

# Prof. YEŞİM SAĞ AÇIKEL

## Personal Information

Office Phone: [+90 312 297 7444](tel:+903122977444)

Fax Phone: [+90 312 299 2124](tel:+903122992124)

Email: [yesims@hacettepe.edu.tr](mailto:yesims@hacettepe.edu.tr)

Web: <http://yunus.hacettepe.edu.tr/~yesims/>

Address: Hacettepe Üniversitesi Mühendislik Fakültesi Kimya Mühendisliği Bölümü 06800 Beytepe Ankara

## International Researcher IDs

ORCID: 0000-0002-3026-0933

Publons / Web Of Science ResearcherID: G-6100-2013

ScopusID: 7004651435

Yoksis Researcher ID: 6288

## Education Information

Doctorate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği, Turkey 1988 - 1993

## Foreign Languages

English, C1 Advanced

## Research Areas

Chemistry, Natural Sciences

## Academic Titles / Tasks

Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2002 - Continues

Associate Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 1994 - 2002

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 1986 - 1998

## Advising Theses

Sağ Açikel Y., Kolon Kanseri Tedavisi İçin Folik Asit Reseptör Hedefli Pektin ile Kaplı Pullulan Bazlı Nanopartiküllerden Kemoterapötik-Kemopreventif İlaç – Etken Madde Kombinasyonlarının Sıralı Salımının İncelenmesi, Doctorate, A.Burcu(Student), Continues

Sağ Açikel Y., Kitosan Nano Partiküllerine Kapsüllenmiş Aloe Vera ve Yeşil Çay Ekstraktlarının Yara İyileşmesi Üzerindeki Etkilerinin Karşılaştırmalı Araştırılması, Doctorate, E.Uzunhasanoğlu(Student), Continues

Sağ Açikel Y., Poli(laktik-ko-glikolik asit) -Kitosan Çekirdek/Kabuk Nanopartiküllerden Kemopreventif ve Kemoterapötik Özellikteki Piperin ve Epigallokateşin Gallat' ın Sıralı Salımının İncelenmesi, Postgraduate, D.Gürel(Student), Continues

Sağ Açikel Y., Kontrollü ve Sıralı Büyüme Faktörü Salımı için Manyetik Silika/Aljinat Mikroküreler Kullanılarak Manyetik Duyarlı Kemik Doku İskelelerinin Geliştirilmesi, Doctorate, G.Polat(Student), Continues

Sağ Açıkel Y., Meme Kanseri İçin Hedeflenebilir İlaç Salım Sistemi Olarak İkili İlaç Yüklü Kitosan Kaplı Karboksümetil Selüloz-Zein Nanopartiküllerinin Araştırılması, Doctorate, M.Öztekin(Student), Continues

Sağ Açıkel Y., Meme Kanseri İçin Hedeflenebilir İlaç Salım Sistemi Olarak İkili İlaç Yüklü Albümin Bazlı Nanopartiküllerin Geliştirilmesi, Doctorate, E.Türkeş(Student), Continues

Sağ Açıkel Y., Kitosan ve Halloysit Bazlı Nanopartiküller Kullanılarak Kesikli Karıştırmalı Kaplarda Adsorpsiyon Yoluyla Sulu Ortamlardan Antibiyotik Giderimi, Postgraduate, S.ERDEM(Student), 2018

Sağ Açıkel Y., Aljinat-Halloysit Biyokompozitlere Ciprofloxacın Yüklenmesi, Salımı ve Adsorpsiyonunun İncelenmesi, Postgraduate, Ö.CAN(Student), 2018

Sağ Açıkel Y., Kansere Tedavisinde Kullanılan Resveratrolün İlaç Taşıyıcı Sistem Olarak Kitosan-Aljinat Kompozit Biyojellere Yüklenmesi ve Salımının İncelenmesi, Postgraduate, A.BURCU(Student), 2018

SAĞ AÇIKEL Y., Manyetik kitosan-halloysit nanokompozitlerin üretilmesi ve karakterizasyonu: Cr ve metilen mavisi adsorpsiyonunun incelenmesi, Postgraduate, E.TÜRKEŞ(Student), 2017

SAĞ AÇIKEL Y., Kitosan nanopartiküllerine ve kitosan-halloysit nanokompozitlerine metronidazole yüklenmesi, salımını ve adsorpsiyonunun incelenmesi, Postgraduate, M.ÖZTEKİN(Student), 2017

SAĞ AÇIKEL Y., Manyetik kitosan-halloysit-demir oksit nanokompozitlerine tetrasiklin yüklenmesi, karakterizasyonu, salımını ve adsorpsiyonunun incelenmesi, Postgraduate, P.RAEIATBIN(Student), 2017

