

# **Prof. SİNAN YAPICI**

## **Personal Information**

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## **International Researcher IDs**

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Publons / Web Of Science ResearcherID: ABG-7826-2020

Yoksis Researcher ID: 31284

## **Education Information**

Doctorate, University of Exeter, Engineering School, Chemical Engineering Dpt, United Kingdom 1989 - 1992

Postgraduate, Ataturk University, Fen Bilimleri Enst., Kimya Mühendisliği, Turkey 1985 - 1987

Undergraduate, Inonu University, Mühendislik Fakültesi, Kimya Mühendisliği, Turkey 1980 - 1984

## **Foreign Languages**

English, C1 Advanced

## **Certificates, Courses and Trainings**

Other, OPCW, ASSOCIATION PROGRAMME, OPCW, 2003

## **Dissertations**

Doctorate, Electrochemical Mass Transfer in Annular Swirl Flow, University of Exeter, Engineering School, Chemical Engineering Department, 1992

Postgraduate, Uleysitten Borik Asit Üretiminin Optimizasyonu, Ataturk University, Fen Bilimleri Enstitüsü, Kimya Mühendişliği, 1987

## **Research Areas**

Chemical Engineering and Technology, Basic Operations and Thermodynamics, Mass Transfer, Engineering and Technology

## **Academic Titles / Tasks**

Professor, Inonu University, Mühendislik Fakültesi, Kimya Mühendisliği, 2016 - Continues

Professor, Ataturk University, Mühendislik Fakültesi, Kimya Mühendisliği, 1999 - 2016

Associate Professor, Ataturk University, Mühendislik Fakültesi, Kimya Mühendisliği, 1994 - 1999

Assistant Professor, Ataturk University, Mühendislik Fakültesi, Kimya Mühendisliği, 1992 - 1994

## Academic and Administrative Experience

Ataturk University, 2012 - 2015  
Ataturk University, 2012 - 2014  
Agri Ibrahim Cecen University, 2008 - 2010  
Ataturk University, 2008 - 2009  
Ataturk University, 1994 - 1995

## Courses

AYIRMA İŞLEMLERİ, Undergraduate, 2016 - 2017  
PROSES TASARIMI, Undergraduate, 2016 - 2017  
KÜTLE TRANSFERİ, Undergraduate, 2016 - 2017

## Advising Theses

YAPICI S., KARIŞTIRMALI TANKLarda KARIŞMA SÜRESİNİN ELEKTROKİMYASAL SINIRLAYICI DİFÜZYON AKIM TEKNİĞİ İLE BELİRLENMESİ, Doctorate, Ö.AYDIN(Student), 2017  
YAPICI S., 6. Gliserin-su çözeltileri içinde ferrisiyanürün difüzyon katsayılarının belirlenmesi, Postgraduate, E.EROĞLU(Student), 2010  
YAPICI S., 5. Nükleer tipta kullanılan radyoaktif atıkların biyosorpsiyon yöntemiyle arıtılması, Doctorate, H.EROĞLU(Student), 2009  
YAPICI S., 5. Pamuk yağından biyodizel üretiminin optimizasyonu, Postgraduate, A.FIRAT(Student), 2008  
YAPICI S., 3. Kabarcıklı kolonların hidrodinamigi-gaz hold-up ve kabarcık yükselme hızı, Doctorate, E.ERKOÇ(Student), 2005  
YAPICI S., 2. Akışkan yataktaki silindire kütle transferi, Doctorate, R.EBRU(Student), 2003  
YAPICI S., 4. Karbon keçe elektrotlarda kütle transferi, Postgraduate, E.ERKOÇ(Student), 1999  
YAPICI S., 1. Delikli prizmatik türbülens oluşturanların ısı transferi üzerine etkisi, Doctorate, O.ŞARA(Student), 1998  
YAPICI S., 3. Kalsine edilmiş manyezitin akışkan yataktaki çözündürülmesi, Postgraduate, E.BARULAY(Student), 1998  
YAPICI S., 2. Laminer akım-geçiş bölgesi rejiminde helisel akımın konvektif aktarımı etkisi, Postgraduate, R.EBRU(Student), 1996  
YAPICI S., 1. Swirl akımda duvar kesme gerilimi, Postgraduate, G.Yazıcı(Student), 1995

