

Assoc. Prof. Ayça Meriç HASANOĞLU

Personal Information

Email: aymeric@yildiz.edu.tr

Web: <https://avesis.yildiz.edu.tr/aymeric>

International Researcher IDs

ORCID: 0000-0002-2988-8504

Yoksis Researcher ID: 189626

Education

Post Doctorate, Universidad de Santiago de Chile, Kimya Mühendisliği, Chile 2009 - 2010

Doctorate, Kimya Mühendisliği, Spain 2008 - 2008

Doctorate, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Chemical Engineering, Turkey 2003 - 2008

Postgraduate, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Chemical Engineering, Turkey 2000 - 2003

Research Areas

Chemical Engineering and Technology, Basic Operations and Thermodynamics, Separation Operations, Engineering and Technology

Academic Positions

Associate Professor, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Chemical Engineering, 2014 - Continues

Courses

Undergraduate

Heat Transfer, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Journal articles indexed in SCI, SSCI, and AHCI

- I. **Silica Filled Polyphenylsulfone/Polydimethylsiloxane Composite Membranes for Pervaporation Separation of Biobutanol from ABE Mixtures**

Çalhan A., DENİZ S., Kujawski W., Kujawa J., Knozowska K., Hasanoğlu A. M.

Chemical Engineering and Processing - Process Intensification, vol.156, 2020 (SCI-Expanded)

- II. **Comparison of various membrane contactor systems for whey concentration process**

Hasanoglu A. M.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.35, no.3, pp.1565-1574, 2020 (SCI-Expanded)

- III. **Development of metal organic framework filled PDMS/PI composite membranes for biobutanol recovery**
Çalhan A., Deniz S., Romero J., Hasanoğlu A. M.
KOREAN JOURNAL OF CHEMICAL ENGINEERING, vol.36, no.9, pp.1489-1498, 2019 (SCI-Expanded)
- IV. **Concentration of skim milk using a hybrid system of osmotic distillation and membrane distillation**
Gul K., Hasanoglu A. M.
DESALINATION AND WATER TREATMENT, vol.149, pp.11-22, 2019 (SCI-Expanded)
- V. **Investigation of sorption characteristics of polymeric membranes containing ionic liquids for n-butanol recovery from aqueous streams**
Hasanoglu A. M.
DESALINATION AND WATER TREATMENT, vol.57, no.15, pp.6680-6692, 2016 (SCI-Expanded)
- VI. **Separation of butanol from ABE mixtures by sweep gas pervaporation using a supported gelled ionic liquid membrane: Analysis of transport phenomena and selectivity**
Plaza A., Merlet G., Hasanoglu A. M., Isaacs M., Sanchez J., Romero J.
JOURNAL OF MEMBRANE SCIENCE, vol.444, pp.201-212, 2013 (SCI-Expanded)
- VII. **Gas-filled membrane absorption: a review of three different applications to describe the mass transfer by means of a unified approach**
Hasanoglu A. M., Romero J., Plaza A., Silva W.
DESALINATION AND WATER TREATMENT, vol.51, pp.5649-5663, 2013 (SCI-Expanded)
- VIII. **Removal of phenol from wastewaters using membrane contactors: Comparative experimental analysis of emulsion pertraction**
Hasanoglu A. M.
DESALINATION, vol.309, pp.171-180, 2013 (SCI-Expanded)
- IX. **Effect of the operating variables on the extraction and recovery of aroma compounds in an osmotic distillation process coupled to a vacuum membrane distillation system**
Hasanoglu A. M., Rebolledo F., Plaza A., Torres A., Romero J.
JOURNAL OF FOOD ENGINEERING, vol.111, no.4, pp.632-641, 2012 (SCI-Expanded)
- X. **Modelling of a pervaporation membrane reactor during esterification reaction coupled with separation to produce ethyl acetate**
Hasanoglu A. M., Dincer S.
DESALINATION AND WATER TREATMENT, vol.35, pp.286-294, 2011 (SCI-Expanded)
- XI. **Ammonia removal from wastewater streams through membrane contactors: Experimental and theoretical analysis of operation parameters and configuration**
Hasanoglu A. M., Romero J., Perez B., Plaza A.
CHEMICAL ENGINEERING JOURNAL, vol.160, no.2, pp.530-537, 2010 (SCI-Expanded)
- XII. **The esterification of acetic acid with ethanol in a pervaporation membrane reactor**
Hasanoglu A. M., SALT Y., KELESER S., Dincer S.
DESALINATION, vol.245, pp.662-669, 2009 (SCI-Expanded)
- XIII. **Pervaporation membrane reactor study for the esterification of acetic acid and isobutanol using polydimethylsiloxane membrane**
Korkmaz S., SALT Y., Hasanoglu A. M., Ozkan S., SALT İ., Dincer S.
APPLIED CATALYSIS A-GENERAL, vol.366, no.1, pp.102-107, 2009 (SCI-Expanded)
- XIV. **Desorption of ethyl acetate-water mixture by using cross-linked poly(vinylalcohol) membrane and comparison of results with pervaporation**
Korkmaz S., SALT Y., Hasanoglu A. M., Ozkan S., Dincer S.
CHEMICAL ENGINEERING COMMUNICATIONS, vol.195, no.6, pp.585-599, 2008 (SCI-Expanded)
- XV. **Pervaporation separation of organics from multicomponent aqueous mixtures**
Hasanoglu A. M., Salt Y., KELESER S., Ozkan S., Dincer S.
CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, vol.46, no.4, pp.300-306, 2007 (SCI-Expanded)
- XVI. **Desorption of ethylacetate-water mixture by using crosslinked polydimethylsiloxane membrane**