SAĞ AÇIKEL Y., Manyetik halloysit nanotüpler-aljinat hibrit kürelerin sentezlenmesi ve karakterizasyonu: Sulu ortamlardan Pb, metilen mavisi ve direkt mavi 71'in gideriminde kullanılması, Postgraduate, G.POLAT(Student), 2017

SAĞ AÇIKEL Y., Sulu ortamdan ağır metal iyonlarının ve boyar maddelerin mikropolimerik malzemeler, kitin ve kitosan kullanılarak adsorpsiyon yöntemiyle giderilmesi, Postgraduate, B.GÖZE(Student), 2013

SAĞ AÇIKEL Y., Rhizopus delemar ile ağır metal biyobirikiminin ve ağır metal iyonlarının enzimatik faaliyetler üzerine interaktif etkileşimlerinin incelenmesi, Doctorate, O.AHMET(Student), 2011

SAĞ AÇIKEL Y., Toprak ve toprak bileşenlerine Cd(II) iyonlarının adsorpsiyonunun ve rhamnolipid biyosurfaktanla bu iyonların geri kazanımının incelenmesi, Doctorate, Y.AŞÇI(Student), 2006

SAĞ AÇIKEL Y., Rhizopus delemar ile lipaz üretimi, Postgraduate, B.ÇELEBİ(Student), 2005

SAĞ AÇIKEL Y., Rhamnolipid biyosurfaktantlarla topraktaki ve sulu ortamdaki ağır metal iyon kirliliğinin giderilmesi, Postgraduate, H.ŞAHİN(Student), 2004

Sağ Açıkel Y., Ağır metallerin kitin ve kitosan üzerine adsorpsiyonunun incelenmesi, Postgraduate, Y.Aktay(Student), 2001

Sağ Açıkel Y., Üçlü ve dörtlü ağır metal iyonlarının yarışmalı biyosorpsiyonunun, kesikli karıştırmalı ve kolon tipi reaktörde incelenmesi, Postgraduate, B.Akçael(Student), 2000

Sağ Açıkel Y., İkili ve üçlü ağır metal iyon karışımlarının R. arrhizus' a çok bileşenli biyosorpsiyonunun incelenmesi ve yarışmalı adsorpsiyon modellerinin uygulanması, Postgraduate, A.Kaya(Student), 1998

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

- I. **Folic acid-conjugated cancer drug curcumin-loaded albumin nanoparticles: Investigation of curcumin release kinetics**  
Türkeş E., SAĞ AÇIKEL Y.  
Journal of Drug Delivery Science and Technology, vol.91, 2024 (SCI-Expanded)
- II. **Simultaneous removal of Methylene Blue and Direct Blue 71 with Pb(II) ions from multi-component systems: application of the multi-component Langmuir model**  
Polat G., Türkeş E., Açıkel Y.  
Desalination and Water Treatment, vol.289, pp.206-220, 2023 (SCI-Expanded)
- III. **Removal of heavy metal by using green synthesis ZnO NPs and ZnO-HNT composite**  
Canbaz G. T., AÇIKEL Ü., Açıkel Y.  
Biomass Conversion and Biorefinery, 2023 (SCI-Expanded)
- IV. **Investigation of adsorption of metronidazole on Chitosan - Halloysite nanocomposites and controlled release**  
Oztekin M., SAĞ AÇIKEL Y.

INDIAN JOURNAL OF CHEMICAL TECHNOLOGY, vol.27, no.2, pp.101-115, 2020 (SCI-Expanded)

