

# Prof. Hafzullah Aksoy

## Personal Information

**Fax Phone:** [+90 212 285 6587](tel:+902122856587)

**Email:** haksoy@itu.edu.tr

**Address:** İTÜ İnşaat Fakültesi Hidrolik Laboratuvarı 34469 Maslak, İstanbul

## Education Information

Doctorate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Hidrolik Ve Su Kaynakları Mühendisliği (Dr), Turkey 1993 - 1998

Post Graduate, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Hidrolik Ve Su Kaynakları Mühendisliği (YI), Turkey 1990 - 1993

Under Graduate, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1986 - 1990

## Foreign Languages

German

English

## Research Areas

Hydraulic

## Academic Titles / Tasks

Professor, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 2010 - Continues

Associate Professor, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 2003 - 2010

Assistant Professor, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 2002 - 2003

Research Assistant, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 1991 - 2002

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Reconstruction of Hydrometeorological Data in Lake Urmia Basin by Frequency Domain Analysis Using Additive Decomposition**  
Vaheddoost B., Aksoy H.  
WATER RESOURCES MANAGEMENT, vol.33, pp.3899-3911, 2019 (Journal Indexed in SCI)
- **Modeling and practice of erosion and sediment transport under change**  
Aksoy H., Mahe G., Meddi M.  
Water (Switzerland), vol.11, 2019 (Journal Indexed in SCI)
- **Spatial Drought Characterization for Seyhan River Basin in the Mediterranean Region of Turkey**  
Cavus Y., Aksoy H.  
WATER, vol.11, 2019 (Journal Indexed in SCI)
- **Fast response of groundwater to heavy rainfall**  
Wittenberg H., Aksoy H., Miegel K.  
JOURNAL OF HYDROLOGY, vol.571, pp.837-842, 2019 (Journal Indexed in SCI)
- **FREQUENCY ANALYSIS OF LOW FLOWS IN INTERMITTENT AND NON-INTERMITTENT RIVERS FROM HYDROLOGICAL BASINS IN TURKEY**  
ERİŞ DUMAN E., AKSOY H., ÖNÖZ B., ÇETİN M., YÜCE M. İ. , SELEK B., AKSU H., BURGAN H. İ. , EŞİT M.,

YILDIRIM I., et al.

Water Science and Technology-Water Supply, vol.19, pp.30-39, 2019 (Journal Indexed in SCI Expanded)

- **Annual flow duration curve model for ungauged basins**

Burgan H. İ. , Aksoy H.

HYDROLOGY RESEARCH, vol.49, pp.1684-1695, 2018 (Journal Indexed in SCI)

- **Interaction of groundwater with Lake Urmia in Iran**

VAHEDDOOST B., AKSOY H.

Hydrological Processes, vol.32, pp.3283-3295, 2018 (Journal Indexed in SCI)

- **Markov chain-incorporated and synthetic data-supported conditional artificial neural network models for forecasting monthly precipitation in arid regions**

Aksoy H., DAHAMSHEH A.

JOURNAL OF HYDROLOGY, vol.562, pp.758-779, 2018 (Journal Indexed in SCI)

- **Experimental analysis of sediment incipient motion in rigid boundary open channels**

SAFARI M. J. S. , Aksoy H., Ünal N. E. , MOHAMMADI M.

ENVIRONMENTAL FLUID MECHANICS, vol.17, pp.1281-1298, 2017 (Journal Indexed in SCI)

- **Velocity-based analysis of sediment incipient deposition in rigid boundary open channels**

Aksoy H., SAFARI M. J. S. , Ünal N. E. , MOHAMMADI M.

WATER SCIENCE AND TECHNOLOGY, vol.76, pp.2535-2543, 2017 (Journal Indexed in SCI)

- **Structural characteristics of annual precipitation in Lake Urmia basin**

VAHEDDOOST B., Aksoy H.

THEORETICAL AND APPLIED CLIMATOLOGY, vol.128, pp.919-932, 2017 (Journal Indexed in SCI)

- **Empirical Sediment Transport Models Based on Indoor Rainfall Simulator and Erosion Flume Experimental Data**

Aksoy H., Eris E., Tayfur G.