- KELESER S., Salt Y., Hasanoglu A. M., Ozkan S., Dincer S.
DESALINATION, vol.200, pp.44-45, 2006 (SCI-Expanded)
- XVII. **Pervaporation separation of ethylacetate-water mixtures through a crosslinked poly(vinylalcohol) membrane**
Salt Y., Hasanoglu A. M., Salt I., Keleser S., Ozkan S., Dincer S.
VACUUM, vol.79, pp.215-220, 2005 (SCI-Expanded)
- XVIII. **Pervaporation separation of ethyl acetate-ethanol binary mixtures using polydimethylsiloxane membranes**
Hasanoglu A. M., Salt Y., Keleser S., Ozkan S., Dincer S.
CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, vol.44, no.3, pp.375-381, 2005 (SCI-Expanded)
- XIX. **Sorption behavior and preliminary pervaporation results of cross-linked polyvinylalcohol and polydimethylsiloxane membranes prepared for the separation of water-ethylacetate mixtures**
Salt Y., Hasanoglu A. M., Dincer S.
CHEMICAL ENGINEERING COMMUNICATIONS, vol.190, pp.564-572, 2003 (SCI-Expanded)

Articles Published in Other Journals

- I. **Concentration of Skim Milk and Dairy Products by Forward Osmosis**
HASANOĞLU A. M., Gül K.
Journal of Turkish Chemical Society, vol.1, no.1, pp.149-160, 2017 (Peer-Reviewed Journal)
- II. **Pervaporasyon Teknolojisi ve Prosesleri**
Salt Y., Dinçer S., Özkan S., Hasanoglu A. M.
Kimya Teknolojileri Dergisi, pp.56-58, 2001 (Non Peer-Reviewed Journal)

Books

- I. **Kimya Mühendisliğine Giriş: Bugünden Yarına Temel Bilgiler**
HASANOĞLU A. M., Kılıç Apar D.
Literatür Yayıncılık, İstanbul, 2016

