifestation of Global Changes, Guangzhou, China 2-5 December, 2008.
- Co-organiser of the "Information Communication Technologies & Intelligent Decision Support Systems for Environmental Studies" workshop in the 5<sup>th</sup> Conference on Scientific

- Research Outlook & Technology Development in the Arab World (SRO5), Fez, Morocco, 28-31 October 2008.
- Co-organiser of the "Early Warning Systems" session in the 5<sup>th</sup> International conference on Information Systems for Crisis Response and Management, ISCRAM08 Washington DC, USA May 4-7 2008.
- Co-organiser of the "Spatial Planning for Disaster Risk Reduction" session in the 4<sup>th</sup> International Conference on Information Systems for Crisis Response and Management, ISCRAM07 Delft, The Netherlands 14-17 May 2007.
- Chair of the Technical Session in the UN/ Syria/ European Space Agency Regional Workshop: on the Use of Space Technology for Disaster Management in Western Asia and Northern Africa. Damascus, GORS, April, 22-26, 2006.
- Co-editor of the engineering section for the third Annals of MCFA (2003-present).
- Member of the program committee of the 5<sup>th</sup> Metaheursitic International Conference MIC03, 25-28 August, 2003, Kyoto Japan.
- Organiser of the international meeting for "Operational Research, Tools & Applications", within the area of Operations Research and Management Science/Engineering at the 7<sup>th</sup> World Multi-Conference on Systemics, Cybernetics & Informatics, July 27-30, 2003, Orlando, Florida, USA.
- Local co-organiser of the MCFA Annual General Meeting, Brussels, 5-6 April 2003.
- Co-organizer of the 12<sup>th</sup> Marie Curie Scientific Workshop, 4th and 5th June, 2002. Brussels, co-organised by the Ministry of Flanders-Science Division and by the EC.
- Organizer of metaheuristics stream at the Eleventh Young Operational Research Conference 11YOR, Fitzwilliam College, Cambridge, England, UK. (March 28-30, 2000).
- Plenary session chair for the Conference "11YOR- Eleventh Young Operational Research". Fitzwilliam College, Cambridge, England, UK. (March 28-30, 2000).
- Co-editor of the 12<sup>th</sup> Marie Curie Scientific Workshop, 4-5 June, 2002. Brussels, co-organised by the Ministry of Flanders-Science Division and by the EC.

# **Society memberships**

- Member of Institution of Civil Engineering since December (1987- present) (SYR)
- Member of the Royal Institution of Charted Surveyor (1995- 2000) (UK).
- Member of the New York Academy of Science since (1996-1998) (USA).
- Fellow of the Royal Astronomical Society since February (1997- Present) (UK).
- Professional member of the Operational Research Society (1997- Present) (UK).
- Member of the International Society of Applied Intelligence (1997-1998) (USA).
- Professional member of Institution of Navigation (1997- Present) (USA).
- Member of Education Lecturing Services (1997) (UK).
- Professional member of the International Association of Geodesy (2003- present) (DK).
- EX-Fellow of the Marie Curie Fellowship Association (2003-present) (B).

### **PROJECTS EVALUATIONS**

Expert Assessor of International Standing for the Australian Research Council, 2003-04.

## **LANGUAGES**

Arabic (mother tongue), English (Professional), French (intermediate level), Dutch (Basic).

