Curriculum vitae

Name
Date of birth
Nationality
Languages

Mohamed Said Desouky Abu-Hashim 10.06.1974 Egyptian English, German



Dr. Mohamed Abuhashim

Soil and Water Science Dept. Zagazig University Egypt

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WORK EXPERIENCES AND POSITIONS

- 2021 **Professor Soil physics and Water Resource Management, Zagazig University**.
- 2019 now Consultant of the International collaborations, League of Arab States
- 2017 now Manager of projects management unit, Faculty of Agriculture, Zagazig University
- 2017 Host Professor at Faculty of Civil Engineering, Kosice University, Slovakia.
- 2017 2021 Manager of International cooperation Office, TICO, Zagazig University, Egypt.
- 2016 2021 Associate Prof. Soil physics and Water Resource Management, Zagazig University.
- 2015 now Contact person of EXCEED SWINDON -Middle East North Africa program "International Network of Sustainable Water Management in Developing Countries"
- 2014 2015 **Post Doctor Position at Julius Kuehn- Institute (JKI), Braunschweig,** Germany
- 2013 2015 Manager of Technology Transfer Office, TICO, Zagazig University, Egypt.
- 2012-2014 **Lecturer of irrigation and hydraulic**, High Technology Institute, Civil Engineering Department, 10th of Ramadan City, Egypt.
- 2011 -2016 **Lecturer of soil and water resource management**, Faculty of Agriculture, Zagazig University.
- 2011 Doctor rer. nat. Geoecology Institute, Faculty of Architecture, Civil Engineering, and Environmental Science, TU-Braunschweig, Germany.

- 2007 2010 Ph.D student at Julius Kuehn- Institute (JKI), Germany Main subject: Geohydrology, Soil and water science Subsidiary subjects: GIS, Water resource management.
- 2006 2007 **Enrolment as Ph.D student** in Institute of Water and Soil Science of the Federal Agricultural Research Centre (FAL), Germany
- 2002 2006 Assistant lecturer, Soil and Water Science Dept., Faculty of Agriculture, EL-Zagazig University.
- 1996 2002 **Lab instructor**, Soil and Water Science Dept., Faculty of Agriculture, EL-Zagazig University, Egypt.

Education:

Institution	Degree(s) or Diploma(s) obtained	Date (from – to)	
Geoecology Institute, TU- Braunschweig, Germany	Ph. D. in Soil and Water management	2011	
Faculty of Agriculture, Aarhus University, Denmark	Diploma in Soil architecture and physicochemical functions in Agriculture	2010	
Faculty of Agriculture, Zagazig University, Egypt	Master Degree in Soil and Water science	2002	
Faculty of Agriculture, Zagazig University, Egypt	B.Sc. in Soil and Water science	1996	

Language skills : competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
German	2	2	2
English	1	1	1

Membership of professional bodies:

- Egyptian Contact person of EXCEED SWINDON -Middle East North Africa program "International Network of Sustainable Water Management in Developing Countries".
- Member in board of International Water Technology Association,
- Member in Egyptian Soil Science Association

Other skills:

- Expertise in numerical modeling "HYDRUS-ID software package for simulating the Water movement and Multiple Solutes in Variably-Saturated Media.
- Expertise in Geographical Information Systems (GIS) from Geographic dept.,
- Expertise in Analytical models (SPSS programs)

Years of professional experience: 25 years

Key qualifications:

- **15 years** overall professional experience in Monitoring and Modeling in water and agriculture/extension services.
- **12 years** of experience in projects related to relevant crop patterns under different climate changes and agriculture/extension services.
- **12 years** of experience in international development projects related to carbon farming and carbon sequestration into soils under different agriculture management scenarios and plant covers to reduce

CO₂ emission and global warming

- Experience in conducting **trainings in the field**: 1996 2002: **Field instructor**, 2002 2006 **Assistant lecturer**, 2006 – 2007: **Enrolment as Ph.D student**, 2012 – 2020: **Team leader** for International training soil programs in Zagazig University.
- **Experience in preparation of assessment reports: as** I am coordinator and a member in different International projects, I used to prepare and develop of assessment reports:

2018 – now : Principal Investigator of project "Decentralized treatment wetlands for sustainable water management and climate changes in rural and remote areas of semi-arid regions" Funded by ERANETMED program, EU

2019- Now: Co-PI of the international project "A Novel Standalone Solar-Driven Agriculture Greenhouse-Desalination System" funded by Newton Masharfa Program, EU.