LAND DEGRADATION & DEVELOPMENT, vol.28, pp.1320-1328, 2017 (Journal Indexed in SCI)

- **Non-deposition self-cleansing design criteria for drainage systems**

Safari M., Aksoy H., Ünal N. E. , MOHAMMADI M.

JOURNAL OF HYDRO-ENVIRONMENT RESEARCH, vol.14, pp.76-84, 2017 (Journal Indexed in SCI)

- **Rainfall-Runoff Model Considering Microtopography Simulated in a Laboratory Erosion Flume**

Aksoy H., Gedikli A., Ünal N. E. , Yilmaz M., Eris E., Yoon J., Tayfur G.

WATER RESOURCES MANAGEMENT, vol.30, pp.5609-5624, 2016 (Journal Indexed in SCI)

- **Prediction of Water Level using Monthly Lagged Data in Lake Urmia, Iran**

Vaheddoost B., Aksoy H., ABGHARI H.

WATER RESOURCES MANAGEMENT, vol.30, pp.4951-4967, 2016 (Journal Indexed in SCI)

- **Artificial neural network and regression models for flow velocity at sediment incipient deposition**

Safari M., Aksoy H., MOHAMMADI M.

JOURNAL OF HYDROLOGY, vol.541, pp.1420-1429, 2016 (Journal Indexed in SCI)

- **Panta Rhei 2013-2015: global perspectives on hydrology, society and change**

McMillan H., MONTANARI A., CUDENNEC C., SAVENJE H., KREIBICH H., KRUEGER T., LIU J., MEJIA A., Van Loon A., Aksoy H., et al.

HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, vol.61, pp.1174-1191, 2016 (Journal Indexed in SCI)

- **Adaptation of water resources systems to changing society and environment: a statement by the International Association of Hydrological Sciences**

Ceola S., MONTANARI A., KRUEGER T., DYER F., KREIBICH H., Westerberg I., CARR G., CUDENNEC C., Elshorbagy A., SAVENJE H., et al.

HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, vol.61, pp.2803-2817, 2016 (Journal Indexed in SCI)

- **Incipient deposition of sediment in rigid boundary open channels**

Safari M. J. S. , Aksoy H., MOHAMMADI M.

ENVIRONMENTAL FLUID MECHANICS, vol.15, pp.1053-1068, 2015 (Journal Indexed in SCI)

- **Comparative analysis of two infiltration models for application in a physically based overland flow model**

Mallari K. J. B. , Arguelles A. C. C. , Kim H., Aksoy H., KAVVAS M. L. , Yoon J.

ENVIRONMENTAL EARTH SCIENCES, vol.74, pp.1579-1587, 2015 (Journal Indexed in SCI)

- **Baseflow Recession Analysis for Flood-Prone Black Sea Watersheds in Turkey**

Aksoy H., WITTENBERG H.

CLEAN-SOIL AIR WATER, vol.43, pp.857-866, 2015 (Journal Indexed in SCI)

- **A comparison of two infiltration models applied to simulation of overland flow over a two-dimensional flume**

Mallari K. J. B. , Kim H., Pak G., Aksoy H., Yoon J.

WATER SCIENCE AND TECHNOLOGY, vol.71, pp.1325-1332, 2015 (Journal Indexed in SCI)

- **Evaluation of an erosion-sediment transport model for a hillslope using laboratory flume data**

Arguelles A. C. C. , Jung M., Mallari K. J. B. , Pak G., Aksoy H., KAVVAS L. M. , Eris E., Yoon J., LEE Y., HONG S.

JOURNAL OF ARID LAND, vol.6, pp.647-655, 2014 (Journal Indexed in SCI)

- **A field application of physically-based erosion and sediment transport model for hillslope response**

Yoon J., Aksoy H., KAVVAS L., Arguelles A. C. C. , Mallari K. J. B.

HOUILLE BLANCHE-REVUE INTERNATIONALE DE L EAU, pp.81-87, 2014 (Journal Indexed in SCI)

- **Markov Chain-Incorporated Artificial Neural Network Models for Forecasting Monthly Precipitation in Arid Regions**

Dahamsheh A., Aksoy H.

ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.39, pp.2513-2524, 2014 (Journal Indexed in SCI)

- **Laboratory experiments of sediment transport from bare soil with a rill**

Aksoy H., Ünal N. E. , Çokgör Ş., Gedikli A., Yoon J., KOCA K., INCI S. B. , Eris E., Pak G.

HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, vol.58, pp.1505-1518, 2013 (Journal Indexed in SCI)

- **A rainfall simulator for laboratory-scale assessment of rainfall-runoff-sediment transport processes over a two-dimensional flume**

Aksoy H., Ünal N. E. , Çokgör Ş., Gedikli A., Yoon J., KOCA K., INCI S. B. , Eris E.

CATENA, vol.98, pp.63-72, 2012 (Journal Indexed in SCI)

- **Nonlinear baseflow recession analysis in watersheds with intermittent streamflow**

Aksoy H., WITTENBERG H.

HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, vol.56, pp.226-237, 2011 (Journal Indexed in SCI)

- **AUG-Segmenter: a user-friendly tool for segmentation of long time series**

Gedikli A., Aksoy H., Ünal N. E.

JOURNAL OF HYDROINFORMATICS, vol.12, pp.318-328, 2010 (Journal Indexed in SCI)

- **Modified dynamic programming approach for offline segmentation of long hydrometeorological time series**

Gedikli A., Aksoy H., Ünal N. E. , Kehagias A.

STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, vol.24, pp.547-557, 2010 (Journal Indexed in SCI)

- **13th IWA International Specialized Conference on Diffuse Pollution and Integrated Watershed Management (IWA DIPCON 2009) 12-15 October 2009, Lotte Hotel World, Seoul, Korea**

Hong S. K. , Stenstrom M. K. , Yoon J., Li Y., Kim J. H. , Kim L., Aksoy H., Park M. H. , Tsai F., Cho S., et al.

DESALINATION AND WATER TREATMENT, vol.19, pp.1, 2010 (Journal Indexed in SCI)

- **Groundwater intrusion into leaky sewer systems**

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WATER SCIENCE AND TECHNOLOGY, vol.62, pp.92-98, 2010 (Journal Indexed in SCI)

- **Artificial neural network models for forecasting monthly precipitation in Jordan**

Aksoy H., DAHAMSHEH A.

STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, vol.23, pp.917-931, 2009 (Journal Indexed in SCI)

- **Artificial neural network models for forecasting intermittent monthly precipitation in arid regions**

Dahamsheh A., Aksoy H.

METEOROLOGICAL APPLICATIONS, vol.16, pp.325-337, 2009 (Journal Indexed in SCI)

- **Modeling Monthly Mean Flow in a Poorly Gauged Basin by Fuzzy Logic**

Toprak Z. F. , ERIS E., AGIRALIOGLU N., CIGIZOGLU H. K. , YILMAZ L., Aksoy H., COSKUN H. G. , ANDIC G., ALGANCI U.

CLEAN-SOIL AIR WATER, vol.37, pp.555-564, 2009 (Journal Indexed in SCI)

- **Filtered smoothed minima baseflow separation method**

Aksoy H., KURT I., ERIS E.

JOURNAL OF HYDROLOGY, vol.372, pp.94-101, 2009 (Journal Indexed in SCI)

- **Comment on 'Wang W, Ding J. 2007. A multivariate non-parametric model for synthetic generation of daily streamflow. Hydrological Processes 21 : 1764-17711**

Aksoy H.

HYDROLOGICAL PROCESSES, vol.22, pp.1234-1235, 2008 (Journal Indexed in SCI)

- **Segmentation algorithm for long time series analysis**

Gedikli A., Aksoy H., Ünal N. E.

STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, vol.22, pp.291-302, 2008 (Journal Indexed in SCI)

- **Discussion of "Generalized regression neural networks for evapotranspiration modelling"**

Aksoy H., GÜVEN A., AYTEK A., Yuce M. I. , Unal N. E.

HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, vol.52, pp.825-828, 2007 (Journal Indexed in SCI)

- **Using SWMM as a tool for hydrologic impact assessment**

Jang S., CHO M., YOON J., YOON Y., KIM S., KIM G., KIM L., Aksoy H.

DESALINATION, vol.212, pp.344-356, 2007 (Journal Indexed in SCI)

- **Untitled**

Aksoy H., Unal N. E. , Gedikli A.

STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, vol.21, pp.447-449, 2007 (Journal Indexed in SCI)

- **Hydrological variability of the european part of Turkey**

Aksoy H.

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION B-ENGINEERING, vol.31, pp.225-236, 2007 (Journal Indexed in SCI Expanded)

- **Structural characteristics of annual precipitation data in Jordan**

Dahamsheh A., Aksoy H.

THEORETICAL AND APPLIED CLIMATOLOGY, vol.88, pp.201-212, 2007 (Journal Indexed in SCI)

- **Comparison of two nonparametric alternatives for stochastic generation of monthly rainfall**

Srikanthan R., Sharma A., McMahon T.

Journal of Hydrologic Engineering, vol.11, pp.222-229, 2006 (Journal Indexed in SCI Expanded)

- **Watershed environmental hydrology model: Environmental module and its application to a California watershed**

Kavas M., YOON J., CHEN Z., LIANG L., DOGRUL E., OHARA N., Aksoy H., ANDERSON M., REUTER J., HACKLEYS.

JOURNAL OF HYDROLOGIC ENGINEERING, vol.11, pp.261-272, 2006 (Journal Indexed in SCI)

- **A review of hillslope and watershed scale erosion and sediment transport models**

Aksoy H., KAVVAS M. L.

CATENA, vol.64, pp.247-271, 2005 (Journal Indexed in SCI Expanded)

- **Using Markov chains for non-perennial daily streamflow data generation**

Aksoy H.

JOURNAL OF APPLIED STATISTICS, vol.31, pp.1083-1094, 2004 (Journal Indexed in SCI)

- **Stochastic generation of hourly mean wind speed data**

Aksoy H., TOPRAK Z., AYTEK A., UNAL N. E.

RENEWABLE ENERGY, vol.29, pp.2111-2131, 2004 (Journal Indexed in SCI)

- **Watershed Environmental Hydrology (WEHY) model based on upscaled conservation equations: Hydrologic module**

Kavas M., CHEN Z., DOGRUL C., YOON J., OHARA N., LIANG L., Aksoy H., ANDERSON M., YOSHITANI J., FUKAMI K., et al.

JOURNAL OF HYDROLOGIC ENGINEERING, vol.9, pp.450-464, 2004 (Journal Indexed in SCI)

- **Annual and monthly rainfall data generation schemes**

Unal N. E. , Aksoy H., AKAR T.

STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, vol.18, pp.245-257, 2004 (Journal Indexed in SCI)

- **Pulse generation models for daily intermittent streamflows**

Aksoy H.

HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, vol.49, pp.399-411, 2004 (Journal Indexed in SCI)

- **Wavelet analysis for modeling suspended sediment discharge**

Aksoy H., AKAR T., ÜNAL N. E.

NORDIC HYDROLOGY, vol.35, pp.165-174, 2004 (Journal Indexed in SCI Expanded)

- **Markov chain-based modeling techniques for stochastic generation of daily intermittent streamflows**

Aksoy H.

ADVANCES IN WATER RESOURCES, vol.26, pp.663-671, 2003 (Journal Indexed in SCI)

- **Storage capacity for river reservoirs by wavelet-based generation of sequent-peak algorithm**

Aksoy H.

WATER RESOURCES MANAGEMENT, vol.15, pp.423-437, 2001 (Journal Indexed in SCI)

- **Nonparametric streamflow simulation by wavelet or Fourier analysis**

Bayazit M., ONOZ B., Aksoy H.

HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, vol.46, pp.623-634, 2001 (Journal Indexed in SCI)

- **Probabilistic approach to modelling of recession curves**

Aksoy H., BAYAZIT M., WITTENBERG H.

HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, vol.46, pp.269-285, 2001 (Journal Indexed in SCI)

- **Using wavelets for data generation**

BAYAZIT M., Aksoy H.

JOURNAL OF APPLIED STATISTICS, vol.28, pp.157-166, 2001 (Journal Indexed in SCI)

- **A model for daily flows of intermittent streams**

AKSOY H., BAYAZIT M.