#### **PUBLICATIONS**

# Published in international journals

- Saleh, H., Allaert, G., and De Sutter, R., 2016. Towards Efficient Use of Water Resources Management: A Case Study of the Syrian Coastal Region. International Journal of Water. 10/1:28–54 (issn:1741-5322).
- Saleh, H. 2011. Support system based advanced process resolving models for water management in arid environment. *International Journal of Water Resources and Arid Environment*. 1/6:450–456 (issn:2079-7079)
- Rekiek, B., Delchambre, A. and Saleh, H., (2006). Handicapped Person Transportation: An application of the Grouping Genetic Algorithm. *Journal of the Engineering Applications of Artificial Intelligence*. 19/511-520
- Saleh, H. & Vanden Berghen, F., (2005). Human Genome behaviour: a powerful mechanism for optimising the use of ST in Surveying Networks Design". *GPS Solutions*, 9 (3), 201-211
- Saleh, H. A. and Chelouah, R., (2004). "The design of the Global Navigation Satellite Surveying Networks using Genetic Algorithms". *Journal of the Engineering Applications of Artificial Intelligence*. 17/1:111-122
- Saleh, H. A., (2003). "An Artificial Intelligent design for GPS Surveying Networks". *GPS Solutions*, 7 (2): 101-108.
- Saleh, H. A. and Dare, P., (2003). "Near-optimal design of Global Positioning System Networks using Tabu Search Technique". *J. of Global Optimization*. 25 (2): 183-208.
- Saleh, H. A., (2003). "Metaheuristics for Optimizing the Water Framework Directive based Geographic Information Systems. Science for Water Policy (SWAP), the European Commission, Research Directorate-General, Belgium, pp 195-215.
- Saleh, H. A., (2002). "Optimal Design for GPS Surveying Networks using Operational Research". *Journal of the Arab Institute of Navigation*. 17: 31-47.
- Saleh, H. A., (2002). "Ants can successfully design GPS Surveying Networks". *GPS World*,13(9): 48-60.
- Saleh, H. A. and Dare, P., (2002). "Heuristic methods for designing Global Positioning System Surveying Network in the Republic of Seychelles". *The Arabian Journal for Science and Engineering*. 26: 73-93.

- Saleh, H. A. and Dare, P. J. (2001). "Effective Heuristics for the GPS Survey Network of Malta: Simulated Annealing & Tabu Search Techniques". *J. of Heuristics*. 7 (6):533-549.
- Dare, P. and Saleh, H. A. (2000). "GPS networks design: logistics solution using optimal and near-optimal methods". *Journal of Geodesy*, 74: 467-478.

# **Key Note papers**

 Saleh, H., 2000. A computational Study of Heuristic Techniques for GPS Surveying Networks Scheduling. In the Eleventh Young Operational Research Conference YOR11, University of Cambridge, UK, 28-30 March.

# Published in the national journal

- قبيلي، عماد، عباس، جميل، صالح، حسين، العلي، مارينا. الواقع الحالي والمستقبلي لمياه الشرب في حوض نهر الكبير الشمالي. محافظة اللاذقية، باستخدام نموذج التخطيط والتقييم المائي ، WEAP21.
- قبيلي، عماد، عباس، جميل، صالح، حسين، العلي، مارينا. اعداد قاعدة البيانات للمعطيات الثابتة اللازمة لنموذج التخطيط والتقييم المائي WEAP21 لحوض نهر الكبير الشمالي، مجلة بجوث جامعة حلب. العدد 122 لعام 2016.
  - قبيلي، عماد، عباس، جميل، صالح، حسين، العلي، مارينا. اعداد قاعدة بيانات التربة لنمذجة حوض نهر الكبير الشمالي باستخدام نموذج التخطيط والتقييم المائي WEAP21 ، مجلة جامعة تشرين للبحوث والدراسات العلمية. 2017/7/13.
    - قبيلي، عماد، عباس، جميل، صالح، حسين، العلي، مارينا. إدارة ماء الري الزراعي باستخدام نموذج MABIA-WEAP في حوض نهر الكبير الشمالي بسورية، المجلة السورية للبحوث الزراعية. 2018/12/4.

### Published in the Arabic journal

- Saleh, H., (2012). Global Navigation Satellites Systems (GNSSs) and its real life applications. Al-taqaddum Al-'lmi Magazine (The Scientific Advancement), Kuwait Foundation for the Advancement of Sciences. April No. 76, 67-72. (In Arabic)
- Saleh, H., (2010). Early Warning Systems and Disaster Management. Al-taqaddum Al-'lmi Magazine (The Scientific Advancement), Kuwait Foundation for the Advancement of Sciences. October No. 70, 34-30. (In Arabic)
- Saleh, H., (2010). Geo-information System and its importance in solving Environmental Problems. Al-taqaddum Al-'lmi Magazine (The Scientific Advancement), Kuwait Foundation for the Advancement of Sciences. June No. 69, 57-61. (In Arabic)

# Accepted in publication in the international journal

Saleh, H., Allaert, G., and De Sutter, R., 2014. Towards Efficient Use of Water Resources Management: A Case Study of the Syrian Coastal Region. *International Journal of Water* 