2017 – **now** : Coordinator of the international project: "*Development of salt tolerant agricultural practices and reforestation for bioremediation and CO*₂ sequestration in the Middle East Region" funded by EXCEED-Swindon Program, Germany.

2011-2013: Member at FP7 Collaborative Project. The project title is "Climate Induced Changes on the Hydrology of Mediterranean Basins "CLIMB" – Reducing Uncertainty and Quantifying Risk through an Integrated Monitoring and Modelling System". Funded by the European Union.

2011-2013: Principal investigator of CIM project (Centrum für internationale Migration und Entwicklung). The project title is "Water resource management and soil fertility under different land-use and land-management scenarios". **From April 2011 to April 2013**. Sponsored by Deutschen Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Germany.

2008–2009: Vergleichende Untersuchungen der Infiltrationseigenschaften von konventionell und ökologisch bewirtschafteten Böden. Eine Fallstudie aus dem Main-Tauber Kreis, Baden-Württemberg, sponsored by Federal Agency for Nature Conservation Germany, BFN.

• Experience in development of bi-annual reports:

AS the manager of Project Management Unit at Faculty of Agriculture, Zagazig University and the manager of Technology Transfer office that Funded be ASRT in Egypt, I used to prepare and develop of bi-annual reports.

In addition as the Principal Investigator for different International projects I used to prepare and develop of bi-annual reports such as: **Principal Investigator** of **project** "Decentralized treatment wetlands for sustainable water management and climate changes in rural and remote areas of semiarid regions" This assignment implemented under Zagazig University and cooperation with **TU-Berlin and Funded by ERANETMED program, EU.**

2017 – now : Coordinator of the international project: "Development of salt tolerant agricultural practices and reforestation for bioremediation and CO₂ sequestration in the Middle East Region" funded by EXCEED-Swindon Program, Germany.; **2014** – **2017** : Principal Investigator of Zagazig University for TEMPUS Project entitled: Establish a new joint master degree in biotechnology applied to agri-science, environment and pharmacology. **543865-TEMPUS-1-2013-1-EG-TEMPUS-JPCR**; **2012** - **2015**: Member at TEMPUS Project entitled: GIEP – Green Innovation and Entrepreneurship Program 530611-TEMPUS-1-2012-1-IT-TEMPUS-JPCR; **2012-2014**: Director of the National e-Learning Project. The project is titled Product and develops soil and water science courses in e-learning program. The Project is funded by the Ministry of Higher Education, Egypt.;

Specific experience in the region:

Country	Date from – Date to
MENA region	Egyptian Contact person of EXCEED - SWINDON -Middle East North Africa program 2016-2020
Tunisia	Consultant for EMPOWER Tunisia – Emerging pollutants in water and waste water in Tunisia. Financially supported through the German Academic Exchange Service DAAD with a grant of German Foreign Ministry in the period. 2012 – 2013
Egypt and Morocco	"Development of salt tolerant agricultural practices and reforestation for bioremediation and CO ₂ sequestration in the Middle East Region" funded by EXCEED-Swindon Program, Germany. 2016 - 2018
Slovakia	Host Professor at Faculty of Civil Engineering, Kosice University, Slovakia. 2017
Middle East and North Africa	Expert Advisor to the Board of "Agriculture Without Borders, Nietherland" for the middle East and North Africa. 2017 - 2019

Professional experience:

