

ERCAN KAHYA

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Civil Engineering Department/ Hydraulics Division
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EDUCATION

- 1989 - 1993 **Ph. D.**
Department of Civil Engineering
University of California, Los Angeles (UCLA), USA

Major Field: Water Resources Engineering
Minor Field: Atmospheric Sciences
- 1988 - 1989 Department of Civil Engineering
Columbia University (CU), New York, USA

Water Resources Engineering
Graduate Study (Ph. D.)
- 1986 - 1987 **M. Sc.**
Department of Civil Engineering
Polytechnic University (PU), New York, USA

Water Resources Engineering
- 1985 - 1985 *English Language Education*
June - Dec. ELS Language Center
Oklahoma City University (OCU), Oklahoma City, USA
- 1985 - 1985 *English Language Education*
Jan. - May Foreign Language Center
Middle East Technical University (METU), Ankara, Turkey
- 1984 - 1984 Department of Civil Engineering
Sep. - Dec. Bosphorus University (BU), Istanbul, Turkey

Hydraulic Engineering - Graduate Study (M. Sc.)
- 1980 - 1984 **B. Sc.**
Department of Civil Engineering
Istanbul Technical University (ITU), Istanbul, Turkey

EXECUTIVE EXPERIENCE

- 2002 - 2006 **Member of Executive Board**, Coastal Sciences and Engineering Graduate Program at ITU
Istanbul Technical University, Istanbul
- 2002 - 2004 **Vice Dean**, Institute of Science and Technology
Istanbul Technical University, Istanbul

(Responsible for the largest graduate student mass in Europe, over than 6,000)

- 2002 - 2004 **Member of Executive Board**, Institute of Science and Technology
Istanbul Technical University, Istanbul
- 2001 - 2003 **Member of Executive Board**, EURASIA Institute of Earth Sciences
Istanbul Technical University, Istanbul
- 1996 - 1999 **Head of Hydraulic Division**, Civil Engineering Department
Selçuk University, Konya
- 1996 - 1999 **Member of Executive Board**, Civil Engineering Department
Selçuk University, Konya
- 1995 - 2000 **Chief of Hydraulic Laboratory**, Civil Engineering Department
Selçuk University, Konya

ACADEMIC EXPERIENCE

- 2008 - present **Assoc. Prof.**, Department of Civil Engineering
American University of Sharjah (AUS), UAE
- (Teaching undergraduate level courses; Undertaking various water resources and hydro-meteorological researches; Presenting papers in international and national conferences; Participating in various academic commissions; etc.)
- 2006 - 2008 **Assoc. Prof.**, Department of Civil Engineering
Istanbul Technical University (ITU), Istanbul
- (Teaching undergraduate and graduate level courses; Supervising M.S. and Ph.D. students; Undertaking various water resources and hydro-meteorological researches; Presenting papers in international and national conferences; Participating in various academic commissions; etc.)
- 2004 - 2006 **Assoc. Prof.**, Department of Civil Engineering
American University in Dubai (AUD), UAE
- (Teaching undergraduate level courses; Conducting research activities. Participating in various academic commissions; etc.)
- 2001 - 2004 **Assoc. Prof.**, Department of Civil Engineering
Istanbul Technical University (ITU), Istanbul
- (Same as above)
- 1998 - 2000 **Assoc. Prof.**, Department of Civil Engineering
Selçuk University (SU), Konya
- (Same as above)
- 1994 - 1998 **Assist. Prof.**, Department of Civil Engineering
Selçuk University (SU), Konya
- (Same as above)
- 1993 - 1994 **Water Resources Specialist**
State Water Works (DSİ), Ankara, Turkey
- (Responsible for an irrigation project in Southern Anatolia Project (GAP); Establishing stochastic models for the reliability of active reservoir volumes; Performing various hydrologic works such as spillways-gates-outlet works, pressure conduits, water supply systems, flood damage

mitigation, and planning for water resources development.)

