



İSTANBUL AYDIN ÜNİVERSİTESİ ECZACILIK FAKÜLTESİ

E-BÜLTEN

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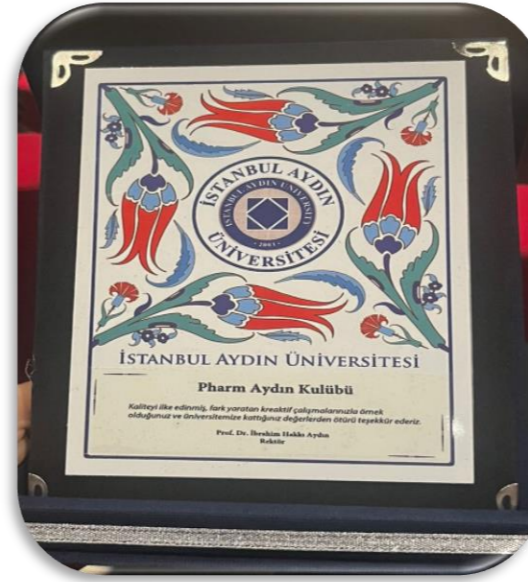
Haziran

PharmAydın ve Aydın ADEC Kulüplerine Kulüpler Birliği'nden Anlamlı Ödül

Fakültemiz bünyesinde faaliyet gösteren PharmAydın ve Aydın ADEC kulüpleri, yıl boyunca düzenledikleri başarılı ve nitelikli etkinliklerle **İstanbul Aydın Üniversitesi Kulüpler Birliği** tarafından ödüle layık görülmüştür.

Gerçekleştirilen değerlendirme sonucunda **PharmAydın Kulübümüz "Plaket"**, **Aydın ADEC Kulübümüz ise "Takdir ve Başarı Belgesi"** ile onurlandırılmıştır.

Öğrenci topluluklarımızın bilimsel, sosyal ve mesleki gelişime katkı sunan çalışmalarıyla elde ettikleri bu anlamlı başarıdan dolayı tüm kulüp yönetimlerini ve üyelerini tebrik eder, başarılarının devamını dileriz.





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Haziran

Biyokimya Anabilim Dalı Öğretim Üyemiz Prof. Dr. Fikriye URAS tarafından *AKEV Bilgelik Programı* çerçevesinde Şubat ayından itibaren her hafta düzenli olarak verilen “*Tıbbi Biyokimya*” dersi başarıyla tamamlanmıştır.

Katılımcılara tıbbi biyokimya alanında temel ve güncel bilgilerin aktarıldığı ilgili eğitim serisi, bilimsel içeriği ve uygulamaya yönelik bir yaklaşımla ele alınmıştır. Katılımcılar tarafından ilgiyle takip edilen eğitim sürecinde hem teorik bilgilerin hem de uygulama örneklerinin dengeli bir şekilde aktarılmasıyla verimli ve zengin içerikli bir deneyim sunulmuştur.





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Haziran

Farmakoloji Anabilim Dalı Öğretim Üyemiz Prof. Dr. Yusuf ÖZTÜRK'ün Q3 indeksli Canadian Journal of Physiology and Pharmacology dergisinde "*Exploring the supraspinal antihyperalgesic effects of levetiracetam in the rat model of chronic constriction injury*" isimli çalışması yayınlanmıştır.

 Canadian Journal of
Physiology and
Pharmacology

Research Article

Exploring the supraspinal antihyperalgesic effects of levetiracetam in the rat model of chronic constriction injury

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Abstract

Neuropathic pain severely impacts quality of life and effective treatments are needed. To address this, the present study investigated the antihyperalgesic mechanisms of levetiracetam administered at the supraspinal level, together with its effects on ion channel activities. The ventral posterolateral nucleus of the thalamus was selected as the location for micro-injection. Thermal hyperalgesia and mechanical allodynia were assessed via in vivo experiments using the Hargreave's and e-Von Frey apparatus, respectively. Levetiracetam displayed statistically meaningful time and dose-dependent effects in the chronic constriction injury model, with statistical probability values less than 0.05. It was discovered that the antihyperalgesic effects were more pronounced in mechanical allodynia. Electrophysiological studies conducted through whole-cell patch clamp recordings indicated that levetiracetam tended to activate or increase the permeability of one or more channels for ion flow that are active only at hyperpolarized membrane potentials (-130 to -90 mV), suggesting the potential participation of hyperpolarization-activated cyclic nucleotide-gated, inwardly-rectifying K^+ , or G protein-gated inwardly-rectifying K^+ channels. The findings could guide future drug development studies towards levetiracetam and its derivatives as effective treatments for neuropathic pain.

