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Dr. Ramazan KATIRCI

Research Project Manager

Personel Details	<p>Nationality:T.C</p> <p>Date of Birth :15Ekim 1974</p> <p>Place of Birth :MENGEN/BOLU TURKEY</p> <p>MaritalStatus :Maried</p>
Personel Statement	I am a person with knowledge and practical experiences in areas of semiconductor photodiode, metal/non-metal electroplating process, thin film and selective coatings gained through both academic study and work experience for more than 10 years. I conducted more than 6 project awarded by the government. Some of these were the joint projects with private companies.
Ambition	My plans include development and management of the innovation products and projects awarded by the state agency.
Area of Expertise	<ul style="list-style-type: none">➤ Spectral and electrochemical characterization of semiconductors<ul style="list-style-type: none">○ Built-in voltage (V_{bi})○ Bias voltage (V_{bias})○ Open-circuit voltage (V_{oc})○ Short-circuit current (J_{sc})○ Saturation (leakage) current (J_0)○ Maximum power point (MPP)○ Fill factor (FF)○ Resistivity○ Carrier Concentration○ Carrier Mobility○ Surface charge○ Recombination Lifetime○ Diffusion length○ Generation lifetime○ Interface/Surface recombination velocity

	<ul style="list-style-type: none"> ○ Carrier mobility ○ Refractive index ○ Film thickness ○ Fundamental Band Gap ○ Surface roughness ○ Defects: pinhole density etc. ○ Spectral Response ○ I -V curve *(Voc, Isc and FF) ➤ Electrochemical studies (Potentiostat/Galvanostat) <ul style="list-style-type: none"> ○ Chronoamperometry ○ Chronopotentiometry ○ Impedance (Cathode surface characterization) ○ Pulse applications ○ Tafel measurements (corrosion resistance, rate, etc.) ➤ Surface and stracture characterization (SEM-EDS, XRD) <ul style="list-style-type: none"> ○ Surface morphology (smoothness, grain boundary, thickness) ○ Crystallinity ○ Grain size ➤ Electroplating process <ul style="list-style-type: none"> ○ Nickel electroplating ○ Copper electroplating ○ Bronze electroplating ○ Chromium electroplating ○ Brass electroplating ○ Zinc electroplating (Alkaline, acidic) ○ Zinc-nickel electroplating (alkaline) ○ Passivation and cleaning baths.
Awarded Projects	<ul style="list-style-type: none"> ➤ Project No: 7130913, Project Manager: Ramazan Katırcı. Subject: The development of Ag/AgCl electrode coating system for electrocardiography instrument. 2013-2014, awarded by Tubitak. Turkey ➤ Project No: 7130160, Project Manager: Ramazan Katırcı. Subject: The development of alloy deposition electrolyte to increase the corrosion resistance of otomotive parts. 2013-2014, awarded by Tubitak. Turkey ➤ Project No: 0020.TGSD.2012, ProjectManager: Ramazan Katırcı, Subject: The development of metal alloy absorber that absorbs the solar light with high efficiency for thermal solar panels (It doesn't include Cr, Ni, Cd, Co), 2012-2013, awarded by Industrial Ministry. Turkey ➤ Project No: 7090638, ProjectManager: Ramazan Katırcı, Subject: The development of environmental friendly chromium bath with trivalent chromium