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Bipolar membrane electrodialysis for mixed salt water treatment: determination of optimum conditions by topsis-based taguchi method**  
Oner M. R., Ata O. N., YAPICI S.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.20, no.1, pp.587-604, 2023 (SCI-Expanded)
- II. **Bipolar membrane electrodialysis for mixed salt water treatment: Evaluation of parameters on process performance**  
Oner M. R., KANCA A., ATA O. N., YAPICI S., Yaylali N. A.  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, vol.9, no.4, 2021 (SCI-Expanded)
- III. **A novel method for the measurement of mixing time: A new application of electrochemical limiting diffusion current technique**

- Aydin O., YAPICI S.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.99, pp.242-250, 2018 (SCI-Expanded)
- IV. Heat transfer performance of water and Nanoencapsulated n-nonadecane based Nanofluids in a double pipe heat exchanger  
DORUK S., ŞARA O. N., KARAİPEKLİ A., YAPICI S.  
HEAT AND MASS TRANSFER, vol.53, no.12, pp.3399-3408, 2017 (SCI-Expanded)
- V. Hydrofluoric acid and sodium hydroxide production by bipolar membrane electrodialysis  
Erkmen J., Yapici S., ARZUTUĞ M. E., AYDIN Ö., ATA O. N., Oner M. R.  
DESALINATION AND WATER TREATMENT, vol.57, no.43, pp.20254-20260, 2016 (SCI-Expanded)
- VI. A environmentally friendly process for boric acid and sodium hydroxide production from borax; bipolar membrane electrodialysis  
Erkmen J., Yapici S.  
DESALINATION AND WATER TREATMENT, vol.57, no.43, pp.20261-20269, 2016 (SCI-Expanded)
- VII. Thermal Conductivity and Viscosity of Nanofluids Having Nanoencapsulated Phase Change Material  
Barlak S., Sara O. N., Karaippekli A., YAPICI S.  
NANOSCALE AND MICROSCALE THERMOPHYSICAL ENGINEERING, vol.20, no.2, pp.85-96, 2016 (SCI-Expanded)
- VIII. Batch biosorption of radioactive thallium on solid waste of oleum rosea process  
Yapici S., Eroglu H.  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.88, no.11, pp.2082-2090, 2013 (SCI-Expanded)
- IX. Neutron Equivalent Dose Rate Measurements of Gypsum-Waste Tire Rubber Layered Structures  
Korkut T., Umac Z. I., Aygun B., KARABULUT A., Yapici S., ŞAHİN R.  
INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION, vol.18, no.6, pp.423-429, 2013 (SCI-Expanded)
- X. Some Transport Properties of Potassium Ferri/Ferro-Cyanide Solutions in a Wide Range of Schmidt Numbers  
Eroglu E., Yapici S., Sara O. N.  
JOURNAL OF CHEMICAL AND ENGINEERING DATA, vol.56, no.8, pp.3312-3317, 2011 (SCI-Expanded)
- XI. Effect of suspended CuO nanoparticles on mass transfer to a rotating disc electrode  
Sara O. N., Icer F., Yapici S., ŞAHİN B. N.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.35, no.3, pp.558-564, 2011 (SCI-Expanded)
- XII. Experimental investigation of pressure drop and friction factor for water flow in microtubes  
Barlak S., Yapici S., Sara O. N.  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.50, no.3, pp.361-368, 2011 (SCI-Expanded)
- XIII. Bio-sorption of Tl-201 radionuclide on olive pomace  
Yapici S., Eroglu H., Varoglu E.  
APPLIED RADIATION AND ISOTOPES, vol.69, no.3, pp.614-622, 2011 (SCI-Expanded)
- XIV. An environmentally friendly batch bioadsorption study of the radionuclides Ga-67 from aqueous solutions by fibrous tea waste  
Eroglu H., Varoglu E., Yapici S., ŞAHİN A.  
CHEMICAL ENGINEERING JOURNAL, vol.165, no.2, pp.563-572, 2010 (SCI-Expanded)
- XV. An Investigation of the Biosorption of Radioactive Gallium-67 in an Aqueous Solution Using Rose Residue  
Eroglu H., Yapici S., Varoglu E.  
JOURNAL OF CHEMICAL AND ENGINEERING DATA, vol.55, no.8, pp.2848-2856, 2010 (SCI-Expanded)
- XVI. Biosorption of Ga-67 radionuclides from aqueous solutions onto waste pomace of an olive oil factory  
Eroglu H., Yapici S., Nuhoglu C., Varoglu E.  
JOURNAL OF HAZARDOUS MATERIALS, vol.172, pp.729-738, 2009 (SCI-Expanded)
- XVII. Experimental study of laminar forced convective mass transfer and pressure drop in microtubes  
Sara O. N., Ergu O. B., ARZUTUĞ M. E., Yapici S.  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.48, no.10, pp.1894-1900, 2009 (SCI-Expanded)