Key words: levetiracetam, chronic constriction injury, antihyperalgesic, electrophysiology, thalamus



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Haziran

Farmakoloji Anabilim Dalı Öğretim Üyemiz Prof. Dr. Yusuf ÖZTÜRK'ün ESCI indeksli İstanbul Journal of Pharmacy dergisinde "*Core competency frameworks for the education of pharmacists in Türkiye: EczÇEP-2015 and EczÇEP-2019*" isimli çalışması yayınlanmıştır.

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İstanbul Journal of Pharmacy

Review Article Open Access

Core competency frameworks for the education of pharmacists in Türkiye: EczÇEP-2015 and EczÇEP-2019


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Abstract

Education in pharmaceutical sciences is a major concern in every nation. It has many stakeholders in different categories, who are in expectation of a satisfactory level in terms of skills, competencies, knowledge, etc. As the dynamics of pharmaceutical sciences have been changing due to the tremendous amount of pharmaceutical research, the requirement for a renewal of pharmacy education has emerged in Türkiye. In the year of 2015, this requirement was imposed by The Council of Higher Education of Türkiye (CoHE/YÖK) through the Medicine Health Sciences Education Council of Türkiye (MHSEC/TSBEK), as well as the Turkish Pharmacists' Association (Türk Eczacılar Birliği, TPA/TEB) plus the influences of global organisations like FIP (The International Pharmaceutical Federation), WHO (World Health Organisation). Subsequently, the Deans Council of Pharmacy Faculties of Türkiye (DCPF), consisting of 32 members, decided immediately to prepare a competency framework for pharmacists in Türkiye and established a sub-committee for this purpose. The sub-committee, which consisted of 25 members as Deans and Vice-Deans, has prepared a draft for the competency framework for the pharmacy education and to approve to DCPF, and then MHSEC/TSBEK. After final approval from CoHE/YÖK, the first core competency framework for pharmacists was implemented by the Pharmacy Faculties in Türkiye. After this framework, an updated version was completed in 2019 with a similar process. The second frame work (EczÇEP-2019) is more useful than the first one in terms of its applicability and practise.

Keywords Pharmacy education · Core competency · Curriculum development · Qualifications in pharmacy





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Haziran

Farmakoloji Anabilim Dalı Öğretim Üyemiz Prof. Dr. Yusuf ÖZTÜRK'ün ESCI indeksli İstanbul Journal of Pharmacy dergisinde "*Integrated (modular) education model in pharmacy: The Anadolu University case*" isimli çalışması yayınlanmıştır.



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Review Article

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Integrated (modular) education model in pharmacy: The Anadolu University case



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Abstract

Perhaps being the most multidisciplinary among all professional sciences is pharmacy. It is a perfect amalgam of quite different scientific disciplines. Every scientific branch of pharmacy is an applied science, and almost every year, very innovative developments and changes occur in these scientific branches. Therefore, pharmacy education is among the issues preserving importance all over the world. Both pharmacy students and diverse stakeholders in different working areas of pharmacy must be satisfied with the knowledge on continuous innovations. Therefore, pharmacy education must be handled with sensitivity and all the knowledge and skills acquired during the education must be "integrated delicately". Due to this highly dynamic characteristic of pharmacy education, there is a need for the continuous renewal of curricula and the creation of better models in pharmacy education. The creation of core competency programs (EczÇEP-2015 and EczÇEP-2019) is a manifestation of this need. Nowadays, pharmacy education is competency based in Türkiye as well. The only education model that can fully meet all these requirements is integrated education. It is impossible to meet these requirements with departments acting like independent republics. Providing "horizontal" and "vertical" integration of knowledge, integrated education ensures the most important scientific properties of today's science: "Multidisciplinary", "Interdisciplinary" and "Transdisciplinary" thinking and working. Integrated education models in other health professions (Medicine and Dentistry) can provide this for years. Therefore, the Anadolu University Faculty of Pharmacy switched to the spiral integrated education model (modular system) in 2017. Students have now started to graduate and enter professional life.

Keywords

Pharmacy education • Curricular integration • Curriculum development • Integrated education • Modular education



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Farmakoloji Anabilim Dalı Öğretim Üyemiz Prof. Dr. Yusuf ÖZTÜRK, ESCI indeksli İstanbul Journal of Pharmacy dergisinin *Tematik Eğitim Özel Sayısı*'nda misafir editör olarak görev yapmıştır.

