

## Assoc. Prof. MELEK ŞİRİN ÇELİK

### Personal Information

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### Education Information

Doctorate, Clarkson University, Department Of Chemistry And Biomolecular Science, United States Of America 2001 - 2006

Post Graduate, Marmara University, Faculty of Arts and Sciences, Chemistry, Turkey 1998 - 2001

Under Graduate, Marmara University, Faculty of Arts and Sciences, Chemistry, Turkey 1994 - 1998

### Dissertations

Doctorate, Electrochemical and Chemical Reactions of Some Aromatic Carboxaldehydes, Clarkson University, Department Of Chemistry And Biomolecular Science, 2006

Post Graduate, Çinkonun kaplama banyosundan elektrokristalizasyonu, Marmara Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Bölümü, 2001

### Research Areas

Analytical Chemistry, Physical Chemistry

### Academic Titles / Tasks

Associate Professor, Marmara University, Faculty of Arts and Sciences, Chemistry, 2018 - Continues

Research Assistant, Marmara University, Faculty of Arts and Sciences, Chemistry, 1998 - 2016

### Professional Experience

Erasmus Coordinator, Marmara University, Faculty of Arts and Sciences, Chemistry, 2015 - Continues

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Electrochemical Approach on Mechanism of an Oral Progestin in Aqueous Media and its Fully Validated Detection via a Carbon-Metal Based Composite Sensor**  
Bakirhan N. K. , Celik M. S. B. , Celik H., USLU B., ÖZKAN S. A.  
ELECTROANALYSIS, vol.30, pp.2273-2283, 2018 (Journal Indexed in SCI)
- II. **Polarographic Investigation of Dienogest**  
Baymak M. Ş. , Celik H., Bakirhan N. K. , USLU B., ÖZKAN S. A.  
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.165, 2018 (Journal Indexed in SCI)
- III. **The Application of Differential Pulse Polarography to the Analysis of Capecitabine and Investigation of Its Electroreduction Mechanism**

Baymak M. Ş. , Celik H., ÖZKAN S. A.

JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.162, 2015 (Journal Indexed in SCI)

- IV. **A rapid validated HPLC method for determination of sulforaphane and glucoraphanin in broccoli and red cabbage prepared by various cooking techniques**  
Celik H., Ariburnu E., Baymak M. Ş. , YEŞİLADA E.  
ANALYTICAL METHODS, vol.6, pp.4559-4566, 2014 (Journal Indexed in SCI)
- V. **Determination of pK(a) Values of Some Benzoxazoline Derivatives and the Structure-Activity Relationship**  
Celik H., Buyukaga M., ÇELEBİER M., TÜRKÖZ ACAR E., Baymak M. Ş. , GÖKHAN KELEKÇİ N., PALASKA E., Erdogan H.  
JOURNAL OF CHEMICAL AND ENGINEERING DATA, vol.58, pp.1589-1596, 2013 (Journal Indexed in SCI)
- VI. **Equilibria of formation and dehydration of the carbinolamine intermediate in the reaction of benzaldehyde with hydrazine**  
ÇELİK M. Ş. , Zuman P.  
Tetrahedron, vol.63, pp.5450-5454, 2007 (Journal Indexed in SCI Expanded)
- VII. **Solvent solute interactions of isomeric phthalaldehydes in aqueous solutions**  
ÇELİK M. Ş. , Kulla E., Zuman P.  
Journal Of Molecular Liquids, vol.131132, pp.24-28, 2007 (Journal Indexed in SCI Expanded)
- VIII. **Electroanalytical evidence for the formation of carbinolamines in the reactions of terephthalaldehyde with hydrazine**  
ÇELİK M. Ş. , Zuman P.  
Tetrahedron Letters, vol.47, pp.7991-7993, 2006 (Journal Indexed in SCI Expanded)
- IX. **Reduction of diprotonated form of aryl hydrazones**  
ÇELİK M. Ş. , ÇELİK H., Lund H., Zuman P.  
Journal Of Electroanalytical Chemistry, vol.589, pp.7-14, 2006 (Journal Indexed in SCI Expanded)
- X. **Strong Covalent Hydration of Terephthalaldehyde**  
ÇELİK M. Ş. , Vercoe K. L. , Zuman P.  
Journal Of Physical Chemistry B, vol.109, pp.21928-21929, 2005 (Journal Indexed in SCI Expanded)
- XI. **Experimental evidence of formation of imines in the course of reduction of hydrazones**  
ÇELİK M. Ş. , ÇELİK H., Lund H., Zuman P.  
Journal Of Electroanalytical Chemistry, vol.581, pp.284-293, 2005 (Journal Indexed in SCI Expanded)
- XII. **Electroreduction and oxidation of terephthalaldehyde and the role of hydration**  
ÇELİK M. Ş. , Bover W. J. , ÇELİK H., Zuman P.  
Electrochimica Acta, vol.50, pp.1347-1359, 2005 (Journal Indexed in SCI Expanded)
- XIII. **Diprotonated hydrazones and oximes as reactive intermediates in electrochemical reductions**  
ÇELİK M. Ş. , ÇELİK H., Ludvik J., Lund H., Zuman P.  
Tetrahedron Letters, vol.45, pp.5113-5115, 2004 (Journal Indexed in SCI Expanded)
- XIV. **Difference in the electrochemical behavior of three isomeric phthalaldehydes**  
Bover W J, ÇELİK M. Ş. , Camaione L., Zuman P.  
Electrochemistry Communications, vol.5, pp.334-336, 2003 (Journal Indexed in SCI Expanded)
- XV. **Electroreduction of isophthalaldehyde An example of simultaneous reduction of two identical electroactive centers**  
Bover W. J. , David J., ÇELİK M. Ş. , Zuman P.  
Indian Journal Of Chemistry Section A-Inorganic Bio-Inorganic Physical Theoretical Chemistry, vol.42, pp.744-750, 2003 (Journal Indexed in SCI Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Organik Moleküllerin İndirgenme Mekanizmalarının Aydınlatılmasında Polarografik Yaklaşım**  
ÇELİK M. Ş. , ÇELİK H.  
30.Ulusal Kimya Kongresi, Gazi Mağusa-KKTC., Turkey, 5 - 08 November 2018