- XVIII. **Pressure drop and point mass transfer in a rectangular microchannel**  
Ergu O. B., Sara O. N., Yapici S., ARZUTUĞ M. E.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.36, no.6, pp.618-623, 2009 (SCI-Expanded)
- XIX. **An environmentally friendly process; Adsorption of radionuclide Tl-201 on fibrous waste tea**  
Eroglu H., Yapici S., Nuhoglu C., Varoglu E.  
JOURNAL OF HAZARDOUS MATERIALS, vol.163, pp.607-617, 2009 (SCI-Expanded)
- XX. **Electrochemical Mass Transfer in Impinging Swirl Jets**  
ARZUTUĞ M. E., Yapici S.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.48, no.3, pp.1593-1602, 2009 (SCI-Expanded)
- XXI. **Electrochemical mass transfer between an impinging jet and a rotating disk in a confined system**  
Sara O. N., ERKMEN J., Yapici S., Copur M.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.35, no.3, pp.289-298, 2008 (SCI-Expanded)
- XXII. **A comparison of mass transfer between a plate and submerged conventional and multichannel impinging jets**  
ARZUTUG M., Yapici S., KOCAKERIM M.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.32, no.6, pp.842-854, 2005 (SCI-Expanded)
- XXIII. **Performance evaluation criteria for heat exchangers based on first law analysis**  
YILMAZ M., COMAKLI O., Yapici S., SARA O.  
JOURNAL OF ENHANCED HEAT TRANSFER, vol.12, no.2, pp.121-157, 2005 (SCI-Expanded)
- XXIV. **Determination of a semi empirical kinetic model for dissolution of metallic copper particles in HNO<sub>3</sub> solutions**  
DEMIR H., OZMETIN C., KOCAKERIM M., Yapici S., COPUR M.  
CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, vol.43, no.8, pp.1095-1100, 2004 (SCI-Expanded)
- XXV. **Heat transfer and friction characteristics in decaying swirl flow generated by different radial guide vane swirl generators**  
YILMAZ M., COMAKLI O., Yapici S., SARA O.  
ENERGY CONVERSION AND MANAGEMENT, vol.44, no.2, pp.283-300, 2003 (SCI-Expanded)
- XXVI. **Heat transfer from a surface fitted with rectangular blocks at different orientation angle**  
BILEN K., Yapici S.  
HEAT AND MASS TRANSFER, vol.38, pp.649-655, 2002 (SCI-Expanded)
- XXVII. **Energy correlation of heat transfer and enhancement efficiency in decaying swirl flow**  
Yilmaz M., YAPICI S., COMAKLI O., SARA O.  
HEAT AND MASS TRANSFER, vol.38, pp.351-358, 2002 (SCI-Expanded)
- XXVIII. **Thermal performance analysis of a tube finned surface**  
BILEN K., AKYOL U., Yapici S.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.26, no.4, pp.321-333, 2002 (SCI-Expanded)
- XXIX. **Heat transfer from a plate impinging swirl jet**  
BILEN K., BAKIRCI K., Yapici S., YAVUZ T.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.26, no.4, pp.305-320, 2002 (SCI-Expanded)
- XXX. **Effect of pulsed flow on the performance of carbon felt electrode**  
ERKOC E., Yapici S., KESKINLER B., CAKICI A., AKAY G.  
CHEMICAL ENGINEERING JOURNAL, vol.85, pp.153-160, 2002 (SCI-Expanded)
- XXXI. **The dissolution kinetics of ulexite in sulphuric acid solutions**  
TUNC M., Yapici S., KOCAKERIM M., YARTASI A.  
CHEMICAL AND BIOCHEMICAL ENGINEERING QUARTERLY, vol.15, no.4, pp.175-180, 2001 (SCI-Expanded)
- XXXII. **Heat-transfer enhancement in a channel flow with perforated rectangular blocks**  
SARA O., PEKDEMIR T., Yapici S., YILMAZ M.

