

Prof. ZEHRA ZEYBEK

Personal Information

Office Phone: [+90 312 203 3522](tel:+903122033522)

Other Email: zeybek@eng.ankara.edu.tr

Web: <https://avesis.ankara.edu.tr/zeybek>

Address: zeybek@eng.ankara.edu.tr

Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), Turkey 1994 - 1997

Doctorate, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 1994 - 1997

Postgraduate, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 1990 - 1993

Undergraduate, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 1985 - 1990

Dissertations

Doctorate, Fuzzy ve neural network yöntemleri ile kimyasal proseslerin modellenmesi ve kontrolü, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 1997

Postgraduate, Değişik polimer çözeltilerinde gaz/sıvı kütle aktarımı, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 1993

Research Areas

Engineering and Technology

Academic Titles / Tasks

Professor, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2014 - Continues

Associate Professor, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2007 - 2014

Courses

PROSES KONTROL, Undergraduate, 2015 - 2016, 2013 - 2014

Termodinamik , Undergraduate, 2013 - 2014, 2008 - 2009

Advising Theses

ZEYBEK Z., Yün yıkama atık suyunun koagülasyon flokülasyon prosesiyle arıtımının cevap yüzey metodolojisiyle optimizasyonu ve arıtma tesisi tasarımı, Postgraduate, B.KÖFTER(Student), 2021

ZEYBEK Z., Risk assessment in a lubricant oil plant, Postgraduate, B.ALATUN(Student), 2019

ZEYBEK Z., Boron removal and recovery from industrial wastewater by using chemical coagulation and

- electrocoagulation method, Postgraduate, G.KOÇYİĞİT(Student), 2018
- ZEYBEK Z., Municipal waste water treatment by chemical coagulation and elektrocoagulation using particle swarm optimization based modelling and control approach, Doctorate, A.TAŞKIN(Student), 2016
- ZEYBEK Z., Petrokimya atıksuyu arıtımında bulanık mantık tabanlı dinamik matris kontrol, Postgraduate, M.ASPIR(Student), 2015
- ZEYBEK Z., Tekstil atık suyunun çöktürmeye arıtımında yapay sinir ağları kullanılarak arıtımının modellenmesi ve pH denetimi, Postgraduate, H.AYYILDIZ(Student), 2015
- ZEYBEK Z., İleri kontrol yöntemleriyle kablosuz sıvı seviye kontrolü, Doctorate, İ.BAYRAM(Student), 2015
- ZEYBEK Z., Kağıt endüstrisi atık suyunun çöktürme ile iyileştirilmesi ve adaptif keşifsel pH kontrolu, Postgraduate, B.MERAL(Student), 2012
- ZEYBEK Z., PH'ı bulanık PID ile kontrol ederek duvar boyası endüstriyel atık suyunun çöktürmeye arıtımı ve boyaya pigmentinin geri kazanımı, Postgraduate, S.TUNA(Student), 2010
- ZEYBEK Z., pH'I bulanık PID ile kontrol ederek duvar boyası endüstriyel atık suyunun çöktürmeye arıtımı ve boyaya pigmentinin geri kazanımı, S.TUNA(Student), 2010

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Application of Fuzzy Control in a Wireless Liquid Level Simulator**
Bayram I., ZEYBEK Z., ALTINTEN A., Alpbaz M.
WIRELESS PERSONAL COMMUNICATIONS, vol.109, no.1, pp.211-222, 2019 (SCI-Expanded)
- II. **Experimental application of one step ahead advanced pH control to water-based paint wastewater treatment**
CAMCIOĞLU Ş., ÖZYURT B., ZEYBEK Z., HAPOĞLU H.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.31, no.3, pp.656-665, 2016 (SCI-Expanded)
- III. **APPLICATION OF TEMPERATURE CONTROL IN A BATCH POLYMERIZATION REACTOR AT DIFFERENT OPTIMAL TEMPERATURES**
Cetinkaya S., DURMAZUÇAR H. H., ZEYBEK Z., HAPOĞLU H., Alpbaz M.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.28, no.2, pp.383-392, 2013 (SCI-Expanded)
- IV. **Optimal temperature control in a batch polymerization reactor using fuzzy-relational models-dynamics matrix control**
Cetinkaya S., Zeybek Z., Hapoglu H., Alpbaz M.
COMPUTERS & CHEMICAL ENGINEERING, vol.30, no.9, pp.1315-1323, 2006 (SCI-Expanded)
- V. **Role of adaptive heuristic criticism in cascade temperature control of an industrial tubular furnace**
Zeybek Z.
APPLIED THERMAL ENGINEERING, vol.26, no.2-3, pp.152-160, 2006 (SCI-Expanded)
- VI. **Adaptive heuristic temperature control of a batch polymerisation reactor**
Zeybek Z., Yuce S., Hapoglu H., Alpbaz M.
CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, vol.43, no.7, pp.911-920, 2004 (SCI-Expanded)
- VII. **Fuzzy temperature control of industrial refineries furnaces through combined feedforward/feedback multivariable cascade systems**
Abilov A., Zeybek Z., Tuzunalp O., Telatar Z.
CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, vol.41, no.1, pp.87-98, 2002 (SCI-Expanded)
- VIII. **Use of neural network for modeling of non-linear process integration technology in chemical engineering**
Abilov A., Zeybek Z.
CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, vol.39, no.5, pp.449-458, 2000 (SCI-Expanded)