- V. **Loading of cancer drug resveratrol to pH-Sensitive, smart, alginate-chitosan hydrogels and investigation of controlled release kinetics**  
Nazli A. B., Acikel Y.  
JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY, vol.53, 2019 (SCI-Expanded)
- VI. **Synthesis and Characterization of Magnetic Halloysite-Alginate Beads for the Removal of Lead(II) Ions from Aqueous Solutions**  
Polat G., Acikel Y.  
JOURNAL OF POLYMERS AND THE ENVIRONMENT, vol.27, no.9, pp.1971-1987, 2019 (SCI-Expanded)
- VII. **Synthesis and characterization of magnetic halloysite-chitosan nanocomposites: use in the removal of methylene blue in wastewaters**  
Türkeş E., Sağ Açikel Y.  
International Journal of Environmental Science and Technology, 2019 (SCI-Expanded)
- VIII. **Use of magnetic halloysite nanotubes-alginate hybrid spheres in the treatment of dyes**  
Polat G., Acikel Y.  
NEW BIOTECHNOLOGY, vol.44, 2018 (SCI-Expanded)
- IX. **Removal of tetracycline by magnetic chitosan nanoparticles from medical wastewaters**  
RAEIATBIN P., Acikel Y. S.  
DESALINATION AND WATER TREATMENT, vol.73, pp.380-388, 2017 (SCI-Expanded)
- X. **Removal of Methyl Red, a cationic dye, Acid Blue 113, an anionic dye, from wastewaters using chitin and chitosan: influence of copper ions**  
Acikel Y., GOZE B.  
DESALINATION AND WATER TREATMENT, vol.73, pp.289-300, 2017 (SCI-Expanded)
- XI. **Investigation of antagonistic and synergistic interactions on simultaneous adsorption of crystal violet and Cu(II) using chitin and chitosan**  
GOZE B., EVIRGEN O. A., Acikel Y. S.  
DESALINATION AND WATER TREATMENT, vol.57, no.9, pp.4059-4072, 2016 (SCI-Expanded)
- XII. **Investigation of mutual interactions of physicochemical parameters on simultaneous Zn II bioaccumulation and lipase production of R delemar**  
EVİRGEN A., SAĞ AÇIKEL Y.  
Desalination And Water Treatment, vol.53, pp.3543-3556, 2015 (SCI-Expanded)
- XIII. **Simultaneous copper bioaccumulation, growth and lipase production of Rhizopus delemar in molasses medium: optimisation of environmental conditions using RSM**  
EVIRGEN O. A., Acikel Y. S.  
CHEMISTRY AND ECOLOGY, vol.30, no.1, pp.39-51, 2014 (SCI-Expanded)
- XIV. **Effects of stirring and aeration rates on lipase production and growth of R. delemar**  
ERŞAN M., AÇIKEL Ü., SAĞ AÇIKEL Y.  
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XV. **Equilibrium hysteresis and kinetics of cadmium desorption from sodium feldspar using rhamnolipid biosurfactant**  
AŞCI Y., AÇIKEL U., SAĞ AÇIKEL Y.  
Environmental Technology, vol.33, pp.1857-1868, 2012 (SCI-Expanded)
- XVI. **The effects of the composition of growth medium and fermentation conditions on the production of lipase by R delemar**  
AÇIKEL U., ERSAN M., SAĞ AÇIKEL Y.  
Turkish Journal Of Biology, vol.35, pp.35-44, 2011 (SCI-Expanded)
- XVII. **Investigation of sorption desorption equilibria of heavy metal ions on from quartz using rhamnolipid biosurfactant**  
AŞCI Y., NURBAŞ M., SAĞ AÇIKEL Y.  
Journal Of Environmental Management, vol.91, pp.724-731, 2010 (SCI-Expanded)
- XVIII. **Optimization of critical medium components using response surface methodology for lipase**

**production by Rhizopus delemar**

AÇIKEL U., ERSAN M., SAĞ AÇIKEL Y.

Food And Bioproducts Processing, vol.88, pp.31-39, 2010 (SCI-Expanded)