- II. **Bazı Nonsteroidal Antiinflatuar 2-(3H)-Benzoksazon Türevlerinin Asitlik Sabitlerinin (pKa) Spektrofotometrik Yöntem ile Belirlenmesi**  
ALTUNTERİM S., ÇELİK M. Ş. , ÇELİK H., mulazım y., KEŞANLI B.  
30.Ulusal Kimya Kongresi,, Gazi Mağusa-KKTC., Turkey, 5 - 08 November 2018
- III. **SYNTHESIS, ANTIMICROBIAL ACTIVITY and ELECTROCHEMICAL BEHAVIOUR of ALKYL 4-(4-(3-METHOXYCARBONYL)-2,6,6-TRIMETHYL-5-OXO-1,4,5,6,7,8-HEXAHYDROQUINOLINE-4-YL)PHENYL)-6,6-DIMETHYL-5-OXO-1,4,5,6,7,8-HEXAHYDROQUINOLINE-2-CARBOXYLATE**  
ÇELİK H., Eroğlu A., ÇELİK M. Ş. , ÇETİN G., ŞİMŞEK R., ŞAFAK O. C.  
12th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 26 - 29 June 2018
- IV. **Reduction Mechanism and Electrochemical Determination of Risperidone**  
ÇELİK M. Ş. , ÇELİK H.  
12th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 26 - 29 June 2018
- V. **Electrochemical behavior of an oral progesterin dienogest and its sensitive analysis from pharmaceutical dosage form**  
KARADAŞ BAKIRHAN N., ÇELİK H., ÇELİK M. Ş. , USLU B., ÖZKAN S. A.  
EAST WEST CHEMISTRY CONFERENCE, 12 - 14 October 2017
- VI. **Electrochemical Behavior of Dienogest in Aqueous Solutions**  
ÇELİK M. Ş. , ÇELİK H., Isık S., KARADAŞ BAKIRHAN N., USLU B., ÖZKAN S. A.  
50th Heyrovsky Discussion, 18 - 22 June 2017
- VII. **Electrochemical Behaviour of Some New Mannich Bases of 5-Methyl and 5-Nitro-2-benzoxazolinone Derivatives**  
ÇELİK H., Arıcı B., ÇELİK M. Ş. , KÖKSAL AKKOÇ M.  
50th Heyrovsky Discussion, 18 - 22 June 2017
- VIII. **Application of Polarographic Methods for the Determination of Electrochemical Behavior of Organic Pharmaceutical Drugs**  
ÇELİK H., ÇELİK M. Ş.  
Petr Zuman 60th Birthday Symposium, Potsdam, New York, United States Of America, 29 - 30 June 2016
- IX. **Polarography in the Investigation of Organic Reaction Mechanisms and Electroanalytical Applications**  
ÇELİK M. Ş. , ÇELİK H.  
Petr Zuman 60th Birthday Symposium, Potsdam, New York, United States Of America, 29 - 30 June 2016
- X. **Electrochemical Behavior of 1,4-dihydro pyridine Derivatives**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
11th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 9 - 12 June 2015
- XI. **Determination of Acid Dissociation Constant Values of some new Mannich Bases of 5 Methyl and 5 Nitr 2 Benzoxazolinone**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
11th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 9 - 12 June 2015
- XII. **Kloral in İndirgenme Mekanizması ve Sulu Ortamdaki Denge Reaksiyonunun Polarografik Yöntem ile İncelenmesi**  
ÇELİK M. Ş. , ÇELİK H.  
7. Ulusal Analitik Kimya Kongresi, Kahramanmaraş, Turkey, 1 - 05 September 2014
- XIII. **Electrochemical Behavior of Risperidone in Aqueous Buffered Solutions**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
10th International Electrochemistry Meeting, Konya, Turkey, 4 - 08 September 2013
- XIV. **Electrochemical Behavior of 2,3H Benzoxazolinone and Its Derivatives**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
10th International Electrochemistry Meeting, Konya, Turkey, 4 - 08 September 2013
- XV. **Travoprost'un Valide Edilmiş HPLC DAD Yöntemi ile Ticari Preparatlarda Tayini ve Stabilite Takibi**  
ÇELİK H., TÜRKÖZ ACAR E., ÇELİK M. Ş. , BERK B.  
Kromatografi 2013 Kongresi, Bursa, Turkey, 19 - 22 June 2013