1993 - 1993 **Post-doc,**
University of California, Los Angeles (UCLA), USA

(Performing a research regarding U.S. streamflow and La Nina events and preparing all relevant research works to be published in WRR journal; Investigating hydroelectric power and groundwater problems existed in Los Angeles.)

1990 - 1992 **Research Assistant,**
University of California, Los Angeles (UCLA), USA

(Studying U.S. streamflow patterns in association with ENSO episodes; Applying various methodologies such as harmonic analysis, composite analysis, statistical models based on some theoretical PDF; Writing proposal and final reports; Presenting papers in conferences.)

1986 - 1987 **Laboratory Assistant,**
Polytechnic University (PU), New York, USA

(Conducting undergraduate-level experiments in the hydraulic lab.)

CONSULTANCY EXPERIENCE

2004 - 2006 **Consultant**
Metropol Gulf Landscaping & Construction L.L.C., Dubai/UAE

(Preparing joint venture agreements; Presenting company profiles to new customers; Participating various business meeting; Evaluating project bids, Organizing work force, etc.)

SCHOLARSHIP AND AWARD

1984 Ranked 5th among 300 graduates at ITU
1985 - 1991 Government scholarship for postgraduate study in the USA
1987 Tuition remission by Polytechnic University
1992 Conference travel award by UCLA
1992 Tuition Fellowship by UCLA
1994 - present Personal value of Relative Citation Impact (RCI) > 25
2006 Who's Who" in the World, 2006 (23rd) Edition

MEMBERSHIP

Turkish Society of Civil Engineering, Istanbul, Turkey
International Association of Hydrological Sciences, UK
Turkish National Hydrology Commission, Ankara, Turkey
Turkish Association of Preventing Traffic Accidents, Konya, Turkey (1999-2001)
Turkish Business Council, Dubai, UAE (2004-2005)
American Geophysical Union (AGU), USA
European Geophysical Union (EGU), France
International Association of Hydrological Sciences (IAHS), UK
European Water Resources Association (EWRA)
Joint Specialist Group (JSG) on Marine Outfalls & Coastal Environment, Istanbul
UNCCD (United Nation Convention to Combat Desertification) Member of "Expert List"

RESEARCH STUDIES AND INTERESTS

SURFACE WATER HYDROLOGY; GROUND WATER HYDROLOGY; HYDRAULICS; WATER RESOURCES; COASTAL ENGINEERING; ENVIRONMENTAL ENGINEERING; HYDROCLIMATOLOGY

- * Climatological and Hydrological Variability
- * Hydrologic Time Series Analysis, Stochastic Modeling
- * Flood Hazard Modeling (current interest)
- * Groundwater Modeling (current interest)
- * Hydroclimatological Modeling Coupled with GCMs (current interest)
- * Contaminations in Water Systems (current interest)
- * Coastal Zone Management (current interest)
- * Climate Change and Drought (current interest)

FACULTY/DEPARTMENT COMMITTEE MEMBERSHIP

- 1) Library Committee; School of Engineering and Architecture, SU (1995-1997)
- 2) Organizing Courses in Foreign Language Committee; School of Eng. and Architecture, SU (1995-1997)
- 3) Doctorate Thesis Supervision Committee; Graduate School, SU (1995-1997)
- 4) Doctorate Qualifying Committee of Hydraulics and Water Resources Division; ITU (2004-)
- 5) Examination Committee; Coastal Sciences and Engineering Program, Graduate School, ITU (2004-2006)
- 6) Library Committee; School of Engineering, American University in Dubai; AUD (2005-2006)
- 7) *Individual Task*: Faculty Advisor, American University in Dubai; AUD (2005-2006)
- 8) TSE (Turkish Standard Institution) and ISO Standards Committee; Civil Eng. Faculty, ITU (2007-)

FACULTY/DEPARTMENT COMMITTEE MEMBERSHIP AT AUS

- ✱ Curriculum Committee [2008-]
- ✱ Outreach, Alumni & Graduate Students Recruitment Committee [2008-]
- ✱ Faculty Search Committee (AUS) [2008-]
- ✱ Graduate Program Admission Committee [2008-]
- ✱ Curriculum Committee [2008-devam]
- ✱ *Individual Task*: Design Project Coordinator [2008-]
- ✱ *Individual Task*: Extra-curriculum Activities Coordinator [2008-]