- XIX. **Removal of zinc ions from a soil component Na-feldspar by a rhamnolipid biosurfactant**  
Asci Y., Nurbas M., Acikel Y. S.  
DESALINATION, vol.223, pp.361-365, 2008 (SCI-Expanded)
- XX. **A comparative study for the sorption of Cd II by K feldspar and sepiolite as soil components and the recovery of Cd II using rhamnolipid biosurfactant**  
AŞCI Y., NURBAŞ M., SAĞ AÇIKEL Y.  
Journal Of Environmental Management, vol.88, pp.383-392, 2008 (SCI-Expanded)
- XXI. **A comparative study for the sorption of Cd II by soils with different clay contents and minerology and the recovery of Cd II using rhamnolipid biosurfactant**  
AŞCI Y., NURBAŞ M., SAĞ AÇIKEL Y.  
Journal Of Hazardous Materials, vol.154, pp.663-673, 2008 (SCI-Expanded)
- XXII. **Sorption of Cd II onto kaolin as a soil component and desorption of Cd II from kaolin using rhamnolipid biosurfactant**  
AŞCI Y., NURBAŞ M., SAĞ AÇIKEL Y.  
Journal Of Hazardous Materials, vol.139, pp.50-56, 2007 (SCI-Expanded)
- XXIII. **Application of multicomponent adsorption models to the biosorption of Cr VI Cu II and Cd II ions on Rhizopus arrhizus from ternary metal mixtures**  
SAĞ AÇIKEL Y., AKÇAEL B., KUTSAL T.  
Chemical Engineering Communications, vol.190, pp.797-812, 2003 (SCI-Expanded)
- XXIV. **Biosorption of Pb II and Cu II by activated sludge in batch and continuous flow stirred reactors**  
SAĞ AÇIKEL Y., TATAR B., KUTSAL T.  
Bioresource Technology, vol.87, pp.27-33, 2003 (SCI-Expanded)
- XXV. **Kinetic studies on sorption of Cr(VI) and Cu(II) ions by chitin, chitosan and Rhizopus arrhizus**  
Sağ Y., AKTAY Y.  
Biochemical Engineering Journal, vol.12, no.2, pp.143-153, 2002 (SCI-Expanded)
- XXVI. **A comparative study for the sorption of Cu II ions by Chitin and Chitosan application of equilibrium and mass transfer models**  
SAĞ AÇIKEL Y., AKTAY Y.  
Separation Science And Technology, vol.37, pp.2801-2822, 2002 (SCI-Expanded)
- XXVII. **Ternary biosorption equilibria of chromium VI copper II and cadmium II on Rhizopus arrhizus**  
SAĞ AÇIKEL Y., AKÇAEL B., KUTSAL T.  
Separation Science And Technology, vol.32, pp.279-309, 2002 (SCI-Expanded)
- XXVIII. **Evaluation interpretation and representation of three metal biosorption equilibria using a fungal biosorbent**  
SAĞ AÇIKEL Y., AKÇAEL B.  
Process Biochemistry, vol.37, pp.35-50, 2001 (SCI-Expanded)
- XXIX. **Recent trends in the biosorption of heavy metals A review**  
SAĞ AÇIKEL Y., KUTSAL T.  
Biotechnology And Bioprocess Engineering, vol.6, pp.376-385, 2001 (SCI-Expanded)
- XXX. **Use of a mathematical model for prediction of the performance of the simultaneous biosorption of Cr VI and Fe III on R arrhizus in a semibatch reactor**  
SAĞ AÇIKEL Y., YALÇUK A., KUTSAL T.  
Hydrometallurgy, vol.59, pp.77-87, 2001 (SCI-Expanded)
- XXXI. **Biosorption of heavy metals by fungal biomass and modeling of fungal biosorption a review**  
SAĞ AÇIKEL Y.  
Separation And Purification Reviews, vol.30, pp.1-48, 2001 (SCI-Expanded)
- XXXII. **Application of equilibrium and mass transfer models to dynamic removal of Cr VI ions by Chitin in packed column reactor**

- SAĞ AÇIKEL Y., AKTAY Y.  
Process Biochemistry, vol.36, pp.1187-1197, 2001 (SCI-Expanded)
- XXXIII. **Mass transfer and equilibrium studies for the sorption of chromium ions onto chitin**  
SAĞ AÇIKEL Y., AKTAY Y.  
Process Biochemistry, vol.36, pp.157-173, 2000 (SCI-Expanded)
- XXXIV. **Mono and multi component biosorption of heavy metal ions on Rhizopus arrhizus in a CFST**  
SAĞ AÇIKEL Y., YALÇUK A., KUTSAL T.  
Process Biochemistry, vol.35, pp.787-799, 2000 (SCI-Expanded)
- XXXV. **Determination of the biosorption activation energies of heavy metal ions on Zoogloea ramigera and Rhizopus arrhizus**  
SAĞ AÇIKEL Y., KUTSAL T.  
Process Biochemistry, vol.35, pp.801-807, 2000 (SCI-Expanded)
- XXXVI. **Lead copper and zinc biosorption from bicomponent systems modelled by empirical Freundlich isotherm**  
SAĞ AÇIKEL Y., KAYA A., KUTSAL T.  
Applied Microbiology And Biotechnology, vol.53, pp.338-341, 2000 (SCI-Expanded)
- XXXVII. **Equilibrium parameters for the single and multicomponent biosorption of Cr VI and Fe III ions on R arrhizus in a packed column**  
SAĞ AÇIKEL Y., ATAÇOĞLU I.  
Hydrometallurgy, vol.55, pp.165-179, 2000 (SCI-Expanded)
- XXXVIII. **Determination of the biosorption heats of heavy metal ions on Zoogloea ramigera and Rhizopus arrhizus**  
SAĞ AÇIKEL Y., KUTSAL T.  
Biochemical Engineering Journal, vol.6, pp.145-151, 2000 (SCI-Expanded)
- XXXIX. **Biosorption of lead II nickel II and copper II on Rhizopus arrhizus from Binary and Ternary Metal Mixtures**  
SAĞ AÇIKEL Y., KAYA A., KUTSAL T.  
Separation Science And Technology, vol.35, pp.2601-2617, 2000 (SCI-Expanded)
- XL. **Simultaneous biosorption of Cr VI and Cu II on R arrhizus in packed column reactor Application of the competitive Freundlich model**  
SAĞ AÇIKEL Y., ATAÇOĞLU I., KUTSAL T.  
Separation Science And Technology, vol.24, pp.3155-3171, 1999 (SCI-Expanded)
- XLI. **The simultaneous biosorption of Cr VI Fe III and Cu II on Rhizopus arrhizus**  
SAĞ AÇIKEL Y., KUTSAL T.  
Process Biochemistry, vol.33, pp.571-579, 1998 (SCI-Expanded)
- XLII. **The simultaneous biosorption of Cu II and Zn on Rhizopus arrhizus application of the adsorption models**  
SAĞ AÇIKEL Y., KAYA A., KUTSAL T.  
Hydrometallurgy, vol.50, pp.297-314, 1998 (SCI-Expanded)
- XLIII. **A comparative study for the simultaneous biosorption of Cr VI and Fe III on C vulgaris and R arrhizus application of the competitive adsorption models**  
SAĞ AÇIKEL Y., AÇIKEL Ü., AKSU Z., KUTSAL T.  
Process Biochemistry, vol.33, pp.273-281, 1998 (SCI-Expanded)
- XLIV. **The simultaneous biosorption process of lead II and nickel II on Rhizopus arrhizus**  
SAĞ AÇIKEL Y., KUTSAL T.  
Process Biochemistry, vol.32, pp.591-597, 1997 (SCI-Expanded)
- XLV. **The adsorption of copper II by Z ramigera immobilized on Ca alginate in packed bed columns a dynamic approach by stimulus response technique and evaluation of adsorption data by moment analysis**  
MUTLU M., SAĞ AÇIKEL Y., KUTSAL T.  
Chemical Engineering Journal, vol.65, pp.81-86, 1997 (SCI-Expanded)