HYDROLOGICAL PROCESSES, vol.14, pp.1725-1744, 2000 (Journal Indexed in SCI)

## Articles Published in Other Journals

- **Surface Water**

Aksoy H.

WATER RESOURCES OF TURKEY, vol.2, pp.127-158, 2020 (Refereed Journals of Other Institutions)

- **Düşük Akımların Frekans Analizi ve Çevresel Akış ile İlişkisi**

AKSOY H., ERİŞ DUMAN E., ÖNÖZ B., ÇETİN M., YÜCE M. İ. , SELEK B., AKSU H., BURGAN H. İ. , EŞİT M., YILDIRIM I., et al.

Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.9, pp.503-514, 2018 (Other Refereed National Journals)

- **Regional Flow Duration Curves for Seyhan and Ceyhan Basins**

BURGAN H. İ. , AKSOY H.

International Journal of Innovative Research in Science, Engineering and Technology, vol.5, pp.121-128, 2016 (Refereed Journals of Other Institutions)

- **Preface: HS01 - Changes in flood risk and perception in catchments and cities**

Rogger M., Aksoy H., KOOY M., SCHUMANN A., TOTH E., CHEN Y., Borrell Estupina V., BLOSCHL G.

IAHS-AISH Proceedings and Reports, vol.370, pp.1-2, 2015 (Refereed Journals of Other Institutions)

- **Statistical Hydrology**

GRIMALDI S., KAO S., CASTELLARIN A., Papalexioiu S., VIGLIONE A., LAIO F., Aksoy H., Gedikli A.

TREATISE ON WATER SCIENCE, VOL 2: THE SCIENCE OF HYDROLOGY, pp.479-517, 2011 (Refereed

## Supported Projects

- Aksoy H., Çavuş Y., Project Supported by Higher Education Institutions, Yağış Açığı Cinsinden Kritik Kuraklık Şiddet-Süre-Frekans Eğrileri, 2019 - 2019
- Aksoy H., Burgan H. İ. , Project Supported by Higher Education Institutions, Akım Ölçümü Olmayan Havzalar İçin Debi Süreklilik Çizgisi Modeli Geliştirilmesi, 2015 - 2019
- Aksoy H., Project Supported by Higher Education Institutions, Taşkına Meyilli Alanların Belirlenmesi için Hidrolojik ve Hidrolik Modeller, 2016 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Ölçüm yapılmayan akarsu havzalarında hidrometeorolojik verilere dayanan taban akışı regresyon denklemi, 2015 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Hidrolojik Havzalarda Katı Madde Sorunu, 2014 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Sürec Tabanlı ve Laboratuvar Deney Verisi Destekli Yağış Akış Katı Madde Hareketi Modeli, 2013 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Van Gölü Su Seviyesinin Ani Değişim ve Çoklu Eğilimli Zaman Serisinin Stokastik Modeli, 2012 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Basit İstatistiksel Hidroloji Yöntemleri ile Birleştirilmiş Yapay Sinir Ağları Modelleri, 2011 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Uzun Zaman Serileri İçin Geliştirilmiş Bir Bilgisayar Programı, 2008 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Uzun Zaman Serilerinin Homojen Parçalara Ayrılması, 2007 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Doğu Karadeniz Bölgesi Yıllık En Büyük Günlük Ortalama Akımlarının Yapısal Karakteristikleri, 2006 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Ürdün'ün yıllık yağış verilerinin incelenmesi, 2005 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Dalgacık Analizi ile Hidrometeorolojik Veri Simülasyonu, 2004 - 2018
- Aksoy H., Project Supported by Higher Education Institutions, Urmiye Gölü için istatistiksel yaklaşımlarla modelleme çalışmaları, 2015 - 2017
- Aksoy H., Project Supported by Higher Education Institutions, Rijit Cidarlı Kanallarda Katı Madde Taşınımının Laboratuvar Çalışmaları, 2014 - 2016
- Aksoy H., Project Supported by Higher Education Institutions, Fırat ve dicle Havzalarının Taban Akışı İndeksinin Hesaplanması, 2012 - 2013
- Aksoy H., Project Supported by Higher Education Institutions, Kuruyan Akarsularda Taban Akışının Ayrılması, 2006 - 2007

## Citations

Total Citations (WOS):1335

h-index (WOS):25