Date	Location	Company	Position	Description
12/2016 – present (Attach file)	Egypt	EXCEED- SWINDON program, Funded by DAAD	Coordinator for Egypt	 <u>"International Network of Sustainable Water</u> <u>Management in Developing Countries</u>", funded by DAAD The primary goal of the international cooperation partners is to promote capacity building, knowledge transfer, and to develop core proposals for sustainable water management. The latter includes technologies for manifold use and reuse of water. For instance two thirds of fresh water worldwide is currently used in agriculture that literally drains away into the ground. Here, treated wastewater could be recycled and reused for further application, e.g. in agriculture. responsible of the Mobilization of different teams lead the development of innovative and relevant research initiatives. It includes innovative agricultural production and Aqua systems for Agriculture through the Joint Research project that funded by the EXCEED Program: "Development of salt tolerant agricultural practices and reforestation for bioremediation and CO₂ sequestration in the Middle East Region" funded by EXCEED- Swindon Program, Germany. 2016 – 2018. http://www.exceed-swindon.org/
04/2017 - present	Egypt	Faculty of Agriculture, Zagazig University	Director of PMU / Associate Professor / Lecturer	 Since 2017, as Director of Projects Management Unit: The capability to contribute seeking out new funding and partnership opportunities Meeting and liaising with prospective donors Develop and write winning proposals to ensure sustainable growth of the program Action plans for designing, implementing and monitoring high-quality research and projects. Most of the research projects implemented and performed in Faculty of Agriculture focus on aqua systems for agriculture production / modelling tools in innovative approaches of water efficiency use in agriculture production that focus on newly reclaimed area in Egypt, Nile Delta, and North of Egypt that will help us with the relevant data base in our approaches and decisions. I have all the data base of these papers in our library in my faculty Since 2016, Associate Professor in Soil Sciences: main tasks Professor of soil sciences Modify student curriculum in soil management Enhance different modules for agriculture

Date	Location	Company	Position	Description
Date	Location	Company	Position	 productions under different soil types Perform different modules for sustainable land management Group leader for identify the water quality in the streams in Nile delta streams and drains Since 2016: Manager of International cooperation Office, TICO: Technology transfer between the Academy and the industry The main aims during my work in this Centre is: 1) Knowledge transfer between the international entities and the Egyptian Universities 2) Increased quality of education through mobility programs 3) Discuss the cooperation possibilities between involved partners in different international association and Zagazig University 2011-2016 Lecturer of soil and water resource management main tasks Lecturer of soil sciences Modify student curriculum in soil management
				 Enhance different modules for agriculture productions under different soil types Perform different modules for sustainable land management Group leader for identify the water quality in the streams in Nile delta streams and drains
01/2017 – 11/2019	MENA region	Association "Agriculture Without Borders, Nietherland"	Expert Advisor	 Expert Advisor to the Board of "Agriculture Without Borders, Netherlands" for the middle East and North Africa. Advisor for soil and water management Expert of Irrigation – "Agriculture Without Borders Association, Nietherland" it is a non governmental organization (NGO) that aims to enhance the capacity building in different countries all over the world in agriculture production through the consultations, produce several solutions, perform different projects by their experts
05/2017 - 06/2017	Slovakia	Kosice University, Slovakia	Host Professor at Faculty of Civil Engineering	 main tasks A. Knowledge transfer B. Increased quality of education through mobility programs C. Discuss the cooperation possibilities between involved partners D. Discuss the challenge environmental problems in MENA regions and the