- XVI. **İzomerik Fitalaldehitlerin İndirgenmelerinde Kovalent Bağlı Suyun Etkisi**  
ÇELİK M. Ş. , ÇELİK H.  
VI. Ulusal Analitik Kimya Kongresi, Hatay, Turkey, 3 - 07 September 2012
- XVII. **Oksim ve Hidrazonların Elektrokimyasal İndirgenmeleri Hakkında Bilmediklerimiz**  
ÇELİK M. Ş. , ÇELİK H.  
III.Fiziksel Kimya Günleri, Balıkesir, Turkey, 12 - 15 July 2012
- XVIII. **The Influence of Preparation Techniques in Some Cruciferous Vegetables for Quantitative Determination of Sulforaphane and Glucoraphanin by Using Validated HPLC DAD Method**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
10th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 26 - 29 June 2012
- XIX. **Electrochemical Behavior and Validated Determination of Capecitabine in Aqueous Media**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
10th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 26 - 29 June 2012
- XX. **Polarographic Investigation of Nucleophilic Addition to Carbonyl Compounds**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
9th International Electrochemistry Meeting, İzmir, Turkey, 25 - 29 September 2011
- XXI. **Polarographic Behavior of Some Benzoxazolinone Derivatives**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
9th International Electrochemistry Meeting, İzmir, Turkey, 25 - 29 September 2011
- XXII. **Spectrophotometric Potentiometric and Capillary Electrophoretic Acid Dissociation Constant Values of Some Benzoxazolinone Derivatives in Buffered Solutions**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
4th IMMPC – 6th ISPC Joint Meeting, Ankara, Turkey, 30 September - 02 October 2010
- XXIII. **Electrochemical Reduction and Alkaline Cleavage of Chloral**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
9th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 23 - 26 June 2009
- XXIV. **Determination of Acid Dissociation Constant values of Some Benzoxazolinone Derivatives**  
ÇELİK M. Ş. , ÇELİK H., Secki E., Saritemur B., Ayan G., Eken A. D. , KÖKSAL AKKOÇ M., ERDOĞAN H.  
9th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 23 - 26 June 2009
- XXV. **Kloral in Sulu Cozeltilelerdeki Davranışının Elektrokimyasal Yöntemlerle İncelenmesi**  
ÇELİK M. Ş. , ÇELİK H.  
XXII.National Chemistry Congress, Gazimagusa, Cyprus (Kktc), 6 - 10 October 2008
- XXVI. **Experimentální Důkaz Vzniku karbinolaminu při reakci benzaldehydu s hydrazinem rovnováhy a kinetika**  
Zuman P., ÇELİK M. Ş.  
Secka 1- Analytická a fyzikální chemie, Prague, Czech Republic, 1 - 03 September 2006
- XXVII. **Role of protonation in the reduction of hydrazones and oximes**  
Zuman P., ÇELİK M. Ş. , ÇELİK H., Ludvik J., Lund H.  
International Society of Electrochemistry 57th Annual Meeting, Edinburgh, Ireland, 27 August - 01 September 2006
- XXVIII. **Electrochemical Investigation of the Formation of Carbinolamine as Intermediate in the Reaction of Hydrazine with various Carbonyl Compounds**  
ÇELİK M. Ş. , Zuman P.  
The Electrochemical Society 209th Meeting, Colorado, United States Of America, 7 - 11 May 2006
- XXIX. **Contribution to Solution Chemistry of Orthophthalaldehyde and 2,3 Naphthalenedicarboxaldehyde**  
ÇELİK M. Ş. , Zuman P.  
The Electrochemical Society 209th Meeting, Colorado, United States Of America, 7 - 11 May 2006
- XXX. **Contribution to Reduction of Hydrazones and Oximes**  
Zuman P., ÇELİK M. Ş. , ÇELİK H., Ludvik J., Lund H.  
American Chemical Society Pacificchem 2005, Hawaii, United States Of America, 15 - 20 December 2005
- XXXI. **Solvent Solute Interactions of Isomeric Phthalaldehydes in Aqueous Solutions**  
Zuman P., ÇELİK M. Ş. , Kulla E., Vercoe K. L.

