

CURRICULUM VITAE

2015

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DOB and POB: July 28, 1962, Tehran, Iran

Nationality: Iranian

Education:

B.Sc. Soil and Water Science, 1988
University of California at Davis, Ca., USA

M.Sc. Water Science and Engineering, 1990
University of California at Davis, Ca., USA

Ph.D. Environmental Engineering, 1993
University of California at Davis, Ca., USA

Professional Record:

1988 – 1991 Research Assistant, Dept., of Biological Systems Engineering
University of California at Davis, Ca., USA

1993 – 2004 Assistant Professor, Faculty of Civil Engineering
Sharif University of Technology, Tehran, Iran

2004 – to date Associate Professor, Faculty of Civil Engineering
Sharif University of Technology, Tehran, Iran

Research Interests:

Water Quality Management, Water Resources Management,
Application of RS/GIS in Water Resources, Wastewater Reclamation
and Reuse

Courses Taught:

Water Quality Management, Hydraulic System Design, Environmental
Engineering, Water Reuse, Design of Natural System Treating Waste
Water

Representative Publications:

1. Kermanshah, A., S. Sotoudeheian, **M. Tajrishy**, (2015), "Satellite and Ground-Based Assessment of Middle East Meteorological Parameters Impact on Dust Activities in Western Iran", Accept by **Scientia Iranica**.
2. Sima. S., **M. Tajrishy.**, (2015), "Developing Water Quality Maps of Hypersaline Lake Using Spatial Interpolation Methods", **Scientia Iranica**, 22(1), pp. 30-46.
3. Ahmadisharaf. E., **M. Tajrishy.**, N. Alamdari., (2015), "Integrating flood hazard into site selection of detention basins using spatial multi-criteria decision-making", **Journal of Environmental Planning and Management**.
4. **Tajrishy. M.**, (2014), "A Blip on Iran's Water Sector", **Arab Water World (AWW)**, Vol. 37, Issue. 11.
5. Sima. S., Shafiee Jood, **M. Tajrishy**, A. Abrishamchi, (2013)." System Dynamics Analysis for Sustainable Water Allocation Between Wetland and Agriculture- Case Study of the Shadegan Wetland", **Submitted for Possible Publication to Water Resources Management**.
6. Sima, S., A. Ahmadalipour, **M. Tajrishy**, (2013)." Mapping Surface Temperature in a Hyper-Saline Lake and Integrating the Effect of Temperature Distribution on the Lake Evaporation", **Remote Sensing of Environment**, Vol. 136, 374-385.
7. Givchchi, R., M. Arhami, **M. Tajrishy**, (2013)." Contribution of the Middle Eastern Dust Source Areas to PM10 Levels in Urban Receptors: Case Study of Tehran, Iran", **Atmospheric Environment**, Vol. 75, 287-295.