Date	Location	Company	Position	Description
				suggested solution under the impact of Climate change E. Water Footprint at catchment using hydric numerical models
				F. Impacts of water difficiency on crop productivity at saline arid regions
				G. Mitigate climate change by sequestrate CO2 with land-use changes impacts
				H. Monitoring temporal and spatial surface runoff at a catchment scale
10/2012- 05/2014	Egypt	High Technology Institute, Civil Engineering Dep., D of Ramadan City, Egypt	Lecturer of irrigation and hydraulic	 Modify student curriculum in water management Enhance different modules for agriculture productions under different soil types Perform different modules for sustainable land management Group leader for identify the water quality in the streams in Nile delta streams and drains
<mark>10/</mark> 2011 – 10/2013	Germany	Centrum für internationale Migration und Entwicklung - GIZ	Principal investigator of CIM project	"Water resource management and soil fertility under different land-use and land-management scenarios" - funded by by Deutschen Gesellschaft für Internationale Zusammenarbeit (GIZ)
12/2006 – 10/2007	Germany	Institute of Water and Soil Science of the Federal Agricultural Research Centre (FAL), Germany	Assistant Researcher/ Ph.D student	 Responsible for GIS and soil water measurements in Field Work in field for characteristics of soil infiltration capacity under different agricultural management.
02/2002 – 12/2006	Egypt	Faculty of Agriculture, EL- Zagazig University	Assistant lecturer,	 main tasks Share in curriculum development in water management Share in curriculum development in Soil sciences Share different modules for agriculture productions under different soil types Perform different experiments for sustainable land management Group leader for undergraduate students to identify the water quality in the streams in Nile delta streams and drains

Publications:

- <u>Authored books</u>

- <u>Abuhashim M.</u>, (2011). Impact of land use and land management on the water infiltration capacity of soils on a catchment scale. JKI, Germany. ISBN: 978-3-930037-74-2.
- Abdelazim M. Negm and <u>Mohamed Abuhashim</u>. Sustainability of Agricultural Environment in Egypt: I Soil- Water-Food Nexus. The Handbook of Environmental Chemistry. Springer, Berlin, Heidelberg. © Springer International Publishing AG 2018. https://link.springer.com/book/10.1007/978-3-319-95345-8
- Abdelazim M. Negm and <u>Mohamed Abuhashim</u>. Sustainability of Agricultural Environment in Egypt: II potential approaches on crop production. The Handbook of Environmental Chemistry. Springer, Berlin, Heidelberg. © Springer International Publishing AG 2018. https://link.springer.com/book/10.1007/978-3-319-95357-1
- Hassan Awaad, <u>Mohamed Abu-hashim</u>, Abdelazim Negm. Mitigating Environmental Stresses for Agricultural Sustainability in Egypt. Springer Water. © Springer Nature Switzerland AG 2021. <u>https://doi.org/10.1007/978-3-030-64323-2</u>
- <u>Mohamed Abu-hashim</u>, Faiza Allouuche, Abdelazim Negm. Agro-Environmental Sustainability in MENA Countries. Springer Water. © Springer Nature Switzerland AG 2021. <u>https://link.springer.com/book/10.1007/978-3-030-78574-1</u>
- <u>Mohamed Abu-hashim</u>, Faiza Allouuche, Abdelazim Negm 2021. Agriculture Productivity in Tunisia Under Stressed Environment. Springer Nature Switzerland AG **2021**.

- <u>Authored book chapters</u>

- Mohamed Abu-Hashim, El-Sayed E. Omran, Faiza Khebour Allouche, Abdelazim Negm. 2021. Introduction to Agro-Environmental Sustainability in MENA Regions. 2-9. In: Agro-Environmental Sustainability in MENA Countries. Springer Water. © Springer Nature Switzerland AG 2021. https://link.springer.com/book/10.1007/978-3-030-78574-1
- Mohamed Abu-hashim, El-Sayed E. Omran, Faiza Khebour Allouche, Abdelazim Negm. 2021. Introduction to "Agro-Environmental Sustainability in MENA Regions" In: Agro-Environmental Sustainability in MENA Countries. Springer Water. © Springer Nature Switzerland AG 2021. https://link.springer.com/book/10.1007/978-3-030-78574-1
- Hassan Auda Awaad, Abdelazim M. Negm, <u>Mohamed Abu-hashim</u>. 2021. Introduction to "Mitigating Environmental Stresses for Agricultural Sustainability in Egypt. 3-14. In : Mitigating Environmental Stresses for Agricultural Sustainability in Egypt. Springer Water. © Springer Nature Switzerland AG 2021. <u>https://doi.org/10.1007/978-3-030-64323-2</u>
- Hassan Auda Awaad, <u>Mohamed Abu-hashim</u>, Abdelazim M Negm. 2021. Heat Stress Tolerance, Challenges and Solutions. 105-140. In : Mitigating Environmental Stresses for Agricultural Sustainability in Egypt. Springer Water. © Springer Nature Switzerland AG 2021. <u>https://doi.org/10.1007/978-3-030-64323-2</u>
- Hassan Auda Awaad, Abdelazim M. Negm, <u>Mohamed Abu-hashim</u>. 2021. Update, Conclusions, and Recommendations of Mitigating Environmental Stresses for Agricultural Sustainability in