- XLVI. **The selective biosorption of chromium VI and copper II ions from binary metal mixtures by R arrhizus**  
SAĞ AÇIKEL Y., KUTSAL T.  
Process Biochemistry, vol.31, pp.561, 1996 (SCI-Expanded)
- XLVII. **Fully competitive biosorption of chromium VI and iron III ions from binary metal mixtures by R arrhizus Use of the competitive Langmuir model**  
SAĞ AÇIKEL Y., KUTSAL T.  
Process Biochemistry, vol.31, pp.573-585, 1996 (SCI-Expanded)
- XLVIII. **Biosorption of heavy metals by Zoogloea ramigera: Use of adsorption isotherms and a comparison of biosorption characteristics**  
Sag Y., Kutsal T.  
CHEMICAL ENGINEERING JOURNAL AND THE BIOCHEMICAL ENGINEERING JOURNAL, vol.60, pp.181-188, 1995 (SCI-Expanded)
- XLIX. **Comparison of Ca alginate and immobilized Z ramigera as sorbents for copper II removal**  
SAĞ AÇIKEL Y., NOURBAKSH M., AKSU Z.  
Process Biochemistry, vol.30, pp.175-181, 1995 (SCI-Expanded)
- L. **Copper II and nickel II adsorption by R arrhizus in batch stirred reactors in series**  
SAĞ AÇIKEL Y., KUTSAL T.  
Chemical Engineering Journal, vol.58, pp.265-273, 1995 (SCI-Expanded)
- LI. **A comparative study of the biosorption of lead II ions to Z ramigera and R arrhizus**  
SAĞ AÇIKEL Y., ÖZER D., KUTSAL T.  
Process Biochemistry, vol.30, pp.169-174, 1995 (SCI-Expanded)
- LII. **A comparative study of various biosorbents for removal of chromium(VI) ions from industrial waste waters**  
NOURBAKSH M., Sağ Y., ÖZER D., AKSU Z., Kutsal T., ÇAĞLAR A.  
Process Biochemistry, vol.29, no.1, pp.1-5, 1994 (SCI-Expanded)
- LIII. **The biosorption of copper II by C vulgaris and Z ramigera**  
AKSU Z., SAĞ AÇIKEL Y., KUTSAL T.  
Environmental Technology, vol.13, pp.579-586, 1992 (SCI-Expanded)
- LIV. **A comparative study of the adsorption of chromium VI ions to C vulgaris and Z ramigera**  
AKSU Z., SAĞ AÇIKEL Y., KUTSAL T.  
Environmental Technology, vol.11, pp.33-40, 1990 (SCI-Expanded)
- LV. **THE USE OF ZOOGLOEA-RAMIGERA IN WASTE-WATER TREATMENT CONTAINING CR(VI) AND CD(II) IONS**  
SAG Y., KUTSAL T.  
BIOTECHNOLOGY LETTERS, vol.11, no.2, pp.145-148, 1989 (SCI-Expanded)
- LVI. **Application of adsorption isotherms to chromium adsorption on Z ramigera**  
SAĞ AÇIKEL Y., KUTSAL T.  
Biotechnology Letters, vol.11, pp.141-144, 1989 (SCI-Expanded)