- INTERNATIONAL JOURNAL OF HEAT AND FLUID FLOW, vol.22, no.5, pp.509-518, 2001 (SCI-Expanded)
- XXXIII. **Second law analysis of rectangular channels with square pin-fins**  
SARA O., YAPICI S., YILMAZ M., PEKDEMIR T.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.28, no.5, pp.617-630, 2001 (SCI-Expanded)
- XXXIV. **Enhancement of heat transfer from a flat surface in a channel flow by attachment of rectangular blocks**  
SARA O., PEKDEMIR T., YAPICI S., YILMAZ M.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.25, no.7, pp.563-576, 2001 (SCI-Expanded)
- XXXV. **Heat transfer and friction correlations and thermal performance analysis for a finned surface**  
BILEN K., AKYOL U., YAPICI S.  
ENERGY CONVERSION AND MANAGEMENT, vol.42, no.9, pp.1071-1083, 2001 (SCI-Expanded)
- XXXVI. **A Taguchi approach for investigation of heat transfer from a surface equipped with rectangular blocks**  
BILEN K., YAPICI S., CELIK C.  
ENERGY CONVERSION AND MANAGEMENT, vol.42, no.8, pp.951-961, 2001 (SCI-Expanded)
- XXXVII. **Crystallization of silver nitrate from saturated silver nitrate solution in nitric acid**  
OZMETIN C., COPUR M., KOCAKERIM M., YAPICI S.  
INDIAN JOURNAL OF CHEMICAL TECHNOLOGY, vol.8, no.2, pp.112-119, 2001 (SCI-Expanded)
- XXXVIII. **Thermal performance analysis for solid and perforated blocks attached on a fiat surface in duct flow**  
SARA O., PEKDEMIR T., YAPICI S., ERSAHAN H.  
ENERGY CONVERSION AND MANAGEMENT, vol.41, no.10, pp.1019-1028, 2000 (SCI-Expanded)
- XXXIX. **Enhancement of heat transfer by turbulent decaying swirl flow**  
Yilmaz M., COMAKLI O., YAPICI S.  
ENERGY CONVERSION AND MANAGEMENT, vol.40, no.13, pp.1365-1376, 1999 (SCI-Expanded)
- XL. **Energetic correlation of local mass transfer in swirling pipe flow**  
Yapici S.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.38, no.4, pp.1712-1717, 1999 (SCI-Expanded)
- XLI. **Dissolution mechanism of ulexite in H<sub>2</sub>SO<sub>4</sub> solution**  
TUNC M., KOCAKERIM M., YAPICI S., BAYRAKCEKEN S.  
HYDROMETALLURGY, vol.51, no.3, pp.359-370, 1999 (SCI-Expanded)
- XLII. **Surface shear stress for a submerged jet impingement using electrochemical technique**  
Yapici S., KUSLU S., OZMETIN C., ERSAHAN H., PEKDEMIR T.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.29, no.2, pp.185-190, 1999 (SCI-Expanded)
- XLIII. **Mass transfer to finite areas at the wall in swirling pipe flow in the transition region**  
Yapici S., OZBAHAR R.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.37, no.2, pp.643-651, 1998 (SCI-Expanded)
- XLIV. **Dissolution of thermally dehydrated ulexite in sulfuric acid solution**  
KUNKUL A., TUNC M., YAPICI S., ERSAHAN H., KOCAKERIM M.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.36, no.11, pp.4847-4851, 1997 (SCI-Expanded)
- XLV. **The optimisation of the dissolution of phosphate rock with Cl-2-SO<sub>2</sub> gas mixtures in aqueous medium**  
ABALI Y., COLAK S., YAPICI S.  
HYDROMETALLURGY, vol.46, pp.27-35, 1997 (SCI-Expanded)
- XLVI. **Mass transfer to local electrodes at wall and wall friction factor in decaying turbulent swirl flow**  
Yapici S., YAZICI G., OZMETIN C., ERSAHAN H., COMAKLI O.  
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.40, no.12, pp.2775-2783, 1997 (SCI-Expanded)
- XLVII. **Dehydration kinetics of ulexite from thermogravimetric data**  
TUNC M., ERSAHAN H., YAPICI S., COLAK S.  
JOURNAL OF THERMAL ANALYSIS, vol.48, no.2, pp.403-411, 1997 (SCI-Expanded)
- XLVIII. **Dissolution kinetics of ulexite in ammonia solutions saturated with CO<sub>2</sub>**