Egypt. In : Mitigating Environmental Stresses for Agricultural Sustainability in Egypt. Springer Water. © Springer Nature Switzerland AG 2021. <u>https://doi.org/10.1007/978-3-030-64323-2</u>

- Faiza Khebour Allouche, Ibticem Abidi, Eric Delaître, <u>Mohamed Abu-hashim</u>, Dalel Ouerchfeni Bousaida, Safa Hamad, Ribh Riahi. 2021. Assessing Tunisian Oasis Dynamics Using Earth Observation and Landscape Metrics: Case of Djerid and Nefzaoua Regions. In: Environmental Remote Sensing and GIS in Tunisia, 285-301. Springer, Cham.
- AM Negm, FK Allouche, **M Abu-hashim. 2021**. Introduction to "Agriculture Productivity in Tunisia Under Stressed Environment" In: Agriculture Productivity in Tunisia Under Stressed Environment, 3-10, Springer, Cham
- Abuhashim M., Shaban K., Sallam A., Negm A. (2018) Effect of Water Deficit on Food Productivity Under Saline Conditions: Case Study North Sinai, Egypt. In: . The Handbook of Environmental Chemistry. Springer, Berlin, Heidelberg. <u>https://doi.org/10.1007/698_2018_316</u>
- Mohamed Abu-hahim and Abdelazim Negm. 2018. Deficit irrigation management as strategy under water scarcity; potential application at North Sinai, Egypt. In: The Handbook of Environmental Chemistry. Springer, Berlin, Heidelberg. <u>https://doi.org/10.1007/698_2018_292</u>.
- Mohamed E.S., Abu-Hashim M., Belal AA.A. (2018) Sustainable Indicators in Arid Region: Case Study – Egypt. In: The Handbook of Environmental Chemistry. Springer, Berlin, Heidelberg. https://doi.org/10.1007/698_2018_243.
- Abu-hashim M., Mohamed. E. And Belal, A. 2017. Land-use Changes and Site Variables on the Soil Organic Carbon Pool: the Potential Application for the MENA Region. In; Advances in Environmental Reseach, vol. 55, ISSN: 2158-4717.

Published papers

- Zhao, Z.; Huo, A.; Liu, Q.; Peng, J.; Elbeltagi, A.; Abuarab, M.E.-S.; <u>Abu-Hashim, M.S.D</u>. Spatiotemporal Variation in the Coupling Relationship between Human Activities and Soil Erosion— A Case Study in the Weihe River Basin. *Sustainability* **2023**, *15*, 10785. <u>https://doi.org/10.3390/su151410785</u>
- brahim, L.A.; Shaghaleh, H.; <u>Abu-Hashim, M.</u>; Elsadek, E.A.; Hamoud, Y.A. Exploring the Integration of Rice and Aquatic Species: Insights from Global and National Experiences. *Water* 2023, *15*, 2750. <u>https://doi.org/10.3390/w15152750</u>
- Hendy, I.; Zelenakova, M.; Pietrucha-Urbanik, K.; Salama, Y.; <u>Abu-hashim, M.</u> Decentralized Constructed Wetlands for Wastewater Treatment in Rural and Remote Areas of Semi-arid Regions. Water 2023, 15, 2281. <u>https://doi.org/10.3390/w15122281</u>
- <u>Abu-hashim, M.</u>; Lilienthal, H.; Schnug, E.; Lasaponara, R.; Mohamed, E.S. Can a Change in Agriculture Management Practice Improve Soil Physical Properties? *Sustainability* 2023, *15*, 3573. <u>https://doi.org/10.3390/su15043573</u>
- Ibrahim, L.A.; <u>Abu-Hashim, M.</u>; Shaghaleh, H.; Elsadek, E.; Hamad, A.A.A.; Alhaj Hamoud, Y. A Comprehensive Review of the Multiple Uses of Water in Aquaculture-Integrated Agriculture Based on International and National Experiences. *Water* 2023, *15*, 367. <u>https://doi.org/10.3390/w15020367</u>