Papers Presented at Peer-Reviewed Scientific Conferences

- I. **The Development of PPSU Membranes with Silica and PVP Additives for Pervaporation Separation of Butanol**
Çalhan A., Deniz S., Hasanoglu A. M.
6th PV VP GS MD conference, Torun, Poland, 14 - 17 May 2019, pp.46
- II. **ANTIFOULING PEBA MEMBRANES FOR BIOBUTANOL RECOVERY BY PERVAPORATION**
HASANOĞLU A. M., ÇALHAN A., DENİZ S., ARASOĞLU T.
3rd International Conference on Engineering Technology and Innovation (ICETI), Belgrade, Serbia And Montenegro, 17 - 21 April 2019
- III. **Concentration of fruit juices in a hybrid process of osmotic distillation and membrane distillation**
Rogenbuke S., Hasanoglu A. M.
MELPRO 2018, Praha, Czech Republic, 13 - 16 May 2018, pp.125
- IV. **METAL ORGANIC FRAMEWORK PARTICLE FILLED PI/PDMS COMPOSITE MEMBRANES FOR PERVAPORATION SEPARATION OF BIOBUTANOL**
Çalhan A., DENİZ S., HASANOĞLU A. M.
MELPRO 2018, 13 - 16 May 2018

- V. **Pervaporation of Biobutanol Using Ionic Liquid Supported PDMS/PTFE Composite Membranes**
Erdoğan D., HASANOĞLU A. M.
10th World Congress of Chemical Engineering, Barcelona, Spain, 01 October 2017, pp.73
- VI. **Integrated Forward Osmosis-Membrane Distillation Process for Whey Concentration**
Gül K., Rogenbuke S., HASANOĞLU A. M.
10th World Congress of Chemical Engineering, Barcelona, Spain, 01 October 2017, pp.71
- VII. **Pervaporation of Biobutanol Using Supported Ionic Liquid Membranes**
Erdoğan D., Hasanoğlu A. M.
16th Aachener Membrane Colloquium 2016, Aachen, Germany, 02 November 2016, pp.287-291
- VIII. **Concentration of milk by means of membrane contactors: A comparison of forward osmosis and membrane distillation**
Gül K., HASANOĞLU A. M.
16th Aachener Membrane Colloquium 2016, Aachen, Germany, 02 November 2016, pp.261-265
- IX. **Pervaporation Separation of Biobutanol Using Polyimide Based Nanocomposite Membranes**
Çakar L., HASANOĞLU A. M., DENİZ S.
International Conference on Recycling and Reuse 2016, İstanbul, Turkey, 28 September 2016, pp.1
- X. **Süt ve Süt Ürünlerinin İleri Osmoz ile Konsantrasyonu**
Gül K., HASANOĞLU A. M.
12. Ulusal Kimya Mühendisliği Kongresi, İzmir, Turkey, 23 August 2016, pp.213
- XI. **Pervaporation Separation of Biobutanol Using Ionic Liquid Based Polymeric Membranes**
Erdoğan D., HASANOĞLU A. M.
28. Ulusal Kimya Kongresi, Mersin, Turkey, 15 August 2016, pp.335
- XII. **Development of Ionic Liquid Polymer Blended Membranes for Biobutanol Recovery**
HASANOĞLU A. M., Erdoğan D., Romero J.
Eco-Design of Agri-Bio Processes, Paris, France, 04 February 2016, pp.1
- XIII. **Evaluation of Separation Performance of Ionic Liquid-Polymer Blended Membranes for Butanol Recovery through Sorption, Desorption and Pervaporation Studies**
HASANOĞLU A. M., Romero J.
ECCE 10, 10th European Congress of Chemical Engineering, Nice, France, 27 September 2015, pp.1
- XIV. **Extraction of Butanol from ABE Mixtures by Perstraction Using An Ionic Liquid As Receiving Phase**
MERLET G., Uribe F., Cabezas R., HASANOĞLU A. M., ROMERO J.
ECCE 10, 10th European Congress of Chemical Engineering, Nice, France, 27 September 2015, pp.1
- XV. **Nanocomposite Polyimide Based Pervaporation Membranes for Biobutanol Separation: Preparation, Characterization and Pervaporation Performance**
Çakar L., HASANOĞLU A. M., DENİZ S.
Euromembrane 2015, Aachen, Germany, 06 September 2015, pp.315-0
- XVI. **Preparation of Nanocomposite Membranes for alcohol Separation from Aqueous Mixtures**
HASANOĞLU A. M., Deniz S.
5th European Chemistry Congress EuChemS 2014, İstanbul, Turkey, 31 August 2014, pp.31, (Summary Text)
- XVII. **Comparison of various process configurations of hollow fiber membrane contactors for phenol removal and recovery**
HASANOĞLU A. M.
29th European Membrane Summer School: Membranes for liquid separations from an industrial&academic point of view, Essen, Germany, 22 July 2013, pp.55, (Summary Text)
- XVIII. **Phenol Removal from Wastewaters Using Different Extraction Configurations of Membrane Contactors**
HASANOĞLU A. M., Uzun İ.
AUNQUE ICCE 2012, Seville, Spain, 24 June 2012, pp.76-77
- XIX. **Gas-filled Membrane Absorption: A novel Process to Recover Cyanide in Gold Cyanidation**
Estay H., HASANOĞLU A. M., Romero J.
XXV Interamerican Congress of Chemical Engineering /Santiago, Şili, Santiago, Chile, 14 November 2011, pp.6