### **Published in the Proceedings of International Conferences**

- Saleh, H., Ibrahim, A, Allaert, G., 2014. Development Planning Activities and linkages with Disaster Risk Reduction in Syrian Coastal Region. In the 1<sup>st</sup> International Conference on Civil Engineering (ICCE14), "Toward reconstruction and sustainable development", Tishreen University, Lattakia, Syria, 4-6 August.
- Saleh, H., Alkamouh, A., 2014. Artificial Intelligence and Satellite Navigation Space Systems for Optimisation real-life Applications. In the 1<sup>st</sup> International Conference on Civil Engineering (ICCE14), "Toward reconstruction and sustainable development", Tishreen University, Lattakia, Syria, 4-6 August.
- Saleh, H., Allaert, G., Boelens, L., De Maeyer, Ph. 2014. The Importance of the Transnational Planning in Disaster Management: A Case Study on the Future Cross-Border Regions Cooperation in Syria and Neighboring Countries. In the Annual Congress (AESOP), "From control to co-evolution", Utrecht/Delft, The Netherlands, 9-12 July.
- Saleh, H., Allaert, G., 2012. Early Warning System based on Dynamic Optimisation for Tsunamis and other Hazards related to Sea Level Rise on Syrian Coastal Zone. In the 11<sup>th</sup> Biennial Conference of Pan Ocean Remote Sensing Conference (PORSEC 12), Kerala, India, 5-9 November.
- Saleh, H., 2010. Support System based Advanced Process Resolving Models for Water Management in Arid Environment. In the 4<sup>th</sup> International Conference on Water Resources and Arid Environment (ICWRAE 4), Riyadh, Saudi Arabia, 5-8 December.
- Saleh, H., Allaert, G., and Abbas, I., 2010. Spatial Solutions Based Geo-information Methods for Sustainable Integrated Water Resources Management. In the 4<sup>th</sup> International Conference on Water Resources and Arid Environment (ICWRAE 4), Riyadh, Saudi Arabia, 5-8 December.
- Saleh, H., 2009. Geo-information Technology and Dynamic Optimisation for Seismic Hazard and Risk Reduction in Syria. In the proceedings of the of the workshop on Active Tectonic Studies and Earthquake Hazard Assessment in Syria and Neighbouring Countries, Damascus, Syria, ASST, 17-19 November.
- Saleh, H., and Allaert, G., 2009. Water Reuse Applications & Planning Systems in Arid Areas. In the International Conference on Water Conservation in Arid Regions, Jeddah, Saudi Arabia, 12-14 October.
- Saleh, H., and Allaert, G., 2009. The importance of Managed Aquifer Recharge for Water and Environmental Protections. In the International Conference on Water Conservation in Arid Regions, Jeddah, Saudi Arabia, 12-14 October.
- Saleh, H., 2009. Practical Strategy based Scientific Research, Technology, and Innovation for Disaster Management and Risk Reduction in Arabic Countries. In the International Symposium on Disaster Management, Riyadh, Saudi Arabia, 3-7 October.