- <u>Mohamed Abu-hashim</u>, H. Lilienthal, E. Schnug, Dmitry E. Kucher, and Elsayed Said Mohamed. 2022. Tempo-Spatial Variations in Soil Hydraulic Properties under Long-Term Organic Farming. Land 2022, 11, 1655. <u>https://doi.org/10.3390/land11101655.</u>
- AA Abdellatif, AMA Merwad, KF Moussa, <u>MSD Abu-Hashim</u>. 2022. INFLUENCE OF MANGROVE ECOSYSTEM ON SOIL CARBON SEQUESTRATION AND GLOBAL WARMING AT THE WESTERN STRAND OF THE RED SEA, EGYPT. Zagazig Journal of Agricultural Research 49 (4), 513-521.
- Ismail Abd-Elaty, Martina Zelenakova, Salvatore Straface, Zuzana Vranayová, <u>Mohamed Abu-hashim</u>, Abdelazim Negm, Andrea Scozzari. 2022. Investigating the possible measure to protect groundwater from polluted streams in Arid and Semi-Arid Regions: the Eastern Nile Delta case study. EGU General Assembly Conference Abstracts, EGU21-14734.
- Lubna A Ibrahim, Marwa E El-Sesy, ElSayed ElBastamy ElSayed, Martina Zelenakova, Maria Hlinkova, Essam Sh Mohamed, <u>Mohamed Abu-Hashim</u>. 2022. Simultaneous Removal of Metal Ions from Wastewater by a Greener Approach. Water 14 (24), 4049
- ElSayed ElBastamy, Lubna A. Ibrahim, Atef Ghandour, Martina Zelenakova, Zuzana Vranayova, <u>Mohamed Abu-Hashim</u>. 2021. Efficiency of Natural Clay Mineral Adsorbent Filtration Systems in Wastewater Treatment for Potential Irrigation Purposes. *Sustainability*, 13(10), 5738; <u>https://doi.org/10.3390/su13105738</u>
- <u>Abu-Hashim, M.</u>, Sayed, A., Zelenakova, M., Vranayová, Z., Khalil, M. **2021**. Soil Water Erosion Vulnerability and Suitability under Different Irrigation Systems Using Parametric Approach and GIS, Ismailia, Egypt. **Sustainability 2021**, 13, 1057.
- Manal Alnaimy, Martina Zelenakova, Zuzana Vranayová and <u>Mohamed Abu-Hashim</u>. 2020. Effects of Temporal Variation in Long-term Cultivation on Organic Carbon Sequestration in Calcareous Soils: Nile Delta, Egypt. *Sustainability*, 12, 4514
- Hanan Ali, Nahlaa Ahmed, and <u>M. S. Abu-hashim</u>. 2020. Potential Effect of Irrigation Intervals and Potassium Phthalate on Fennel Plants Grown in Semi-Arid Regions. Egypt. J. Soil. Sci. Vol. 60, No. 1, pp. 83-98.
- Ismail Abd-Elaty, Martina Zelenakova, Salvatore Straface, Zuzana Vranayová and <u>Mohamed</u> <u>Abu-hashim</u>. 2019. Integrated Modelling for Groundwater Contamination from Polluted Streams Using New Protection Process Techniques. *Water*, 11, 2321
- Mohamed Elsayed, Abdel-Aziz Belal, and <u>Mohamed Abu-hashim</u>. 2019. Quantitative assessment of surface runoff at arid region: a case study in the Middle of Nile Delta. Bulletin of the National Research Centre. 43:186 <u>https://bnrc.springeropen.com/articles/10.1186/s42269-019-0230-7</u>
- Mohamed Elsayed, <u>Mohamed Abu-hashim</u>, Mohamed AbdelRahman, Brigitta Schütt, and Rosa Lasaponara. 2019. Evaluating the effects of the human activities over the last three decades On the Soil Organic Carbon Pool Using Satellite imagery and GIS techniques in the Nile Delta area, Egypt. *Sustainability*, 11, 2644.
- Mahmoud Ghieth, K.G. Soliman, and <u>M.S. Abu-Hashim</u>. QUALITY OF SURFACE WATER IN SOME SELECTED DRAINS AND CANALS IN FAYOUM GOVERNORATE. Zagazig J. Agric. Res., Vol. 46 No. (6B), 2271-2285.