29th International Conference on Solution Chemistry (ICSC), Portoroz, Slovenia, 21 - 25 August 2005

- XXXII. **Electroreduction and Hydration of Three isomeric Phthalaldehydes**  
ÇELİK M. Ş. , Eliona K., Vercoe K. L. , Zuman P.  
American Chemical Society The 33rd Northeast Regional Meeting (NERM2005), Connecticut, United States Of America, 14 - 17 July 2005
- XXXIII. **Electroreduction Electrooxidation Hydration and ring formation of OPA**  
ÇELİK M. Ş. , Eliona K., Vercoe K. L. , Zuman P.  
The Electrochemical Society 207th Meeting, Quebec, Canada, 15 - 20 May 2005
- XXXIV. **Diprotonation of hydrazones and oximes at electrode surface and an experimental proof of formation of an imine intermediate**  
Zuman P., ÇELİK M. Ş. , ÇELİK H., Lund H.  
2004 Joint International Meeting, 206th Meeting of The Electrochemical Society, Hawaii, United States Of America, 3 - 08 October 2004
- XXXV. **Role of covalent hydration in the reduction of isomeric phthalaldehydes**  
Zuman P., ÇELİK M. Ş. , ÇELİK H.  
International Society of Electrochemistry 55th Annual Meeting, Thessaloniki, Greece, 19 - 24 September 2004
- XXXVI. **Diprotonation preceding first electron transfer in the reduction of some hydrazones and oximes**  
Zuman P., ÇELİK M. Ş. , ÇELİK H., Ludvik J., Lund H.  
International Society of Electrochemistry 55th Annual Meeting, Thessaloniki, Greece, 19 - 24 September 2004
- XXXVII. **Electrochemistry of Terephthalaldehyde**  
Zuman P., Bover W. J. , ÇELİK M. Ş. , ÇELİK H.  
The Electrochemical Society 205th Meeting, New-Jersey, United States Of America, 9 - 13 May 2004, vol.10, pp.49
- XXXVIII. **Experimental proof of formation of imines as intermediates in the reduction of hydrazones**  
ÇELİK M. Ş. , Lund H., Zuman P.  
The Electrochemical Society 205th Meeting, New-Jersey, United States Of America, 9 - 13 May 2004, vol.10, pp.169
- XXXIX. **Contribution to Electroreduction of hydrazones**  
ÇELİK M. Ş. , ÇELİK H., Zuman P.  
The Electrochemical Society 203rd Meeting, New-Jersey, United States Of America, 27 April - 02 May 2003, vol.12, pp.93
- XL. **Polarographic study of the kinetics and equilibria of the reduction benzaldehydes with hydrazine**  
Zuman P., ÇELİK M. Ş.  
The Electrochemical Society 201st Meeting, New-Jersey, United States Of America, 12 - 17 May 2002, vol.10, pp.60

## Citations

Total Citations (WOS):186

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