- XX. **Atık sulardaki Fenolün Membran Kontaktörlerde Kimyasal Absorpsiyon ile Giderilmesi**
HASANOĞLU A. M., Uzun N.
MEMTEK, İstanbul, Turkey, 02 November 2011, pp.163, (Summary Text)
- XXI. **Hydrophilic pervaporation for water control in the esterification reaction of ethanol and acetic acid**
HASANOĞLU A. M., Alvarez J., Luque S.
Euromembrane 2009, Montpeiller, France, 06 September 2010, pp.352-353
- XXII. **Modeling of an Esterification Reaction Coupled with Pervaporation**
HASANOĞLU A. M., Dinçer S.
PERMEA 2010, Tatranské Matliare, Slovakia, 04 September 2010, pp.151
- XXIII. **Estudio experimental de un sistema de remocion de amoniaco desde aguas residuales y su revaloracion como sulfato de amonio utilizando contactores de membrana**
Plaza A., Valenzuela J., HASANOĞLU A. M., Romero J.
XVII Congreso Chileno de Ingenieria Quimica, Vina del Mar, Şili, Vina Del Mar, Chile, 25 October 2009, pp.1
- XXIV. **An overview of pervaporation membrane separation processes**
HASANOĞLU A. M.
XII Congreso Nacional de Estudiantes de Ciencia y Tecnologia de Alimentos CONECYTAL, Universidad de Santiago de Chile, Şili, Santiago, Chile, 14 October 2009, pp.1
- XXV. **Pervaporation Membrane Reactor Study for the Esterification of Acetic Acid and Isobuthanol using Polydimethylsiloxane Membrane**
Korkmaz S., Salt Y., Hasanoğlu A. M., Salt İ., Özkan S., Dinçer S.
2nd International Congress on Green Process Engineering - GPE 2009, Venice, Italy, 14 - 17 June 2009, pp.142
- XXVI. **Etanol ve Asetik Asitin Esterleşme Reaksiyonunun Farklı Membran ve Katalizörler Varlığında Pervaporasyon Membran Reaktörde İncelenmesi**
Hasanoğlu A. M., Salt Y., Keleser S., Dincer S.
XXII. Ulusal Kimya Kongresi, Doğu Akdeniz Üniversitesi, Gazimagusa, Cyprus (Kktc), 06 October 2008, pp.11
- XXVII. **Study on the Esterification of Acetic Acid with Ethanol Coupled with Pervaporation**
HASANOĞLU A. M.
Network Young Membrains 10, Berlin Technical University, Almanya, Berlin, Germany, 18 September 2008, pp.124-125
- XXVIII. **The Esterification of Acetic Acid with Ethanol in a Pervaporation Membrane Reactor**
Hasanoğlu A. M., Dinçer S.
Engineering with Membranes , Agualva-Cacem, Portugal, 25 - 28 May 2008, pp.1-2
- XXIX. **Desorption Study and Modeling of Pervaporation and Desorption**
KELESER S., SALT Y., OZKAN S., HASANOĞLU A. M., DINCER S.
NanoMemCourse EF1, Nanostructured materials and membranes, synthesis and characterisation, Zaragoza, Spain, 07 November 2007, pp.9-10
- XXX. **Esterification of Acetic Acid with Ethanol Coupled with Pervaporation**
HASANOĞLU A. M., DINCER S.
XXIV EMS Summer School:Membranes for Reactive Processes, University of Genoa , Italya, Genova, Italy, 11 September 2007, pp.1, (Summary Text)
- XXXI. **Farklı Katalizörler ile Esterleşme Reaksiyonunun Pervaporasyon Membran Reaktörde İncelenmesi**
HASANOĞLU A. M., DINCER S.
21. Ulusal Kimya Kongresi, Malatya, Turkey, 23 August 2007, pp.1
- XXXII. **Desorption of Ethylacetate- Water Mixture by Using Crosslinked Polydimethylsiloxane Membrane**
Keleşer S., Salt Y., Hasanoğlu A. M., Özkan S., Dinçer S.
Euromembrane 2006, Turin, Italy, 24 - 28 September 2006, pp.1
- XXXIII. **Etanol-su Karışımının Çapraz Bağlı (poli)dimetilsiloksan Membranda Desorpsiyonunun İncelenmesi**
Hasanoğlu A. M., Salt Y., Keleser S., Dincer S.
VII. Ulusal Kimya Mühendisliği Kongresi, Anadolu Üniversitesi, Eskişehir, Turkey, 05 September 2006, pp.40
- XXXIV. **Etil Asetatin Esterleşme Reaksiyonunun Pervaporasyon Membran Reaktörde İncelenmesi**
Hasanoğlu A. M., Salt Y., Keleser S., Ozkan S., Dinçer S.