- MARTINA ZELENAKOVA, PAVOL PURCZ, RADU DANIEL PINTILII, PETER BLISTAN, PETR HLUSTIK, ANNA ORAVCOVA, <u>MOHAMED ABU HASHIM</u>. 2018. Spatio-temporal Variations in Water Quality Parameter Trends in River Waters. REV.CHIM. 69, 10, 2940-2974.
- Zeleňáková, M., BLIŠŤAN, P., DOBOS, E., BLIŠŤANOVÁ, M., VÁGO, J., <u>ABU-HASHIM, M.</u>, FIJKO, R., and PURCZ, P. 2018. Flood vulnerability assessment of Bodva cross border river basin. Acta Montanistica Slovaca, 33, 1, 53-61.
- <u>Abu-hashim, M.S.D.</u>, and Shaban, K.A. 2017. Deficit irrigation management as strategy to adapt water scarcity – Potential application on Mediterranean saline soils. Egypt. J. Soil Sci. Vol. 57, No. 3, pp. 261 – 271.
- <u>Abu-hashim, M.</u>, Mohamed, E., and Belal, A. 2016. Effect of land-use changes and site variables on surface soil organic carbon pool at Mediterranean Region. Journal of African Earth Sciences. 114, 78-84.
- <u>Abu-hashim, M.S.D.</u>, and Salama, A. 2016. Simple method to measure key parameters of soil-root structure using medical X-ray tomography scanning technique. Egypt. J. Soil Sci. Vol. 56, No.7.
- <u>Abu-hashim, M.</u>, Mohamed, E., and Belal, A. 2015. Identification of Potential Soil Water Retention Using Hydric Numerical Model at Arid Regions by Land-use Changes. *International Soil and Water Conservation Research. 3, 305-315.*
- <u>Abu-hashim, M.S.D.</u>, Salama, A., and Garbout, A. 2015. Characterization of soil root interactions using medical X-ray computed tomography technique. International Journal of Agricultural Science and Research. 5(5), 159-170.
- Belal, A.A., Mohamed, E.S., and <u>Abu-hashim M.S.D.</u> 2015. Land Evaluation Based on GIS-Spatial Multi-Criteria Evaluation (SMCE) for Agricultural Development in Dry Wadi, Eastern Desert, Egypt. Int. J. Soil Sci., 10(3), 100-116.
- Sallam, A., Shaban, K. A., and <u>Abuhashim, M.</u> 2014. Influence of Water deficit on seed yield and seed quality of Faba bean under saline soil conditions at North Sinai, Egypt. J. Soil Sci. Vol. 54, No. 3 pp. 265 278.
- <u>Abuhashim M</u>, and Abdel-Fattah M. K. (2012). Impact of Gypsum Radius on Soil Physical Properties in Saline-Sodic Soils in Sinai, Egypt. Journal of Soil and Tillage Research. Egypt. J. Soil Sci. Vol.
- <u>Abuhashim M</u>, Lilienthal H, Schnug E (2012). Land use impact on the water harvest Using a modified physical model at a catchment scale. In: 1st Minia International Conference for Agriculture and Irrigation in the Nile Basin. 26-29 March, Minia, Egypt.
- <u>Abuhashim M</u>, Lilienthal H, Schnug E (2010). Evaluation the impact of different land-use and land management on surface runoff using the modified curve number approach. In: 1st International Conference and Exploratory Workshop on Soil Architecture and Physico-Chemical Functions. Aarhus University, Nov. 30 Dec. 2. Aarhus, Denmark 139-142.
- <u>Abuhashim M</u>, Lilienthal H, Schnug E (2010). Silent sealing- Impact of different land-use and land management on the infiltration characteristics using the modified curve number approach. Oral presentation In: International workshop " Better Soils for Better Life". School of Engineering and Science, Jacobs University. 6 10 Dec. Bremen, Germany.