- Expanded)
- IX. **Optimization strategies of gas/liquid mass transfer in mechanically agitated tanks**
 Zeybek Z., Abilov A., Alpbaz M.
 CHEMICAL ENGINEERING RESEARCH & DESIGN, vol.75, no.A5, pp.480-486, 1997 (SCI-Expanded)
- X. **GAS/LIQUID MASS-TRANSFER IN CONCENTRATED POLYMER-SOLUTIONS**
 ZEYBEK Z., OGUZ H., BERBER R.
 CHEMICAL ENGINEERING RESEARCH & DESIGN, vol.73, no.A6, pp.622-626, 1995 (SCI-Expanded)

Articles Published in Other Journals

- I. **Optimization of electrochemical treatment of textile dye wastewater**
 Pekel L. C., ERTUNÇ S., ZEYBEK Z., Alpbaz M.
 Management of Environmental Quality: An International Journal, vol.24, no.4, pp.452-462, 2013 (Scopus)
- II. **Electrocoagulation treatment of petrol refinery wastewater optimization through RSM**
 Giwa S., Giwa A., Zeybek Z., Hapoğlu H.
 International Journal of Engineering Research and Technology, vol.2, no.8, pp.145-154, 2013 (Peer-Reviewed Journal)
- III. **Application of nonlinear model predictive control based on different models to batch polymerization reactor**
 Cetinkaya S., ANAKLI D., ZEYBEK Z., HAPOĞLU H., Alpbaz M.
 International Conference on Integrated Modeling and Analysis in Applied Control and Automation, vol.1, pp.148-155, 2011 (Scopus)
- IV. **Textile wastewater treatment with coagulation and GPC Control**
 Pekel L. C., ZEYBEK Z., HAPOĞLU H., Alpbaz M.
 Chemical Engineering Transactions, vol.21, pp.817-822, 2010 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Fuzzy model based temperature control of a process simulator with on-line wireless connection**
 Aldemir A., ALTINTEN A., ZEYBEK Z., HAPOĞLU H., Alpbaz M.
 21st International Congress of Chemical and Process Engineering, CHISA 2014 and 17th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, PRES 2014, Prague, Czech Republic, 23 - 27 August 2014, vol.4, pp.2373
- II. **Optimization of Electrochemical Treatment of Textile Dye Wastewater**
 Pekel C., ERTUNÇ S., ZEYBEK Z., Alpbaz M.
 International Conference on Recycling and Reuse (R&R2012), İstanbul, Turkey, 4 - 06 June 2012, pp.345
- III. **Investigation of current density NaCl concentration and electrolysis time effects for the treatment of pulp and paper wastewater with electrocoagulation**
 CAMCIOĞLU Ş., POLAT K., ZEYBEK Z., TOĞRUL H., HAPOĞLU H.
 Proceedings on the 7th Chemical Engineering Conference for Collaborative Researchah in Eastern Mediterranean Countries-EMCC7 April 27-May 1 2012, Corfu Greece, KORFU, Greece, 27 April - 01 May 2012
- IV. **Application of nonlinear model predictive control based on different models to batch polymerization reactor**
 Cetinkaya S., ANAKLI D., ZEYBEK Z., HAPOĞLU H., Alpbaz M.
 5th International Conference on Integrated Modeling and Analysis in Applied Control and Automation, IMAACA 2011, Held at the International Mediterranean and Latin American Modeling Multiconference, I3M 2011, Rome, Italy, 12 - 14 September 2011, pp.148-155
- V. **Generalized Minimum Variance (GMV) Control in Waterborne Wastewater Treatment**
 CAMCIOĞLU Ş., ZEYBEK Z., HAPOĞLU H., Alpbaz M., Akpinar A.

- 13th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, Prague, Czech Republic, 28 August - 01 September 2010, vol.21, pp.823-828
- VI. Evaluation of the quality of life outcomes of women and man with coronary artery disease using fuzzy regression analyses**
Eini S., ZEYBEK Z., ÖZKAN M. M., Ahmed F.
ICCC 2008 - IEEE 6th International Conference on Computational Cybernetics, Stara Lesna, Slovakia, 27 - 29 November 2008, pp.265-268
- VII. Fuzzy-dynamic matrix pH control for treatment of dye wastewater plant**
Zeybek Z., Alpbaz M.
6th International Conference on Computational Intelligence and Multimedia Applications, Nevada, United States Of America, 16 - 18 August 2005, pp.118-123
- VIII. Environmental safety and loss prevention in sulphur tank with fuzzy L-1 norm control**
Zeybek Z.
6th On-Line World Conference on Soft Computing in Industrial Applications (WSC6), ELECTR NETWORK, 01 September 2001, pp.201-212
- IX. Fuzzy relational pattern dynamics of the breast cancer cells**
Zeybek Z., Telatar Z., Ozturk Y.
6th On-Line World Conference on Soft Computing in Industrial Applications (WSC6), ELECTR NETWORK, 01 September 2001, pp.371-378
- X. Integrated computing system of laboratory experiment for automation of research modeling and design of chemical engineering processes**
Abilov A., Zeybek Z., Cabbar Y.
4th IFAC Symposium on Advances in Control Education, İstanbul, Turkey, 14 - 16 July 1997, pp.273-281
- XI. A fuzzy model based control of well mixed reactor with cooling jacket**
Alpbaz M., Zeybek Z., Ozbek L., Aliiev F.
5th Fuzzy Days International Conference on Computational Intelligence, Dortmund, Germany, 28 - 30 April 1997, vol.1226, pp.546

Metrics

Publication: 25
Citation (WoS): 103
Citation (Scopus): 131
H-Index (WoS): 5
H-Index (Scopus): 6