SCIENTIFIC MEETING ORGANIZATION AND SCIENTIFIC COMMITTEE MEMBERSHIP

- 1) **Panel Organization and Speaker**: Topic: “*Trans-boundary Rivers/Climate Change/El Nino*”; Speakers: Prof. Zekai Şen, Dr. Mikdat Kadioğlu, Dr. Ercan Kahya; Date: *08 September 1998*; Place: SU Conference Room, Konya.
- 2) **Seminar Organization**: Topic: “Prediction of Streamflow and Precipitation based on Large-Scale Atmospheric Circulation”; Speaker: Prof. John A. Dracup (UC Berkeley); Date: *28 Mart 2001*, Place: ITU SDKM Conference Room, Istanbul.
- 3) **Panel Organization and Speaker**: Topic: “Restructuring Graduate Education”; Speakers: Prof. Mehmet Karaca, Prof. Nüşet Dalfes and Assoc. Prof. Ercan Kahya; Date: *10 Nisan 2002*; Place: Dumlupınar University, Kütahya.
- 4) **Scientific Committee Membership**: Title of Meeting: “*II. National Water Engineering Symposium*”; Date: *21-24 September 2005*; Place: Gümüşdüz/İzmir.
- 5) **Seminar Organization**: Topic: “Chemically reactive, degrading mass transfer in an aquifer: 2 Dimensional numerical simulation with the ADI scheme”; Speaker: Dr. A. Osman Beg (Professor of Fire Dynamics Leeds College of Building); Date: *19 April 2006*; Place: American University in Dubai, UAE.
- 6) **Scientific Committee Membership**: Title of Meeting: “*I. Turkey Climate Change Congress TIKDEK’2007*”; Date: *11-13 April 2007*; Place: ITU, Istanbul.
- 7) **Scientific Committee Membership**: Title of Meeting: “*III. National Water Engineering Symposium*”; Date: *10-14 September 2007*; Place: Gümüşdüz/İzmir.
- 8) **Organization & Scientific Committee Membership and Speaker**: Title of Meeting: “Global Climate Change and Its Environmental Impacts: Regional and Local Dimensions”; Date: *18-20 October 2007*; Place: Konya.

- 9) **Scientific Committee Membership:** Title of Meeting: “*Forest and Environmental Problems in the Context of Global Climate Change and Water Symposium*”; Date: 29-30 November 2007; Place: Istanbul University, Istanbul.
- 10) **Scientific Committee Membership:** Title of Meeting: “*MWWD 2008–5th International Conference on Marine Waste Water Discharges and Coastal Environment*”; Date: 18-20 October 2008; Place: Dubrovnik/Croatia.
- 11) **Organization & Scientific Committee Membership:** Title of Meeting: “*Climate Extremes during Recent Millennia and their Impact on Mediterranean Societies*”; Date: 14-16 September 2008; Place: National and Kapodistrian University of Athens Athens, Greece, (Other members: Henry Diaz (NAOO-USA); Ray Bradley; Ricardo Garcia; Phil Jones; Elena Xoplaki; Malcom Huges; Ricardo Garcia-Herrera and Juerg Luterbacher).
- 12) **Scientific Committee Membership:** Title of Meeting: “*IV. National Water Engineering Symposium*”; Date: 6-10 July 2009; Place: Orhantepe/Istanbul.