### Articles Published in Other Journals

- I. **ZnO-Kitosan Kompoziti ile Ağır Metal Giderimi**  
TOPAL CANBAZ G., AÇIKEL Ü., SAĞ AÇIKEL Y.  
Avrupa Bilim ve Teknoloji Dergisi, 2022 (Peer-Reviewed Journal)
- II. **Investigation of tetracycline removal from aqueous solutions using halloysite/chitosan nanocomposites and halloysite nanotubes/alginate hydrogel beads**  
Erdem S., Öztekin M., SAĞ AÇIKEL Y.  
Environmental Nanotechnology, Monitoring and Management, vol.16, 2021 (Scopus)
- III. **Chromium (VI) Removal By A Novel Magnetic Halloysite-Chitosan Nanocomposite From Aqueous**

## **Solutions**

TÜRKEŞ E., SAĞ AÇIKEL Y.

International Journal of Food and Biosystems Engineering, 2017 (Peer-Reviewed Journal)

- IV. **Synthesis of Magnetic Halloysite Nanotube-Alginate Hybrid Beads: Use in the Removal of Methylene Blue from Aqueous Media**  
POLAT G., SAĞ AÇIKEL Y.  
International Journal of Food and Biosystems Engineering, 2017 (Peer-Reviewed Journal)
- V. **Investigation of Acid Orange 74 Dye Adsorption with Anaerob Activated Sludge**  
TOPAL G., AÇIKEL Ü., SAĞ AÇIKEL Y.  
International Journal of Food and Biosystems Engineering, vol.4, pp.91-96, 2017 (Peer-Reviewed Journal)
- VI. **Comparative heavy metal adsorption by Ca-alginate and immobilized microorganism systems in packed bed columns Dolgulu kolon reaktörde Ca-aljinat ve tutuklanmış mikroorganizma sistemleriyle karsılaştırmalı ağır metal adsorbsiyonu**  
Sag Y., Nourbakhsh M., Aksu Z., Kutsal T.  
Turkish Journal of Engineering & Environmental Sciences, vol.19, no.2, pp.145-157, 1995 (Scopus)

## **Books & Book Chapters**

- I. **Investigation of Adsorption Kinetics and Equilibrium for Removal of Anionic Dye Direct Blue 71 from Aqueous Media Using Magnetic Halloysite Nanotubes – Alginate Beads**  
Polat G., Türkeş E., Sağ Açikel Y.  
in: INSAC Natural and Technology Sciences, Doç. Dr. Mustafa Tolga Çöğürçü, Dr. Mehmet Uzun, Editor, Duvar Yayınevi, İzmir, pp.1-416, 2022
- II. **Investigation of Metranidazole Adsorption Equilibrium and Kinetics on Chitosan Nanoparticles**  
Öztekin M., Sağ Açikel Y.  
in: Current Academic Studies in Engineering Sciences, Prof. Dr. Serdar Salman, Prof. Dr. Rıdvan Karapınar, Doç. Dr. Duygu Kavak, Dr. Ali Kılıçer, Editor, IVPE, Podgorica, pp.913-930, 2018
- III. **Chapter 8**  
SAĞ AÇIKEL Y.  
in: Biomanagement of Metal Contaminated Soils, MOHAMMAD SAGHIR KHAN, ALMAS ZAIDI, REETA GOEL, JAVED MUSARRAT, Editor, Springer, 2011

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Controlled Delivery of Ciprofloxacin from Halloysite Nanotubes**  
CAN AŞKAR Ö., SAĞ AÇIKEL Y.  
The 5th International Symposium on Pharmaceutical and Biomedical Sciences, 26 - 28 April 2019
- II. **Synthesis of Copper Nanoparticles from Waste Onion Peels**  
Sağ Açikel Y.  
The 5th International Symposium on Pharmaceutical and Biomedical Sciences, Nevşehir, Turkey, 26 - 28 April 2018, pp.107-112
- III. **Green Synthesis of Silver Nanoparticles Using pomegranate Waste**  
Sağ Açikel Y.  
The 5th International Symposium on Pharmaceutical and Biomedical Sciences, Nevşehir, Turkey, 26 - 28 April 2018, pp.113-118
- IV. **Sustained and Controlled Antibiotic Release from Chitosan and Magnetic Chitosan Nanoparticles**  
Sağ Açikel Y.  
The 5th International Symposium on Pharmaceutical and Biomedical Sciences, Nevşehir, Turkey, 26 - 28 April 2018, pp.124-128