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Haziran

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REVIEW



Flexible carbon cloth electrode: pioneering the future of electrochemical sensing devices

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Abstract

Flexible electrochemical sensors are pioneering sensing technology by providing innovative, flexible, and user-friendly solutions to many kinds of everyday issues. These flexible sensors are essential for the next-generation uses in industry, health, and the environment because of their ability for integrating flexibility, mechanical strength, high conductivity, functionality, high sensitivity, adjustable shape, desired size, and cost-effectiveness. The importance of using flexible carbon cloth electrodes (CCE) as sensing interfaces for various analytes was thoroughly discussed in this review paper. This was followed by an overview of the electrochemical sensing concept and related technical terms. Furthermore, the composition and properties of CCE relevant to electrochemical sensing were thoroughly evaluated, as well as compared to other conventional carbonaceous working electrodes. Furthermore, by considering several types of analytes such as neurotransmitters, pharmaceuticals, food safety, and heavy metal detection, it was showed that modifications and different approaches were required to create an effective CCE-based sensing interface. Overall, in this review study, we critically examine and attempt to narrow the gap between the principles of electrochemical sensors and the importance of flexible CCE in next generation cutting-edge applications.

Keywords Flexible carbon cloth · Sensing · Biomolecules · Carbonaceous electrodes · Electrochemical sensor devices · Limit of detection

Analitik Kimya Anabilim Dalı Öğretim Üyemiz Dr. Öğr. Üyesi Cem ERKMEN'in Q1 indeksli Advanced Composites and Hybrid Materials tarafından yayınlanan "*Flexible carbon cloth electrode: pioneering the future of electrochemical sensing devices*" isimli çalışması yayınlanmıştır.



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Haziran

Anolitik Kimya Anabilim Dalı Öğretim Üyemiz Dr. Öğr. Üyesi Cem ERKMEN'in Palme Yayınevi tarafından yayınlanan "*Yaşam Bilimleri Temel ve İleri Uygulamalar*" isimli kitapta "*Yalın ve Bimetalik Nanopartiküller Kullanılarak Modifiye Edilmiş Perde Baskılı Elektrotlarda Askorbik Asitin Voltametrik Tayini*" isimli kitap bölümü yayınlanmıştır.

YALIN VE BİMETALİK NANOPARTİKÜLLER KULLANILARAK MODİFİYE EDİLMİŞ PERDE BASKILI ELEKTROTLARDA ASKORBİK ASİTİN VOLTAMETRİK TAYİNİ

Dr. Öğr. Üyesi Cem Erkmen
Istanbul Aydın Üniversitesi

Prof. Dr. Filiz Kuralay
Hacettepe Üniversitesi

GİRİŞ

Elektrokimya, çözelti/elektrot yüzeyinde meydana gelen elektron transferlerini inceleyen bir bilim dalıdır. Elektron transferi, yüzeydeki yükseltgenme veya indirgenme tepkimeleriyle gerçekleşir ve yükseltgenme veya indirgenme tepkimeleri, bir elektrokimyasal hücre içinde meydana gelmektedir. Temel olarak, elektrokimyasal hücre, kimyasal enerjiyi elektrik enerjisine dönüştüren bir yapıdır. Bu hücreler, elektrik üreten voltaik (galvanik) hücreler ve elektrik enerjisini kullanarak kimyasal tepkimeleri yönlendiren elektrolitik hücreler olmak üzere iki ana kategoriye ayrılır (Bagotsky, 2005; Brett, 2008; Pliech, 2008; Zoski, 2007).

Elektrokimyasal hücre, basit bir şekilde, çözelti içine daldırılmış elektrotlardan oluşan bir yapıdır ve iki ana bileşeni bulunmaktadır. İlk bileşen, iyonların hareketiyle yükün taşındığı elektrolit ortamıdır. Elektrolitler, bir maddenin çözelti içinde çözünmesi, bir katı maddenin eritilmesi veya iyon iletimine izin veren katı maddelerin birleşimiyle oluşabilir. Elektrokimyasal hücredeki ikinci ana bileşen ise elektronların hareketiyle yükün taşınmasına olanak sağlayan elektrotlardır. Elektrotlar, elektrokimyasal özelliklerin takip edildiği malzemelerdir ve bilinen ilk türleri genellikle metallere veya yarı iletkenlerden yapılmıştır (Carbó, 2009; Newman ve Thomas-Alyea, 2004).



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