OTHER ACADEMIC/EXECUTIVE/SOCIAL ACTIVITIES

- 1) Juror in many M. Sc. and Ph.D. thesis defense, Civil Eng. Dept., SU, (1995-2000)
- 2) Juror in many M. Sc. and Ph.D. thesis, Civil Eng. Dept., ITU, (2001-)
- 3) Evaluating EU and TUBITAK (aka; Turkish NSF) project proposals
- 4) Evaluator - ESA Earth Observatory R&D Section (<http://eopi.esa.int/>)
- 5) Faculty Advisor – School of Engineering, AUD, (2004-2006)
- 6) Session Chair in many national and international conferences
- 7) Speaker on national TV channels (i.e., TRT2, Medical Channel, News Turk, Kon TV, Channel 24)

COURSES LECTURED

Undergraduate Level Courses (Lectured in Turkish at SU: 1995-2000)

- Fluid Mechanics
- Hydraulics (Both Civil and Mining Eng. departments)
- Hydrology
- Water Resources Engineering
- Statistics (Both Civil and Industrial Eng. departments)
- Senior Design Project

Graduate Level Courses (Lectured in Turkish at SU: 1995-2000)

- Open Channel Hydraulics
- Stochastic Modeling in Hydrology
- Hydrological Systems Analysis
- Advanced Hydrology

Undergraduate Level Courses (Lectured in English at ITU: 2001-present)

- Water Resources
- Hydrology
- Probability and Statistics
- Senior Design Project
- Fluid Mechanics
- Hydraulics

Graduate Level Courses (Lectured in English at ITU: 2002-present)

- Hydroclimatology (doctorate-level)

Undergraduate Level Courses (Lectured in English at American University in Dubai (AUD): 2004-2006)

- | | |
|-----------------------------|-------------|
| ▪ Environmental Engineering | ▪ Dynamics |
| ▪ Hydrology | ▪ Statics |
| ▪ Fluid Mechanics | ▪ Geomatics |

- Coastal Engineering
- Senior Design Project

Undergraduate Level Courses (Lectured in English at American University of Sharjah (AUS): 2008-present)

- Water Resources Engineering
- Capstone Design Project
- Fluid Mechanics

DEVELOPED CURRICULUM AND PROGRAM

- *Stochastic Modeling in Hydrology* – Graduate School of Selcuk University (SU), Turkey (1995-2000)
- *Open Channel Hydraulics* – Graduate School of Selcuk University (SU), Turkey (1995-2000)
- “*Coastal Sciences and Engineering Graduate Program*” – Graduate School of ITU, Turkey (2002 -)
- *Hydroclimatology* – Graduate School of ITU, Turkey (2004 -)
- *Coastal Engineering* – Civil Eng Dept. of American University in Dubai (AUD) (2005-2006)
- *Senior Design Project-Coastal Engineering* – Civil Eng Dept. of American University in Dubai (AUD) (2005-2006)

GRADUATE STUDENT ADVISORY ACTIVITIES

M. Sc. Thesis:

- 1) M. Çağatay Karabörk, 1997 (Civil Eng. Dept., SU): Stochastic Modeling of Annual and Monthly Streamflows.
- 2) Naci Büyükkaracıgan, 1997 (Civil Eng. Dept., SU): A Comparison of Various Distributions Used in Frequency Analysis, Applying to Annual Peak Series of Konya Basin.
- 3) Nermin Şarlak, 1998 (Civil Eng. Dept., SU): Analysis of Critical Drought with First Order Markov Chain Model.
- 4) Cemal Gürses, 1998 (Civil Eng. Dept., SU): Frequency Analysis of Annual Peak Flows in Konya Basin by L-Moments.
- 5) Serdar Kalaycı, 1997 (Civil Eng. Dept., SU): Determination of Water Quality Trends in Streamflows of Susurluk Basin (Honorary Advisor).
- 6) Ömer Köse, 1999 (Civil Eng. Dept., SU): Drought Analysis of Monthly Streamflows in the Konya Basin by Using Poisson Distribution (Honorary Advisor).
- 7) Turgay Partal, 2003 (Civil Eng. Dept., ITU): Trend Analysis of Turkish Precipitation Patterns.
- 8) M. Cüneyd Demirel, 2004 (Civil Eng. Dept., ITU): Cluster Analysis of Streamflow in Turkey.
- 9) Şahin Akagündüz (Civil Eng. Dept., ITU): Low Flow Regionalization in Turkey

Ph. D. Thesis:

- 1) M. Çağatay Karabörk, 2000 (Civil Eng. Dept., SU): Influences of El Nino and La Nina Events on Streamflows in Turkey [Dr. Karabörk is currently an associate professor at Dumlupınar University].
- 2) Serdar Kalaycı, 2003 (Civil Eng. Dept., SU): The Variability Analysis of Turkish Streamflows [Dr. Kalaycı is currently Mayor of Meram Municipality, Konya].
- 3) Taner M. Cengiz, 2005 (Civil Eng. Dept., ITU): Hydroclimatological Analysis of Lake Levels in Turkey [Dr. Cengiz is currently an assistant professor at Namık Kemal University].

- 4) Ali İhsan Martı, 2006 (Civil Eng. Dept., SU): Streamflow and Precipitation Forecasting Models Based on Their Relationships with the Southern Oscillation. [*Dr. Martı is currently an assistant professor at Selçuk University*].
- 5) Turgay Partal, 2007 (Civil Eng. Dept., ITU): Forecasting Model of Turkish Precipitation Data Based on Neural Networks and Wavelet Methods (with a co-advisor) [*Dr. Partal is currently an assistant professor at Dumlupınar University*].
- 6) Murat Gül (Civil Eng. Dept., ITU): Flood Hazard Modeling.
- 7) M. Cüneyd Demirel (Civil Eng. Dept., ITU): Coastal Zone Management: Marmara Sea (with a co-advisor)

CONFERENCE ACTIVITIES

- 1) **Invited Speaker:** Symposium on “The World at Risk: Natural Hazards and Climate Change”, MIT, Cambridge, USA, January 14-16, 1992.
- 2) **Invited Speaker:** Workshop on ENSO and Its Influence on Pacific Rim Streamflow, UCLA, Los Angeles, USA, November 28 - December 3, 1993.
- 3) **Invited speaker:** “Statistical concepts in understanding and modeling hydro-climatic change.” HS41 at EGU General Assembly, (for details: <http://meetings.copernicus.org/egu2007/>), Vienna, 2007.
- 4) **Invited speaker:** “Global Climate Change and Its Environmental Impacts: Regional and Local Dimensions”, Konya/Turkey, October 18-20, 2007.
- 5) **Invited speaker:** “Floods, Avalanches, Preservation River Beds”, Trabzon/Turkey, August 7-8, 2008.
- 6) 16th Annual Climate Diagnostics Workshop, UCLA, Los Angeles, USA, October 28-Nov. 1, 1991.
- 7) 9th Annual Pacific Climate (PACLIM) Workshop, Asilomar, CA, USA, April 21-24, 1992
- 8) 17th Annual Climate Diagnostics Workshop, University of Oklahoma, Norman, USA, 19-23 October, 1992
- 9) Hydrometeorology Session at American Geophysical Union (AGU) Meeting, San Francisco, USA, Fall of 1992
- 10) International Conference on “Water Problems in Mediterranean Countries”, NEU, Nicosia, North Cyprus, 17-21 November, 1997 <Presented two articles>
- 11) 1st International Workshop on “Environmental Quality and Environmental Engineering in the Middle East Region” Symposium, Konya, Turkey, 5-7 October, 1998 (poster)
- 12) 1st National Climatology Workshop, Ege University, İzmir, Turkey, 11-13 April, 2002 <Co-author of two articles>
- 13) 3rd International Symposium on AGRO-ENVIRON 2002, Cairo, Egypt, 26-29 October, 2002
<Technical Session-3(B) Environment and Climate Change, *Session Chair* and co-author of four articles>
- 14) XXX IAHR: Water Engineering and Research in Learning Society” Thessalonica, Thessalonica, Greece 24-29 September, 2003 <Theme B-Precipitation, *Session Chair* and co-author of four articles>
- 15) 1st National Dams and Hydro-electrical Power Plants, State Water Works General Directorate, Ankara, Turkey, 1-3 June, 2004 <*Session Chair* and co-author of two articles>
- 16) AGU Hydrology Days 2007, 19-21 March, Colorado State University, Fort Collins, CO, USA
<Presented 2 oral and 9 poster papers>
- 17) III. National Water Engineering Symposium, Gümüşdör/İzmir, Turkey, 10-14 September, 2007
<*Session Chair* and presented one article>