- V. **Delivery of Ciprofloxacin from Halloysite Nanotubes**  
Sağ Açıkel Y.  
The 5th International Symposium on Pharmaceutical and Biomedical Sciences, Nevşehir, Turkey, 26 - 28 April 2018, pp.119-123
- VI. **Investigation of Acid Orange 74 Dye Adsorption with Anaerob Activated Sludge**  
TOPAL G., AÇIKEL Ü., SAĞ AÇIKEL Y.  
3rd FaBE 2017 - International Conference on Food and Biosystems Engineering, 1 - 04 June 2017
- VII. **Synthesis of magnetic halloysite nanotube-alginate hybrid beads: Use in the removal of methylene blue from aqueous media**  
POLAT G., SAĞ AÇIKEL Y.  
International Conference of Food and Biosystems Engineering, 1 - 04 June 2017
- VIII. **Chromium(VI) removal by a novel magnetic halloysite-chitosan nanocomposite from aqueous solutions**  
TÜRKEŞ E., SAĞ AÇIKEL Y.  
International Conference of Food and Biosystems Engineering, 1 June - 04 December 2017
- IX. **Investigation of Biosorption Kinetics and Equilibrium of Zinc by Chitin and Chitosan**  
GOZE B., SAĞ AÇIKEL Y.  
16th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production, 5 - 07 October 2016
- X. **Removal of tetracycline by magnetic chitosan nanoparticles from medical wastewaters**  
RAEIATBIN P., SAĞ AÇIKEL Y.  
Desalination for the Environment: Clean Water and Energy, 22 - 26 May 2016
- XI. **Removal of methyl red a cationic dye acid blue 113 an anionic dye from wastewaters using chitin and chitosan influence of copper ions**  
GÖZE B., SAĞ AÇIKEL Y.  
Desalination for the Environment: Clean Water and Energy, 22 - 26 May 2016
- XII. **Investigation of Biosorption Kinetics and Equilibrium of Zinc by Chitin and Chitosan**  
Acikel S. Y., Goze B.  
16th International Symposium on Environmental Issues and Waste Management in Energy and Mineral Production (SWEMP) / International Symposium on Computer Applications (CAMI), İstanbul, Turkey, 5 - 07 October 2016
- XIII. **Removal of cadmium ions from a soil component quartz by a rhamnolipid biosurfactant**  
AŞCI Y., NURBAŞ M., SAĞ AÇIKEL Y.  
23rd International Mineral Processing Congress, IMPC 2006, İstanbul, Turkey, 3 - 08 September 2006, pp.2356-2362
- XIV. **Removal of cadmium ions from Na-Feldspar, a soil component, by rhamnolipid biosurfactant**  
AŞCI Y., NURBAŞ M., SAĞ AÇIKEL Y.  
23rd International Mineral Processing Congress, IMPC 2006, İstanbul, Turkey, 3 - 08 September 2006, pp.2341-2344
- XV. **Multi-component biosorption of lead, copper and zinc ions on R-arrhizus**  
Sag Y., Kaya A., Kutsal T.  
13th International Symposium on Biohydrometallurgy (IBS 99), Madrid, Spain, 20 - 23 June 1999, vol.9, pp.399-408
- XVI. **An overview of the studies about heavy metal adsorption process by microorganisms on the lab. scale in Turkey**  
Sag Y., Kutsal T.  
13th International Symposium on Biohydrometallurgy (IBS 99), Madrid, Spain, 20 - 23 June 1999, vol.9, pp.307-316
- XVII. **THE USAGE OF VARIOUS MICROORGANISMS IN WASTE-WATER TREATMENT CONTAINING COPPER(II) IONS**  
AKSU Z., SAG Y., KUTSAL T.  
NATO ADVANCED STUDY INST ON RECENT ADVANCES IN INDUSTRIAL APPLICATIONS OF BIOTECHNOLOGY,



KUSADASI, Turkey, 16 - 27 September 1991, vol.210, pp.545-546

**XVIII. THE COMPARISON OF VARIOUS BIOSORBENTS IN WASTE-WATER TREATMENT CONTAINING LEAD(II) IONS USING ADSORPTION METHOD**

SAG Y., NOURBAKHS M., OZER D., AKSU Z., KUTSAL T., CAGLAR A.

Turkish 8th National Symp on Chemistry and Chemical Engineering ( CHEMISTRY 92 ), İstanbul, Turkey, 7 - 11 September 1992, vol.518, pp.271-276

**XIX. COPPER(II) ADSORPTION WITH FREE CA-ALGINATE IN PACKED-BED BIOREACTORS**

SAG Y., YILMAZ E., NOURBAKHS M., AKSU Z., KUTSAL T.

Turkish 8th National Symp on Chemistry and Chemical Engineering ( CHEMISTRY 92 ), İstanbul, Turkey, 7 - 11 September 1992, vol.518, pp.301-305

**XX. THE ADSORPTION OF LEAD(II) IONS TO Z-RAMIGERA AND CHROMIUM(VI) IONS TO R-ARRHIZUS IN BATCH STIRRED REACTORS AND FLUIDIZED-BED**

SAG Y., OZER D., KUTSAL T.