8. Sharifi, A., L. Kalin., **M. Tajrishy**, (2013). "System Dynamics Model (SDM) for Predicting Effects of Upstream Development on Hydropower Generation", **ASCE, J. Hydrologic Engineering**, 18(8), 1007-1017.
9. Sima, S., and **M. Tajrishy**, (2013). "Using Satellite Data to Extract a Volume-Area-Elevation Relationship for Urmia Lake,Iran" **J. Great Lakes Research**, Vol. 39, pp. 90-99.
10. Owlia, R.S., A.Abrishamchi, and **M. Tajrishy**, (2011). "Spatial-Temporal Assessment and Redesign of Groundwater Quality Monitoring Network: a case study", **Environmental Monitoring and Assessment**, Vol. 172(1-4), pp. 263-273.
11. Jamshidi, M., **M. Tajrishy** and M. Maghrebi, (2010). "Modeling of Point and Non-Point Source Pollution of Nitrate With SWAT in the Jajrood River Watershed, Iran", **International Agricultural Engineering Journal**, Vol. 19(2), pp. 263-273.
12. **Tajrishy, M.**, M. Maghrebi, M. Jamshidi, (2010). "Assessment of Jajrood River Watershed Microbial Pollution :Sources and Fates", **Environmental Eng. and Management Journal**, Vol. 9, No. 3, pp. 385-391.
13. Taheri, S.B. Shouraki, F.Fell, M. Schaale, J. Fischer, A.Tavakoli, **M. Tajrishy**, (2009). " Application of ALM to Retrieve Pigment from Spectral RS Reflectance Data ", **Intl. J. Remote Sensing**, Vol. 30, pp. 1045-1065.
14. Arasteh, P.D. and **M. Tajrishy**, (2008). "Calibrating Priestly-Taylor Model to Estimate Open Water Evaporation Under Regional Advection Using Volume Balance Method-Case Study: Chahnimeh Reservoir, Iran", **J. Applied Sciences**, Vol. 8 (22), pp. 4097-4104.
15. Abrishamchi, A., H. Alizadeh, **M. Tajrishy**, and A. Abrishamchi, (2007). "Water Resources Management Scenario Analysis in Karkheh River Basin, Iran, Using WEAP Model", **Hydrological Science and Technology**, Volume 23 (1-4), pp. 1-12.
16. Taheri, H., M. Schaale, F. Fell, J. Fischer, R. Preusker, M. Vatandoust, Bagheri S. Shouraki, **M. Tajrishy**, H. Khodaparast, A. Tavakoli, (2007). " Application of the Active Learning Method for the estimation of geophysical variables in the Caspian Sea from satellite ocean colour observations ", **Intl. J. Remote Sensing**, Vol 28(20), 4677-4683.
17. Mohammadian, A., D.Y. Le Roux, and **M. Tajrishy**, (2007). "A Conservative Extension of the Method of Characteristics for 1-D Shallow Flows", **Applied Mathematical Modelling**, Vol. 31, pp 332-348.