VII. Ulusal Kimya Mühendisliği Kongresi, Anadolu Üniversitesi, Eskişehir, Eskişehir, Turkey, 05 September 2006, pp.39

XXXV. Çok Bileşenli Sıvı Karışımların Pervaporasyonla Ayrılması

Hasanoğlu A. M., Salt Y., Keleşer S., Özkan S., Dinçer S.

XIX. Ulusal Kimya Kongresi, Ege Üniversitesi, İzmir, Turkey, 30 September 2005, pp.769, (Summary Text)

XXXVI. Etil Asetat-su Karışımının Çapraz Bağlı Poli(vinilalkol) Membranda Desorpsiyonunun İncelenmesi

Keleşer S., Salt Y., Hasanoğlu A. M., Özkan S., Dinçer S.

XIX. Ulusal Kimya Kongresi Ege Üniversitesi, İzmir, Turkey, 30 September 2005, pp.563

XXXVII. Pervaporation Separation of Ethyl Acetate-Water Binary Mixtures by PDMS Membrane

HASANOĞLU A. M., SALT Y., KELESER S., ÖZKAN S., DİNÇER S.

Euromembrane Congress, Hamburg, Germany, 28 September 2004, pp.617

XXXVIII. Etil Asetat-etanol-asetik Asit-su Karışımının Pervaporasyonla Ayrılması

Keleşer S., Hasanoğlu A. M., Salt Y., Özkan S., Dinçer S.

VI. Ulusal Kimya Mühendisliği Kongresi, Ege Üniversitesi, İzmir, İzmir, Turkey, 07 September 2004, pp.56

XXXIX. Etil asetat-su ve Etil asetat-Etanol Karışımlarının PDMS Membran ile Pervaporasyonu

Hasanoğlu A. M., Keleşer S., Salt Y., Özkan S., Dinçer S.

XVII. Ulusal Kimya Kongresi, İstanbul Üniversitesi, İstanbul, İstanbul, Turkey, 08 September 2003, pp.511

Funded Projects

HASANOĞLU A. M., Kahraman Ö. Ş., Project Supported by Higher Education Institutions, Biyouyumlu Yapay Böbrek Uygulamaları İçin Malzeme Seçimi ve Uygulamaları, 2019 - 2022

HASANOĞLU A. M., ÇALHAN A., ROMEO J., DENİZ S., Project Supported by Higher Education Institutions, Biyobütanolün pervaporasyonla ayrılmasına yönelik polimerik nano dolgulu membranların geliştirilmesi, 2015 - 2018

HASANOĞLU A. M., Project Supported by Higher Education Institutions, Süt ve Süt Ürünlerinin İleri Osmoz-Membran Distilasyonu Hibrit Prosesi ile Konsantrasyonu, 2016 - 2017