As a Participant:

- 1) Special meeting at *Scripps Institution of Oceanography*, UCSD, La Jolla, CA, USA, 1991.
- 2) Hydrology and Hydrometeorology Sessions at American Geophysical Union (AGU) Meeting, San Francisco, USA, Fall of 1991.
- 3) 2nd National Hydrometeorology Symposium, State Meteorology Works General Directorate, Ankara, 18-20 December, 1998 <Co-author of five articles>
- 4) 5th Congress on Advances in Civil Engineering (ACE 2002), Istanbul Technical University, Istanbul, 25-27 September, 2002 <Session Chair and co-author of three articles>
- 5) 1st National Water Engineering Symposium, DSİ, Gümüşdör-İzmir, 22-26 September, 2003
<Session 1-Monday, Session Chair and co-author of two articles>

REFEERE ACTIVITIES FOR PEER-REVIEWED JOURNALS

“SCI & SCI Exp – ISI Thomas Scientific” Journals

- ◆ (3) International Journal of Climatology
- ◆ (1) Water Resources Research
- ◆ (2) Hydrology and Earth System Sciences
- ◆ (1) Climatic Change
- ◆ (2) Hydrological Processes
- ◆ (2) Proceedings of ICE Journal - Water Management
- ◆ (1) Iranian Journal of Science & Technology
- ◆ (7) Advances in Engineering Software
- ◆ (1) Asia-Pacific Journal of Atmospheric Sciences
- ◆ (1) Irrigation Science
- ◆ (2) Fresenius Environmental Bulletin
- ◆ (4) Water and Environment Journal
- ◆ (2) Journal of Hydrology
- ◆ (1) Natural Hazards
- ◆ (17) Journal of Hydrologic Engineering
- ◆ (1) Journal of Geophysical Research
- ◆ (2) Physics and Chemistry of the Earth
- ◆ (2) Water Science and Technology

Total: 52

“Master List SCI – ISI Thomas Scientific” Journals

- ◆ (11) Journal of Applied Sciences
- ◆ (4) Pakistan Journal of Biological Sciences
- ◆ (1) Research Journal of Environmental Sciences

Total: 16

“Other Indexed” Journals

- ◆ (1) International Journal of Agricultural Research
- ◆ (1) Online Journal of Earth Sciences
- ◆ (1) Asian Journal of Biochemistry
- ◆ (1) Journal of Biological Sciences

Total: 4

“National” Journals

- ◆ (1) CBÜ Science Journal

Total: 1

CITATION

- Total number of citations: > **570** (**338** appeared in the *ISI Web of Knowledge*)

EDITORIAL BOARD MEMBERSHIP IN PEER-REVIEWED JOURNAL

- **Associate Editor:** Journal of Hydrology (Elsevier - SCI) (2009-)
- Research Journal of Applied Sciences (Medwell) (2006-)
- Online Journal of Earth Sciences (Medwell) (2006-)
- Journal of Engineering and Applied Sciences (Medwell) (2006-)
- Research Journal of Biological Sciences (Medwell – ISI Thomas Scientific Master List) (2007-)
- Pakistan Journal of Biological Sciences (ANSI – ISI Thomas Scientific Master List) (2007-2009)
- Journal of Applied Sciences (ANSI – ISI Thomas Scientific Master List) (2007-2009)
- Journal of Selcuk University Engineering-Architecture Faculty (1995-2000)

PUBLICATION**Theses:**

- 1) Kahya, E., 1984: Design of Steel Structures. B.Sc. Senior Project, Istanbul Technical University, Istanbul, Turkey
- 2) Kahya, E., 1987: Reservoir Operating Rules Generated by Stochastic Optimization. M.Sc. Project, Polytechnic University, New York, USA
- 3) Kahya, E., 1993: United States Streamflow Patterns in Relation to the Extreme Phases of the Southern Oscillation. Ph.D. Thesis, University of California, Los Angeles, USA

Book Chapters in Preparation:

- 1) O.A. Bég, H.S. Takhar, Tasverr A. Bég, G. Woo and E. Kahya, 2009: Chapter 3: Hydrodynamics of Flood Hazards in "Hydrodynamic Hazards in Civil Engineering: Mathematical Models and Case-Studies.", *Cambridge University Press*.