- Saleh, H., & Allaert, G., 2009. Optimal Decision making in Disaster Management and Risk Reduction using Early Warning System, Communications, & Geo-informatics. In the International Symposium on Disaster Management, Riyadh, Saudi Arabia, 3-7 October.
- Saleh, H., & Allaert, G., 2009. Mitigating flood disasters in Syria: a case study of the massive Zeyzoun dam collapse. In the workshop on safe water services in post-conflict and post-disaster contexts, World Water Week, Stockholm, Sweden 16<sup>th</sup> – 22<sup>th</sup>, August.
- Saleh, H., 2009. The Optimal Design of Civil Construction to Resist Earthquakes and Reduce their Risks in Syria and Neighbouring Countries. In the proceedings of the first International Conference of Industry of Engineering Construction between Reality and Ambitions. Al-baath University, Syria, 11-13 May.
- Saleh, H., 2009. An Advanced Testing Strategy based Artificial Intelligence Algorithms for Optimal Inspection Procedures. In the proceedings of the workshop on the Non-Destructive Testing and its rule in the Syrian Industry, Damascus University, 3-5 May.
- Saleh, H., & Allaert, G., 2008. An Advanced Dynamic Processing Strategy of Earth Observations for Disaster Management and Reduction. In the proceedings of the 9<sup>th</sup> Pan Ocean Remote Sensing Conference PORSEC2008, Oceanic Manifestation of Global Changes. South China Sea Institute of Oceanology, Chinese Academy of Sciences, Guangzhou, China, pp 35, November 24<sup>th</sup> – December 6<sup>th</sup>, 2008.
- Saleh, H., & Allaert, G., 2008. Real-Life Applications of Disaster Warning Network based Dynamic Optimisation and Geo-information Technology. In the proceedings of the 1<sup>st</sup> Regional Conference on Geo-informatics for Disaster Management and Early Warning Systems, State of Kuwait. November 24<sup>th</sup> – 26<sup>th</sup>, 2008.
- Saleh, H., & Allaert, G., 2008. Intelligent tools based Geo-information Technology & Dynamic Optimization for Sustainable Water Management. In the proceedings of the 5<sup>th</sup> Congress of Scientific Research Outlook in the Arab World "Scientific Innovation and Sustained Development" Fez, Morocco, 26-30 October
- Saleh, H., & Allaert, G., 2008. Geo-information Technology & Dynamic Optimisation for Seismic Hazard and Risk Reduction in Syria. In the proceedings of the International Conference on Remote Sensing Techniques in Disaster Management & Emergency Response in the Mediterranean Region, Zadar, Croatia, 22-24 September
- Saleh, H., Allaert, G., De Sutter, R., Kellens, W., De Maeyer, Ph., & Vanneuville, W., 2008. Intelligent Decision Support System based Geo-information Technology and Spatial Planning for Sustainable Water Management in Flanders. In the proceedings of the International Conference on Water & Urban Development Paradigms, "Towards an integration of engineering, design and management approaches", Leuven, Belgium 14<sup>th</sup> 19<sup>th</sup>, Sept., CRC Press, Taylor & Francis, London, pp. 283-288. ISBN 978-0-415-48334-6.
- Saleh, H., & Allaert, G., 2008. An Innovative and Cost-effective Monitoring Network for Water Pollution Control and Water Management. In the proceedings of the World Water

- Week in Stockholm & the 18<sup>th</sup> Stockholm Water Congress, Stockholm, Sweden 17<sup>th</sup> 23<sup>th</sup> August. SIWI Press, Sweden, pp:229-230.
- Kellens, W., Deckers, P., Saleh, H., Vanneuville, W., De Maeyer, Ph., Allaert, G., & De Sutter, R., 2008, A GIS tool for flood risk analysis in Flanders-Belgium. In the proceedings of the 6<sup>th</sup> International conference on computer simulation in risk analysis & Hazard Mitigation, "Risk 2008", Cephalonia, Greece 5<sup>th</sup> 7<sup>th</sup>, May, WIT Press, UK, pp: 21-27.
- Saleh, H., 2008. Optimal Design for Geomatic Networks to support Early Warning Systems for Natural & Environmental Disasters. In the Symposium Disasters' Management & Safety of Buildings in Arab Countries, Riyadh, Saudi Arabia, 28 March- 2 April. The Ministry of Municipal & Rural Affairs Press, Riyadh, pp:555-569.
- Saleh, H., & Rukieh, M., 2008. The use of Geo-information Technology in establishing a
  Practical Methodology for dealing with Ttectonic Mapping and Earthquake Information
  (Case study on Syrian Faults). In the Symposium Disasters' Management & Safety of
  Buildings in Arab Countries, Riyadh, Saudi Arabia, 28 March- 2 April. The Ministry of
  Municipal & Rural Affairs Press, Riyadh, pp:539-553.
- Saleh, H., 2007. Dynamic Metaheuristic Algorithms for Optimising Multi-Objectives Problems in the Functionality of Space Technology. In the 1st Mamoun Conference for Computer Science & Communication Technology, Qamishli, Syria, 10-11 September.
- Saleh, H., & Allaert, G., 2007. Monitoring network based optimisation & geo-information technology for water pollution and water management in Flanders. In the Proceedings of International conference: sustainable development & management of water in Palestine, Amman, Jordan 26 August.
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