18. Abrishamchi, A., A. Ebrahimian, **M. Tajrishy**, and M. Marino, (2005). "Application of Multi Criteria Decision Making to Urban Water Supply", **ASCE J. of Water Res. Planning and Management**, Vol. 131 (4), pp. 326-335.
19. Mohammadian, A., D.Y. Le Roux, and **M. Tajrishy** and K. Mazaheri, (2005). "A Mass Conservative Scheme for Simulating Shallow Flows Over Variable Topographies Using Unstructured Grid", **Advances in Water Resources**, Vol. 28 (5), pp. 523-539.
20. Abrishamchi, A., **M. Tajrishy**, R. Iranpour, and Shafieian, (2005). "Uncertainty Analysis in QUAL2E Model of the Zayandeh-Rood River", **Water Environment Research**, Vol. 77 (3), pp. 279-286.
21. Mohammadian, A., **M. Tajrishy** and Lotfi Azad, (2004). "Two Dimensional Numerical Simulation of Flow and Geomorphological Processes Near Head Land by Using Unstructured Grid", **International Journal of Sediment Research**, 19 (4), pp. 258-277.
22. Saghafian, B., **M. Tajrishy**, H. Taheri, and N. Jalali, (2003). "Modelling Spatial Variability of Daily Rainfall in Southwest Iran", **Scientia Iranica**, Vol. 10, No. 2, pp. 164-174.
23. Jalali, N., B. Saghafian, H. Taheri, **M. Tajrishy**, and B. Aminipouri, (2002). "Spatio-Temporal Mapping of Smoke Fraction Index Generated by the Kuwaiti Oil Well Fires", **Asian J. Geoinformatics**, Vol. 3, No. 1, pp. 29-35.
24. Hills, D.J., **M. Tajrishy** and G. Tchobanoglous, (2000). "The influence of Filtration on UV disinfection of secondary effluent for micro irrigation", **Trans ASAE**, Vol. 43(6), pp. 1499-1505.
25. Iranpour, R., M. Stenstrom, J. Lee, D. Miller, **M. Tajrishy**, A. Abrishamchi, E. Schroeder, and G. Tchobanoglous, (2000). "Management Analysis of Wastewater Capital Improvement Programs In Large Cities", **Water Research**, Vol. 34, No. 5, pp. 1714-1726.
26. Iranpour, R., D. Miller, G. Tchobanoglous, and **M. Tajrishy**, (1999). "Comments on : Virus adsorption in a complex system – an experimentally designed study", **Water Research**, Vol. 33, No. 9, pp. 2194-2195.
27. Iranpour, R., O. Maghaddam, S. kharaghani, G. Garnes, and **M. Tajrishy**, (1998). "Discussion of : Gasification of char from wastewater solids pyrolysis", **Water Env. Res.**, Vol. 70, No. 7, pp. 13330-31.
28. **Tajrishy, M.**, D.J. Hills and G. Tchobanoglous, (1994). "Pretreatment of Secondary Effluent for Drip Irrigation", **ASCE, J. Irrig and Drain. Dir.**, Vol. 120(4), pp , 716-731.
29. **Tajrishy, M.**, D.J. Hills, (1992). "Friction Losses in Layflat Mainflod Hose and Drip-Tape Fitting", **J. Applied Engineering**, Vol. 8(3), pp , 343-346.
30. **Tajrishy, M.**, D.J. Hills, (1989). "Hydraulic Consideration for Compressed subsurface Drip-Tape", **Trans. ASAE**, Vol. 32 (4), pp , 1197-1201.