Journal Papers:***SCI Papers:***

- 1) Kahya, E. and J. A. Dracup, 1993: U.S. Streamflow Patterns in Relation to the El Nino / Southern Oscillation. *Water Resources Research*, Vol. 29, No 8, 2491-2503.
- 2) Dracup, J. A. and E. Kahya, 1994: The Relationships between U.S. Streamflow and La Nina Events. *Water Resources Research*, Vol. 30, No 7, 2133-2141.
- 3) Kahya, E. and J. A. Dracup, 1994: The Influences of Type I ENSO and La Nina Events on Streamflows in the Southwestern United States. *Journal of Climate*, Vol. 7, No 6, 965-976.
- 4) Kahya, E. and M.Ç. Karabörk, 2001: The Analysis of El Nino and La Nina Signals in Streamflows of Turkey. *International Journal of Climatology*, Vol. 21, No 10, 1231-1250.
- 5) Karabörk, M. Ç. and E. Kahya, 2003: The Teleconnections between the Extreme Phases of the Southern Oscillation and Precipitation Patterns over Turkey. *International Journal of Climatology*, Vol. 23, No 13, 1607-1625.
- 6) Kahya, E. and S. Kalaycı, 2004: Trend Analysis of Streamflow in Turkey. *Journal of Hydrology*, Vol. 289, 128-144.
- 7) Kalaycı, S., M.Ç. Karabörk and E. Kahya, 2004: Analysis of El Nino Signals on Turkish Streamflow and Precipitation Patterns Using Spectral Analysis. *Fresenius Environmental Bulletin*, Vol. 13, No 8, 719-725.
- 8) Karabörk, M. Ç., E. Kahya and M. Karaca, 2005: The Influences of the Southern and North Atlantic Oscillations on Hydrometeorological Surface Parameters in Turkey. *Hydrological Processes*, Vol. 19, No 6, 1185-1211.
- 9) Kalaycı, S. and E. Kahya, 2006: Assessment of Streamflow Variability Modes in Turkey: 1964-1994. *Journal of Hydrology*, Vol. 324, 163-177.
- 10) Partal, T. and E. Kahya, 2006: Trend Analysis in Turkish Precipitation Data. *Hydrological Processes*, Vol. 20, No 9, 2011-2026.
- 11) Karabörk, M.Ç., E. Kahya and A.Ü. Kömüşçü, 2007: Analysis of Turkish Precipitation Data: Homogeneity and the Southern Oscillation Forcing on Frequency Distributions. *Hydrological Processes*, Vol. 21, No 23, 3203-3210.
- 12) Kahya, E., S. Kalaycı and T.C. Piechota, 2008: Streamflow Regionalization: Case Study of Turkey. *Journal of Hydrologic Engineering*, Vol. 13, No 4, 205-214.