- KUNKUL A., YAPICI S., KOCAKERIM M., COPUR M.  
HYDROMETALLURGY, vol.44, pp.135-145, 1997 (SCI-Expanded)
- XLIX. **A semiempirical kinetic model for dissolution of Colemanite in aqueous CH<sub>3</sub>COOH solutions**  
OZMETIN C., KOCAKERIM M., YAPICI S., YARTASI A.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.35, no.7, pp.2355-2359, 1996 (SCI-Expanded)
- L. **Nonisothermal decomposition kinetics of trona**  
EKMEKYAPAR A., ERSAHAN H., YAPICI S.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.35, no.1, pp.258-262, 1996 (SCI-Expanded)
- LI. **SOLUBILITY OF STIBNITE ORE IN HCl SOLUTIONS**  
COPUR M., COLAK S., YAPICI S.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.34, no.11, pp.3995-4002, 1995 (SCI-Expanded)
- LII. **FLASH DEHYDRATION OF ULEXITE AND INVESTIGATION OF DEHYDRATION KINETICS FROM THERMOGRAVIMETRIC DATA**  
ERSAHAN H., TUNC M., EKMEKYAPAR A., YAPICI S.  
THERMOCHIMICA ACTA, vol.250, no.1, pp.125-135, 1995 (SCI-Expanded)
- LIII. **ELECTROCHEMICAL STUDY OF MASS-TRANSFER IN DECAYING ANNULAR SWIRL FLOW .2. CORRELATION OF MASS-TRANSFER DATA**  
YAPICI S., PATRICK M., WRAGG A.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.25, no.1, pp.15-22, 1995 (SCI-Expanded)
- LIV. **DISSOLUTION KINETICS OF PHOSPHATE ORE IN SO<sub>2</sub>-SATURATED WATER**  
YARTASI A., KOCAKERIM M., YAPICI S., OZMETIN C.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.33, no.9, pp.2220-2225, 1994 (SCI-Expanded)
- LV. **ELECTROCHEMICAL STUDY OF MASS-TRANSFER IN DECAYING ANNULAR SWIRL FLOW .1. AXIAL DISTRIBUTION OF LOCAL MASS-TRANSFER COEFFICIENTS**  
YAPICI S., PATRICK M., WRAGG A.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.24, no.7, pp.685-693, 1994 (SCI-Expanded)
- LVI. **LEACHING KINETICS OF MALACHITE IN AMMONIA SOLUTIONS**  
KUNKUL A., KOCAKERIM M., YAPICI S., DEMIRBAG A.  
INTERNATIONAL JOURNAL OF MINERAL PROCESSING, vol.41, pp.167-182, 1994 (SCI-Expanded)
- LVII. **HYDRODYNAMICS AND MASS-TRANSFER IN DECAYING ANNULAR SWIRL FLOW**  
YAPICI S., PATRICK M., WRAGG A.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.21, no.1, pp.41-51, 1994 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Effect of distance between impeller blade tip and surface on mass transfer to a local electrode in a stirred vessel in a wide range of Sc number**  
YAPICI S., ALTAY I.  
INDIAN CHEMICAL ENGINEER, vol.64, no.5, pp.576-593, 2022 (ESCI)
- II. **Usability of alloys with different composition as electrode for electrochemical reduction of ferricyanide ion**  
ALTAY I., YAPICI S., DEMİRKIRAN N.  
SN APPLIED SCIENCES, vol.4, no.4, 2022 (ESCI)
- III. **A new application area of electrochemical limiting diffusion current technique: measurement of mixing time and effect of some parameters**  
AYDIN O., ARZUTUĞ M. E., YAPICI S.  
SN APPLIED SCIENCES, vol.1, no.11, 2019 (ESCI)
- IV. **Investigation of the availability of apricot shell in adsorption equilibrium studies**  
YAPICI S., SARICI ÖZDEMİR Ç., VARLIKLIÖZ H.  
Journal of physical chemistry and functional materials, vol.1, no.1, pp.18-24, 2018 (Peer-Reviewed Journal)

## **Supported Projects**

YAPICI S., TUBITAK Project, Bipolar membranlı elektrodializ prosesi ile amonyum klorür ve sodyum klorür çözeltilerinden amonyak sodyum hidroksit ve hidrojen klorür üretiminin incelenmesi, 2015 - Continues

YAPICI S., ALTAY İ., Project Supported by Higher Education Institutions, Farklı Bileşimdeki Metallerin Ferrisiyanır İyonunun Elektrokimyasal İndirgenmesinde Katot Olarak Kullanılabilirliğinin İncelenmesi, 2019 - 2020

YAPICI S., SARICI ÖZDEMİR Ç., VARLIKLIÖZ H., Project Supported by Higher Education Institutions, Adsorpsiyon denge ve kinetik çalışmalarında adsorbent olarak kayısı çekirdeğinin kullanılabilirliği, 2017 - 2018

YAPICI S., Project Supported by Higher Education Institutions, ELEKTROMEMBRAN VE TEMİZ ÜRETİM PROSESLERİ, 2016 - 2018

## **Metrics**

Publication: 61

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