International Conferences:

1. Akhani, H., M. Djamali, A. Sharifi, **M. Tajrishy**, "The Past, Present, and Future of Lake Urmia", **AAAS Annual Meeting, Washington D.C**, 2016.
2. Tavakoli, S., Ebrahimian, **M. Tajrishy**, "Retrofitting the Street Side Gardens as Low Impact Development Practices in the City of Tehran, Iran", **Intl. LID Symposium, Minnesota**, 2013.
3. Ahmadisharaf, A., **M. Tajrishy**, "Combining SWMM and Multi-Criteria Decision Making for Siting Detention Basins to Control Urban Flooding (Poster)", **2012 AWRA Annual Conference**.
4. Kamali, M., S. Ghazvinizadeh, **M. Tajrishy**, M. Kayhanian, "Urban Runoff Characteristics in Tehran, Iran", **9th Internatioal Conference on Urban Drainage Modelling, Belgrade, 2012**.

5. Kazemi Parkouhi, F., **M. Tajrishy**, M. Kayhanian, "Characterization of Road-Deposited Sediments in Different Land-Use Types in Tehran, Iran", **9th International Conference on Urban Drainage Modelling, Belgrade, 2012.**
6. Tavakoli, S., **M. Tajrishy**, "The Economics of Stormwater BMPs in Tehran, Iran", **9th International Conference on Urban Drainage Modelling, Belgrade, 2012.**
7. Sima, S., **M. Tajrishy**, A. Ahmadalipour, " Comparison of the Hydro-meteorological conditions in two adjacent Lakes: Lake Urmia and Lake Van", **ASLO 2012 Aquatic Sciences Meeting, Japan**, Poster presentation: 10293.
8. Khakbazan Fard, F., A. Abdolghafoorian, **M. Tajrishy**, "Using Hydrological Model and Energy Balance in Estimating Groundwater Table, Case Study: Varamin Plain", **9th International Congress on Civil Engineering, May 2012**, Isfahan University of Technology (IUT), Isfahan, Iran, 2012.
9. Emadzadeh, M., F. Khakbazan Fard, **M. Tajrishy**, "Validation of Input Data to SUT-SEBAL Algorithm and Sensivity Analysis of the Results with Respect to the Modified Input Parameters", **ICID 21st International Congress on Irrigation and Drainage, Tehran, Iran**, 15-23 October 2011.
10. Abrishamchi, A., M. Dashti and **M. Tajrishy**, "Development of a Multi-Reservoir Flood Control Optimization Model; Application to the Karkheh River Basin, Iran", **World Environmental and Water Resources Congress, ASCE, Palm Spring, USA, 2011.**
11. Azimi, M., F. Golpayegani, **M. Tajrishy** and A. Abrishamchi, "Seasonal Prediction of Karoon Streamflow Using Larg-Scale Climate Indices", **World Environmental and Water Resources Congress, ASCE, Palm Spring, USA, 2011.**
12. Abrishamchi, A., M. Danesh-Yazdi and **M. Tajrishy**, "Conflict Resolution of Water Resources Allocations Using Game Theoretic Approach: The Case of Orumieh River Basing in Iran", **AWRA 2011 Summer Specialty Conference, Snowbird, Utah.**
13. Abrishamchi, A., S. Shakeri, and **M. Tajrishy**, "Climate-Based Forecasts of Seasonal Streamflow in the Karoon River Basin Using Support Vector Machine Approach", **AGU 2010 Fall Meeting, San Francisco, Ca.**
14. Azimi, M., and **M. Tajrishy**, "Recognition of Effective Climate Variables on Dez Dam Inflow", **AGU 2010 Fall Meeting, San Francisco, Ca.**
15. Abrishamchi, A., E. Beigi, **M. Tajrishy** and A. Abrishamchi, "The Impact of Climate Change on Groundwater Recharge in Karkheh River Basin (Iran)", **An International Conference Linking Science and Policy-Towards Sustainable Groundwater in Agriculture, UC Davis, USA. 2010.**
16. Sima, S., and **M. Tajrishy**, "Monitoring Temperature Changes in Hypersaline Lake Using MODIS-derived Water Temperatures (The Case of Urimia Lake, Iran)", **6th Intl. Symposium on Env. Hydraulics, Athens, 2010.**
17. Abdolghaforian, A., **M. Tajrishy** and A. Abrishamchi, "Water Allocation with Regard to Reclaimed Wastewater as a New Water Resource for Tehran, Iran" **EWRI Intl. Conference, ASCE India, 2010.**
18. Abrishamchi, A., A.R. Asadi, **M. Tajrishy** and A. Abrishamchi, "Regionalizing Rainfall-Runoff Model Parameters: Model Preparation for Climate Change Impact Assessment", **AGU 2010 Fall Meeting, San Francisco, Ca.**
19. Jamshidi, M., **M. Tajrishy** and M. Maghrebi, "Modelling of Point and Non-point Source Pollution of Nitrate with SWAT in the Jajrood River Watershed, Iran", **Intl. SWAT Conference, SEA 2009, Thailand.**
20. Hassani, A., **M. Tajrishy** and A. Abrishamchi, "Comparison of Several Evaporation Models Applied to the Reservoir of Saveh Dam, Iran", **An Intl. Perspective on Environmental and Water Resources, ASCE, Thailand, 2009.**
21. Ashouri, H., A. Abrishamchi, H. Moradkhani, and **M. Tajrishy**, "Assessment of Interannual and Interdecadal Climate Variability Effects on Water Supply in Zayandeh-rood River