	<p>salts., 2009-2011, awarded by Tubitak. Turkey</p> <ul style="list-style-type: none"> ➤ Project Manager:Ramazan Katırcı, The development of nickel brightener presenting high performance at the region of low current density, 2014-2015,awarded by KOSGEB. Turkey ➤ Researcher: Ramazan Katırcı, Theinvestigation of organicadditivesused in Nickelectroplatingbathwiththeelectrochemicalsmethods.,<i>BAP Project</i>. Turkey ➤ Researcher: Ramazan Katırcı,Modelling Steven Rearrangement 2-Methyl 1,3-Dioxepin MoleculeUndergoReactionWithDiazobis(Carbonyl) CompoundsTo Form OxoniumYlides İn The Presence Of Catalyst ([Cu(Acac)₂]). (2003-2005, Technical University of İstanbul/Turkey), <i>BAP projesi</i>. Turkey
<i>International Publications (SCI, SCI Expanded)</i>	<ol style="list-style-type: none"> 1) Katırcı R*., Statistical optimization of trivalentchromiumbathandcharacterization SurfaceEngineering, 31 (6) (2015) 465-471.DOI: 10.1179/1743294415Y.0000000013 2) Katırcı R*., A novel Cr coatingfrom a trivalentchromiumbathcontainingextremelylowconcentration of Cr³⁺ ions, International Journal of SurfaceScienceandEngineering, accepted2014. http://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijsurfse 3) Katırcı R*., Statistical ApproachtoOptimise a Zn-Nibathcontaining ED and TEA, SurfaceReviewandLetters, 22 (1) (2015).DOI: 10.1142/S0218625X15500158 4) Katırcı R*.,Effects of ZnOandNaOH in Zn–Nibath, SurfaceEngineering, 31 (1) (2015) 11-16. DOI 10.1179/1743294414Y.0000000341 5) Katırcı R*., Yılmaz U., Statistical studies of Zn–Nialloycoatingsusingnon-cyanide alkaline bathscontainingpolyethyleneiminecomplexingagents, Transaction of IMF, 92 (5) (2014) 245-252. DOI 10.1179/0020296714Z.000000000195 6) Katırcı R*., Sezer E., Ustamehmetoğlu B., Statistical Optimization of OrganicAdditivesfor Maximum BrightnessandBrightener Analysis in a NickelElectroplatingBath, Transaction of IMF, 93 (2) (2015) 89-96. DOI: 10.1179/0020296714Z.000000000219 7) Sezer E*,Ustamehmetoğlu B., Katırcı R., "Effects of functionalgroups of triplebondscontainingmolecules on nickelectroplating", TurkishJournal of Chemistry, 38 (2014) 701-715 DOI: 10.3906/kim-1309-63 8) Sezer E*,Ustamehmetoğlu B., Katırcı R., "Effects of a N,N-dimethyl-N-2-propenyl-2-propene-1-ammoniumchloride-2-propenamide copolymer on brightnickelplating", Surf. Coat. Tech., 213 (2012) 253-263.doi:10.1016/j.surfcoat.2012.10.057

<i>International publication (withreferee)</i>	<p>9) Sezer E*, Ustamehmetoğlu B., Katırcı R., "The Investigation Of Electrochemical Effect Of Diol Compounds In Nickel Electroplating Bath "Journal of Materials Science and Engineering with Advanced Technology" 8, (2) (2013), 55-68</p>
<i>National publications (without referee)</i>	<p>1) Katırcı R., "Nickel Electroplating Characterization/Nikel Elektrokaplama Karakterizasyonu", Yüzey İşlemler, Mart-Nisan, 89, 2013, sayfa: 38. http://www.telepatireklamcilik.com/dergi-detay/79-yuzey-islemler-dergisi-sayi-89-telepati-reklamcilik.html</p> <p>2) Katırcı R., "The improving of physical and chemical properties of metal coatings/Metal Kaplamaların Fiziksel ve Kimyasal Özelliklerinin İyileştirilmesi", Yüzey İşlemler, Ocak-Şubat, 88 2013, sayfa: 12. http://www.telepatireklamcilik.com/dergi-detay/80-yuzey-islemler-dergisi-sayi-88-telepati-reklamcilik.html</p> <p>3) Katırcı R., "The purification technique in nickel baths and regeneration of new bath/Nikel Banyolarında Saflaştırma Teknikleri ve Yeni bir Bano Oluşturma", Yüzey İşlemler, Mayıs-Haziran, 90, 2013, sayfa: 74. http://www.telepatireklamcilik.com/dergi-detay/78-yuzey-islemler-dergisi-sayi-90-telepati-reklamcilik.html</p> <p>4) Katırcı R., "Nickel Electroplating/Nikel Elektrokaplama", Kimya Magazin, Ağustos, 137, 2013, sayfa: 30. http://www.telepatireklamcilik.com/dergi-detay/77-kimya-magazin-dergisi-sayi-137-telepati-reklamcilik.html</p> <p>5) Katırcı R., "Nickel Electroplating/Nikel Elektrokaplama", Turchem, Mayıs-Haziran 2012</p>
<i>Posterpresentation s</i>	<p>1) Katırcı R., Yılmaz U., Statistical Studies of Zn–Ni Alloy Coatings using Non-Cyanide Alkaline Baths Containing Polyethyleneimine Complexing Agents, 2. Surface Treatment Symposium, International Congress, 25-27 June 2014, İ.T.Ü. Turkey</p> <p>2) Sezer E., Ustamehmetoğlu B., Katırcı R., Effects of a N,N-dimethyl-N-2-propenyl-2-propene-1-ammoniumchloride-2-propenamide copolymer on bright nickel plating ", XXVI. National Chemistry Congress, 1-6 October 2012. Turkey</p> <p>3) Sezer E., Ustamehmetoğlu B., Katırcı R., "Effects of organic additives having triple bond and multi layer coating on the corrosion behavior of bright nickel deposited material", XXVI. National Chemistry Congress, 1-6 October 2012. Turkey</p> <p>4) Sezer E., Ustamehmetoğlu B., Katırcı R., "The Effects Of Triple Bond Containing Organic Additives On Corrosion Behavior Of Nickel Electroplating",</p>