- <u>Abuhashim M</u>, Lilienthal H, Schnug E (2009). Simulation the impact of different agriculture land management on runoff using the Curve Number model. In: Proceeding of the International conference in Water, Wastewater, and the Environment "Urgent Issues for Sustainability". TU Braunschweig, October 25th to November 3rd. Braunschweig, Germany.
- Lilienthal H, <u>Abuhashim M</u>, Schnug E (2009). Preventative Flood protection Adaption of land management to improve soil infiltration. In: Proceeding of the International conference in Dimensions of ecology from global change to molecular ecology: September, 14th to 18th 2009. Bayreuth, Germany.
- <u>Abuhashim M</u>, Lilienthal H, Stoven K, Schnug E (2009). Characteristics of soil infiltration capacity under different agricultural management. Mitt.JKI 419, 91-96.

<u>AWARDS</u>

National Awards

- International Publication Awards from Zagazig Univrsity:
- Abu-hashim, M., Mohamed, E., and Belal, A. 2016. Effect of land-use changes and site variables on surface soil organic carbon pool at Mediterranean Region. Journal of African Earth Sciences.
- Manal Alnaimy, Martina Zelenakova, Zuzana Vranayová and <u>Mohamed Abu-Hashim</u>. 2020. Effects of Temporal Variation in Long-term Cultivation on Organic Carbon Sequestration in Calcareous Soils: Nile Delta, Egypt. *Sustainability*, 12, 4514
- Ismail Abd-Elaty, Martina Zelenakova, Salvatore Straface, Zuzana Vranayová and <u>Mohamed</u> <u>Abu-hashim</u>. 2019. Integrated Modelling for Groundwater Contamination from Polluted Streams Using New Protection Process Techniques. *Water*, 11, 2321

International Awards

- Best Paper Award Certificate from Trans Steller publication house
- Abu-hashim, M.S.D., Salama, A., and Garbout, A. 2015. Characterization of soil root interactions using medical X-ray computed tomography technique. International Journal of Agricultural Science and Research.

International Conferences committee board:

- 1- Coordinator of the first international conference "Recent Advances in Soil Sciences". Alexandria Bibliotheca, May 2015.
- 2- Organizing and Advisory committee board of The 17th World Fertilizer Congress held in Liaoning Mansion, Shenyang, China. 2018. <u>http://17wfc.csp.escience.cn/dct/page/65578</u>
- 3- Organizing committee board of the 21st International Water Technology Conference (IWTC). Port Saieed, Egypt. 28-30 June, 2018.
- 4- Coordinator of the 1st workshop "Better Agriculture Management for Better Life". Zagazig University, Egypt. 7 March, 2018.

- 5- Coordinator of the international workshop "Energy-Water-Food Nexus in MENA Region, 11-16 Nov. 2018, Aswan, Egypt.
- 6- Coordinator of the international workshop "Using Modern Technology to Treat Waste Water for Irrigation and Confront Climate Changes. October 10-13, 2022. Cairo, Egypt
- 7- COP27: Manager of the Panel discussion "Natural Based Solution for Waste Water Treatments and Climate Changes at Arid Regions" Nov. 06-18, 2022, Sharm El Sheikh, Egypt.
- 8- Guest speaker at the international conference "Water Security and Climate Changes-WSCC2022" Dec, 1-3, 2022. Bangkok, Thailand.

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