- Basin, Iran", **The 1st Intl. Conf. on Water Resources and Climate Changes in the MENA Region, Muscat, Oman, 2008.**
22. Abrishamchi, A., H. Ashouri, H. Moradkhani and **M. Tajrishy**, "Effects of El-Nino Southern Oscillation and Pacific Decadal Oscillation on Streamflow in the Zayandeh-rood River Basin", **Intl. Conf. on Water Security, Global Changes, and Groundwater Management Responses, Irvine, Ca., 2008.**
 23. Abrishamchi, A., H. Ashouri, H. Moradkhani and **M. Tajrishy**, "Long-lead Stream Flow Forecasting Using Ensemble Streamflow Prediction (ESP) Technique and Large-Scale Climate Signals", **Intl. Conf. on Water Security, Global Changes, and Groundwater Management Responses, Irvine, Ca., 2008.**
 24. Abrishamchi, A., F. Jazaei, **M. Tajrishy** and A. Abrishamchi, "Forecasting Urban Groundwater Level Applying Artificial Neural Network (ANN)", **Intl. Conference on Water Security, Global Changes and Groundwater Management Response, Irvine, Ca., 2008.**
 25. Abrishamchi, A., R.R. Owlia, **M. Tajrishy** and A. Abrishamchi, "Optimal Design of Groundwater Quality Monitoring Using Entropy Theory", **Intl. Conference on Water Security, Global Changes and Groundwater Management Response, Irvine, Ca., 2008.**
 26. Abrishamchi, A., **M. Tajrishy**, A. Tafarajnoruz, B. Chehrenegar, "Using Satellite Data to Improve the Accuracy of River Flow Forecasting Models. A Case Study of Zayande-Rood River Basin", **AWRA 2008 Spring Specialty Conf., Ca., USA., 2008.**
 27. Abrishamchi, A., A. Tasbandi, **M. Tajrishy**, "Land Use Suitability Analysis for Irrigation Development Using GIS-based Fuzzy Multicriteria Evaluation Procedure", **AWRA 2008 Spring Specialty Conf., Ca., USA., 2008.**
 28. Abrishamchi, A., H. Alizadeh, **M. Tajrishy** and A. Abrishamchi, "Water Resources Management Scenario Analysis in KRB, Iran, Using WEAP Model", **Proc. AI Hydrology Annual Meeting, Reno, USA, 2007.**
 29. Omani, N., **M. Tajrishy** and A. Abrishamchi, "Modeling of a River Basin Using SWAT Model and GIS", **Intl. Conf. on Managing Rivers, Malaysia, 2007.**
 30. Omani, N., **M. Tajrishy** and A. Abrishamchi, "Modeling of a River Basin Using SWAT Model and SUFI-2", **SWAT Conf., 2007.**
 31. Esmaili, O., **M. Tajrishy**, P. Arasteh, " Evaluation of Dust Sources in Iran Through Remote Sensing and Synoptical Analysis", **AECRIS Conference, UK, 2006.**
 32. Arasteh, P., **M. Tajrishy**, " Estimation of Free Water Evaporation from Hamun Wetlands Using Satellite Imagery", **AECRIS Conference, UK, 2006.**
 33. Esmaili, O., **M. Tajrishy**, P. Arasteh, " Results of the 50 Year Ground-based Measurements in Comparison with Satellite Remote Sensing of Two Prominent Dust Emission Sources Located in Iran", **SPIE Europe Remote Sensing, 2006.**
 34. Abrishamchi, A., Jamali, Marino, **M. Tajrishy**, " Stream Flow Forecasting and Reservoir Operation Models Using Fuzzy Inference Systems", **ASCE Operating Res. in Changing Conditions, USA, 2006.**
 35. Sima, S., **M. Tajrishy**, " Modeling Water Allocation Between Wetland and Irrigated Agriculture: Case Study of The Jarrahi Basin, Iran", **7th Intl Conf. Hydroinformatics, France, 2006.**
 36. Sima, S., **M. Tajrishy**, " Water Allocation for Wetland Environmental Water Requirements: The Case of Shadegan Wetland, Jarrahi Catchment, Iran", **ASCE, USA, 2006.**
 37. Taheri, H., **M. Tajrishy**, " Investigating the Ability of Active Learning Method for Chlorophyll and Pigment Retrieval in Case-1 Waters Using SeaWiFS Wavelengths", **ISOPR Conf., KSA, 2005.**
 38. Taheri, H., **M. Tajrishy**, Alimohammadi, A. Abrishamchi, " The Ability of Different Multispectral Images for Spatial Extent Mapping of Lakes and Coastal Wetlands ", **ISOPR Conference, KSA, 2005.**