Turkish 8th National Symp on Chemistry and Chemical Engineering ( CHEMISTRY 92 ), İstanbul, Turkey, 7 - 11 September 1992, vol.518, pp.289-294

## Supported Projects

SAĞ AÇIKEL Y., Türkes E., Project Supported by Higher Education Institutions, Meme kanseri için hedeflenebilir ilaç salım sistemi olarak ikili ilaç yüklü albümin bazlı nanopartiküllerin geliştirilmesi, 2020 - Continues

SAĞ AÇIKEL Y., Project Supported by Higher Education Institutions, Tekli ve ikili karışımlarından ağır metal iyonlarının R.delemar'a biyobirikiminin incelenmesi, 2010 - Continues

SAĞ AÇIKEL Y., Project Supported by Higher Education Institutions, Kitin ve Kitosan Üzerine Kristal Viyole ve Bakırın Simultane Adsorpsiyonu Üzerine Antagonistik ve Sinerjistik Etkileşimlerin Araştırılması, 2017 - 2018

SAĞ AÇIKEL Y., Project Supported by Higher Education Institutions, Kitin ve kitosan üzerine metil kırmızısı boyar maddesi adsorpsiyonunun incelenmesi, 2017 - 2018

SAĞ AÇIKEL Y., Türkes E., Project Supported by Higher Education Institutions, Yeni Bir Manyetik Halloysit-Kitosan Nanokompozit ile Sulu Çözeltilerden Cr(VI) Uzaklaştırılması, 2017 - 2017

SAĞ AÇIKEL Y., Project Supported by Higher Education Institutions, Eş zamanlı bakır biyobirikimi, melaslı ortamda Rhizopus delemarın üremesi ve lipaz üretimi RSM kullanılarak çevresel koşulların optimizasyonu, 2016 - 2017

SAĞ AÇIKEL Y., Project Supported by Higher Education Institutions, Kitin ve kitosan üzerine çinko biyosorpsiyonu kinetiği ve dengesinin araştırılması, 2016 - 2017

SAĞ AÇIKEL Y., Aşkar Ö. C., Raeiatbin P., Project Supported by Higher Education Institutions, Halloysit-Aljinat Nanojellerin ve Halloysit-Kitosan Nanopartiküllerin Karakterizasyonu, Fizikokimyasal ve Termal Özelliklerinin Belirlenmesi, 2015 - 2017

SAĞ AÇIKEL Y., Project Supported by Higher Education Institutions, Kitosan ve Halloysit bazlı nanopartiküller kullanılarak adsorpsiyon yoluyla sulu ortamlardan antibiyotik giderimi, 2014 - 2017

SAĞ AÇIKEL Y., Raeiatbin P., Project Supported by Higher Education Institutions, Tetrasiklin Yüklü Manyetik Halloysit Nanopartiküllerin Nano İlaç Taşıyıcılar Olarak Kullanılması, 2016 - 2016

SAĞ AÇIKEL Y., Project Supported by Higher Education Institutions, Atıksulardan metil kırmızısı, katyonik boya, asid mavisi 113, anyonik boyanın kitin ve kitosan kullanılarak uzaklaştırılması: Bakır iyonlarının etkisi, 2016 - 2016

Sağ Açikel Y., Project Supported by Higher Education Institutions, Kesikli karıştırmalı reaktörlerde Rhizopus delemar' la lipaz üretiminin işletim parametrelerinin optimizasyonu, 2007 - 2010

Sağ Açikel Y., TUBITAK Project, Rhizopus delemar ile lipaz üretimi, 2004 - 2006

## Activities in Scientific Journals

CUMHURİYET SCIENCE JOURNAL, Publication Committee Member, 2016 - Continues

## **Metrics**

Publication: 85

Citation (WoS): 2445

Citation (Scopus): 2746

H-Index (WoS): 26

H-Index (Scopus): 28

## **Congress and Symposium Activities**

The 5th International Symposium on Pharmaceutical and Biomedical Sciences, Working Group, Nevşehir, Turkey, 2018

## **Awards**

Sağ Açıkel Y., Hacettepe Üniversitesi Fen ve Mühendislik Alanında Bilim Ödülü, Hacettepe Üniversitesi, July 2014

Sağ Açıkel Y., Hacettepe Üniversitesi Fen ve Mühendislik Alanında Teşvik Ödülü, Hacettepe Üniversitesi, May 1996

Sağ Açıkel Y., İhsan Doğramacı Üstün Başarı Ödülü, Hacettepe Üniversitesi, October 1985

## **Non Academic Experience**

HACETTEPE ÜNİVERSİTESİ

HACETTEPE ÜNİVERSİTESİ

HACETTEPE ÜNİVERSİTESİ