Hasanoğlu A. M., TUBITAK Project, Süt ve Süt Ürünlerinin İleri Osmoz Membran Distilasyonu Hibrit Prosesi ile Konsantrasyonu, 2015 - 2017

Hasanoğlu A. M., Romero J., Other International Funding Programs, Development of Asymmetric Ionic Liquid-Based Membranes for Pervaporation of Biobutanol, 2014 - 2017

HASANOĞLU A. M., Project Supported by Higher Education Institutions, Atık Sulardaki Fenolün Membran Kontaktörlerde Kimyasal Absorpsiyon ile Uzaklaştırılması, 2011 - 2013

Hasanoğlu A. M., Romero J., Other International Funding Programs, Development of new supported ionic liquid membranes and its application in supercritical fluid extraction of organic compounds from aqueous solutions, 2011 - 2013

HASANOĞLU A. M., Other International Funding Programs, Supercritical fluid extraction of organic compounds from aqueous solutions using gelled ionic liquid membranes, FONDECYT, 2010 - 2013

Hasanoğlu A. M., Keleşer S., Dinçer S., Salt Y., Salt İ., Project Supported by Higher Education Institutions, İzobutil Asetat ve Butil Propiyonatın Ayır Ayır Eldesine Yönelik Esterleşme Reaksiyonlarının Değişik Katalizörler Varlığında Pervaporayon Membran Reaktörde İncelenmesi, 2008 - 2011

Hasanoğlu A. M., Romero J., Other International Funding Programs, Phenomonological and Physicochemical Description of Hollow Fiber Membrane Contactor/Reactor Operations, 2009 - 2010

Hasanoğlu A. M., Salt Y., Salt İ., Dinçer S., Keleşer S., Project Supported by Higher Education Institutions, Etanol-asetik asit (esterleşme) ve Etilasetat-su (hidroliz) Reaksiyonlarının Pervaporasyon Membran Reaktörde İncelenmesi, 2005 - 2008

Hasanoğlu A. M., Salt Y., Özkan S., Dinçer S., Project Supported by Higher Education Institutions, Çok Bileşenli Sıvı Karışımların Pervaporasyonla Ayrılması, 2003 - 2005

Hasanoğlu A. M., Dinçer S., Salt Y., Özkan S., Project Supported by Higher Education Institutions, Etil Asetat-Su, Etil Alkol-Su ve Etil Asetat-Etil Alkol İkili Karışımların Pervaporasyonla Ayrılması, 2001 - 2003

Dinçer S., Salt Y., Hasanoğlu A. M., Özkan S., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Sıvı Karışımların Pervaporasyonla Ayrılması, 1998 - 2001

Peer Reviews in Scientific Publications

Sigma Journal of Engineering and Natural sciences , Other Indexed Journal, July 2017
Chemical Engineering Research and Design , SCI Journal, May 2017
European Polymer Journal , SCI Journal, October 2016
Journal of Industrial & Engineering Chemistry , SCI Journal, June 2016
Journal of Supercritical Fluids , SCI Journal, February 2015
Journal of Membrane Science, SCI Journal, January 2014
Journal of Chemical Technology & Biotechnology, SCI Journal, October 2013
International Journal of Chemical Reactor Engineering, SCI Journal, February 2012
Separation Science and Technology (Makale hakemliđi), SCI Journal, September 2010
International Journal of Enviromental Engineering (Makale Hakemliđi), SCI Journal, June 2010
Journal of Membrane Science (Makale hakemliđi), SCI Journal, June 2010

Metrics

Publication: 61
Citation (WoS): 432
Citation (Scopus): 503
H-Index (WoS): 11
H-Index (Scopus): 11

Scholarships

TÜBİTAK- Bilim İnsanı Destekleme Programı Doktora Bursu, TUBITAK, 2005 - 2008

Awards

Hasanođlu A. M., 29th European Membrane Society Summer School on Membranes, travel award, European Membrane Society , Almanyada, July 2013
Hasanođlu A. M., PhD students and young researchers contest, Presentation Award, Permea 2010, Slovakia, November 2010