- 13) Bég, A.O., J. Zueco, T.A. Bég, H.S. Takhar, and E. Kahya, 2008: NSM Analysis of Time-dependent Nonlinear Buoyancy-driven Double-diffusive Radiative Convection Flow in Non-darcy Geological Porous Media. *Acta Mech*, Vol. 202, 181-204, DOI: 10.1007/s00707-008-0018-6
- 14) Demirel, M.C., A. Venancio and E. Kahya, 2008: Flow Forecast by SWAT Model and ANN in Pracana Basin, Portugal. *Advances in Engineering Software*, Vol. 40, No 7, 467-473, DOI: 10.1016/j.advengsoft.2008.08.002.
- 15) Ganapuram, S., G. T. V. Kumar, I. V. M. Krishna, E. Kahya and M.C. Demirel, 2008: Mapping of Ground Water Potential Zones in the Musi Basin Using Remote Sensing Data and GIS. *Advances in Engineering Software*, Vol. 40, No 7, 506-518, DOI: 10.1016/j.advengsoft.2008.10.001.
- 16) Kahya, E., M.C. Demirel and A.O. Bég, 2008: Hydrologic Homogeneous Regions Using Monthly Streamflow in Turkey. *Earth Sciences Research Journal*, Vol. 12, No 2, 57-69.
- 17) Küçük M., E. Kahya, T.M. Cengiz and M. Karaca, 2008: North Atlantic Oscillation Influences on Turkish Lake-levels by Wavelet Analysis. *Hydrological Processes*, Vol. 23, No 6, 893-906, DOI: 10.1002/hyp.7225.
- 18) Şarlak, N., E. Kahya and A.O. Bég, 2008: Critical Drought Analysis: A Case Study of Göksu River (Turkey) and North Atlantic Oscillation Influences. *Journal of Hydrologic Engineering*, DOI:10.1061/(ASCE)HE.1943-5584.0000052.
- 19) Karabörk, M. Ç. and E. Kahya, 2008: The Links between the Categorized Southern Oscillation Indicators and Climate and Hydrologic Variables over Turkey. *Hydrological Processes* (in press)
- 20) Martı, A.I., E. Kahya, M.C. Demirel and O.A. Bég, 2008: ENSO Modulations on Streamflow Characteristics. *Earth Sciences Research Journal* (in press)
- 21) Kahya, E. and A.I. Martı, 2009: Footprints of ENSO Events on Precipitation Characteristics in Turkey. *Hydrological Processes* (in press)
- 22) Kahya, E. and M.C. Demirel, 2009: Grouping of Streamflow Characteristics in Portugal. *Earth Sciences Research Journal* (in press)
- 23) Ganapuram, S., G. T. V. Kumar, T. Jayababu, E. Kahya and M.C. Demirel, 2009: Study of Long Term Shoreline Changes at Penner River Mouth using Remote Sensing and Digital Shoreline Analysis System in GIS. *Advances in Engineering Software* (in press)
- 24) Kahya, E., F. Yilmaz, A. Sahin, C. Yerdelen, and I. Can, 2009: NAO Signals in Turkish climate data. *Hydrological Processes* (in press)
- 25) Demirel, M.C, A.J. Mariano and E. Kahya, 2009: Appropriate Model Selection based on K Means for Flow Forecasting. *Hydrological Processes*
- 26) Demirel, M.C. and E. Kahya, 2009: Hydrological Regionalization in Turkey. *Water Resources Research* (in review)

EI Papers:

- 1) Kalaycı, S. ve E. Kahya, 1998: Susurluk Havzası'ndaki Akarsularda Su Kalitesi Trendlerinin Analizi. *DOĞA-Türk Mühendislik ve Çevre Bilimleri Dergisi* (TÜBİTAK), Cilt 22, Sayı 6, 503-514.
- 2) Karabörk, M. Ç. ve E. Kahya, 1999: Sakarya Havzası'ndaki Akarsu Akımlarının Çok Değişkenli Stokastik Modellemesi. *DOĞA- Türk Mühendislik ve Çevre Bilimleri Dergisi* (TÜBİTAK), Cilt 23, Sayı 6, 133-147.
- 3) Bég, A.O., J. Zueco, T.A. Bég, H.S. and E. Kahya, 2008: Numerical Modeling of Unsteady Rotating Couette Flow in a High-Porosity Medium Channel at low Ekman Numbers. *Turkish Journal of Engineering and Environmental Sciences* (in review)
- 4) Narahari, M., H. S. Takhar, O. Anwar Bég and E. Kahya 2009: Mathematical Modeling of Transient Double-diffusive Convection in a Vertical Parallel Plate Channel with Constant Temperature and Mass Diffusion. *Turkish Journal of Engineering and Environmental Sciences* (in review)

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