39. Isazadeh. S., **M. Tajrishy**, M. Nazari, A. Abrishamchi, " A Laboratory Study of Sediment Phosphorus Flux in the Latian Dam Reservoir", **ASCE**, Alaska, 2005.
40. Tafaraj Noruz, A., **M. Tajrishy**, M. Jannati, and A. Abrishamchi., "Some Applications of Remote Sensing and GIS Methods for Transboundary Basins (Case Study: The Areas Basin)", Intl. **Workshop on the Use of Space Technology**, Tehran, Iran, 2004.
41. Ahmadi, M., **M. Tajrishy**, and A. Abrishamchi., "GIS Assessment of Food Industrial Location in Iran for Management of Water Resources", Intl **Conference on Security and Sustainability in Water Resources**, Kathmondu, Nepal, 2004.
42. Mohammadian A., F.L. Azad, and **M. Tajrishy**, "Two Dimensional Numerical Simulation of Flow and Geo-Morphological Processes Near Headlands By Using Unstructured Grid", 30th, **IAHR Congres, Greece**, 2003, 615-622.
43. Mohammadian A., and **M. Tajrishy**, "Simulation of Shallow Recirculating Flows with Variable Topography Using Upwind Schemes on Unstructured Grid", 30th, **IAHR Congres, Greece**, 2003, 623-630.
44. **Tajrishy, M.**, and A. Abrishamchi, "Integrated Approach to Water and Wastewater Management for Tehran, Iran", **U.S. and Iranian National Academies Workshop on Water Resources**, Tunisia, U.S. National Academy Press, 2002, 319-335.
45. Abrishamchi, A., and **M. Tajrishy**, "Interbasin Water Transfers in Iran", **U.S. and Iranian National Academies Workshop on Water Resources**, Tunisia, U.S. National Academy Press, 2002, 252-271.
46. Jalali, N., H. Taheri, B. Saghafian, and **M. Tajrishy.**, "Determination of Spatial Distribution and Fraction Index of Smoke Plumes Generated by Kuwaiti Oil Well Fires", 22nd **Asian Conference on Remote Sensing** 2001, Singapore.
47. **Tajrishy, M.**, "Environmental Considerations on Some Water Harvesting Systems", **UNESCO Regional Warkshop on Traditional Water Harvesting Systems**, Tehran, Iran, 1999.
48. **Tajrishy, M.**, and D.J. Hills, "Treatment Requirements of Secondary Effluent for Microirrigation", Microirrigation for a Changing World: Conserving Resources/ Preserving The Environment, **ASAE**, USA, Florida, 1995, 887-89.
49. **Tajrishy, M.**, D.J. Hills and G. Tchobanoglous, "Pretreatment of Secondary Effluent for Drip Irrigation", **ASAE** Paper No. 93-2564 ASAE, Sn. Joseph, Mich.

Consulting Services:

1. Mahab Ghods Consulting Co. Consultant on EIA Studies on Several Water Resources Projects (1996-1997).
2. Sistan and Baluchestan Water Co. Advisor in Sistan Flood Warning and Emergency Plan Project. World Bank (1998-2000).

Management Experience:

1. Director of Environment and Water Research Center (EWRC). Responsille for 20 Member Staff and Provided Guidance on the Overall Contract Effort, Including Independent Research and Development (1980 - Present). <http://EWRC.sharif.edu> .
2. Research Deputy Director, Sharif University of Technology. Duties Included Supervision and Coordination of Research and University administration (2001 - 2007). During Tenure as director, the research output was increased by 3 Fold.
3. Vice Chancellor for Research and Technology, Sharif University of Technology (2010 - Present).
4. Scientific Director, Urmia Lake Restoration Project (2014- Present).