	<p>Eurocorr 2012-The European Corrosion Congress, 9-13 September, Istanbul.Turkey</p> <p>5) Sezer E., Ustamehmetoğlu B., Katırcı R., "Corrosion Behaviour Of Single And Multilayer Nickel And Chromated Nickel Electrodeposits", Eurocorr 2012-The European Corrosion Congress, 9-13 September, Istanbul. Turkey</p>
Patents	<ul style="list-style-type: none"> ➤ Sezer E., Ustamehmetoğlu B., Katırcı R. Bright Nickel Coating, Patent no: 2012/04968. Turkey ➤ Katırcı R., The development in trivalent chromium bath, Patent no: 2010/05789. Turkey
Experiences of Instruments	<ul style="list-style-type: none"> ➤ XRD measurements ➤ SEM-EDX ➤ Potentiostat/Galvanostat (PAR-STAT, GAMRY) ➤ Profilometer ➤ HPLC (High pressure liquid chromatography) ➤ GC (Gas chromatography) ➤ UV-visible Spectrophotometer ➤ FT-IR ➤ AAS (Atomic Absorption Spectroscopy) ➤ X-Ray Fluorescence (XRF) ➤ Hull-Cell Equipments ➤ Salt Spray Test Instrument
Experiences of Experimental Design Methods	<ul style="list-style-type: none"> ➤ Taguchi methods ➤ Mixture methods ➤ Factorial design (Full, fraction) ➤ Response surface design
Work Experiences	<p>2015 Haz.-2016 Haz.Loughborough Üniversitesi, CRESTUK</p> <ul style="list-style-type: none"> ■ Postdoctorate, Photovoltaic, Thin film coating ■ The research subject: The development of p-type CZTS thin film coating processes having high efficiency. <p>2012-ASR Electrochemical Energy Sis. Ltd. Co. İstanbul</p> <p>The company manages the research projects and develops solar absorber for solar thermal panels and semiconductor photodiode for photovoltaic panels using electroplatin</p>

	<p>gmethod.</p> <p>R&D and Project Manager</p> <p>2013 April -2015 May MKS End. Kim. San. Ve Tic. A.Ş Istanbul The supplier and producer of chemicals for electroplating baths.</p> <p>R&D Manager</p> <p>2013- 2013 Arel University Istanbul Academic staff (part-time) Lectures given: (2012-2013) Engineering Materials (English) (2012-2013) Fundamentals of Business Administration) (English)</p> <p>2005-2011 Dede Kimya İstanbul The supplier and producer of chemicals for electroplating baths.</p> <p>R&D Manager</p> <p>2003-2005 TNT İpekyolu Fair Organization Istanbul IT Manager (part time)</p> <p>2001-2002 Net Civata (Secrew company) Istanbul The Manager of Plating Department</p> <p>2000-2001 Hoechst-Marion-Roussel (Medicine firm) Istanbul Analyst</p>
Internship	<p>2001 Samatya Hospital of Istanbul İstanbul</p> <ul style="list-style-type: none"> ■ Biochemistry Laboratory (blood & urine tests)
Educations	<p>2005-2012 November Technical University of Istanbul Turkey</p> <ul style="list-style-type: none"> ■ Doctorate, Electrochemistry, Electroplating, Metal coating ■ My thesis subject: Development and characterization of organic additives on nickel electrodeposition <p>2001- 24/06/2005 Technical University of Istanbul Turkey</p> <ul style="list-style-type: none"> ■ Master, Department of Chemistry (Physical Chemistry) ■ My thesis subject: The Mechanistic Behaviour of Ylides Obtained from the α, β-Conjugated Aldehydes, Ketones and Esters: A Computational Approach <p>1995-2000 Uludağ University of Bursa Turkey</p>

	<ul style="list-style-type: none"> ■ Chemistry <p>2011- T.C. Anadolu University Turkey</p> <ul style="list-style-type: none"> ■ Economy, Distance learning <p>1991- 1994Kağıthane High School İstanbul/ Turkey</p>
Certificates	2012 E- Trade, (YORKTRADE) 2012 Entrepreneurship (KOSGEB) 2004 Toefl (Boğaziçinüniversitesi, 120 saat) 2001 English proficiency (I.T.Ü Foundation, 840 saat)
Computer Skills	MS Office (Word, Excel, PowerPoint), Microsoft Visual Basic, Gaussian03, Spartan02, Suselinux , Red Hat 9.0,Windows(95,98,XP,Vista), Labview, Matlab, Minitab
References:	<p>Prof.Dr. Esma Sezer (Chemistrydepartment) (Thesupervisor of mydoctoratethesis) İstanbul Technical Universitye-mail: esezer@itu.edu.tr</p> <p>Prof.Dr. Belkis Ustamehmetoğlu(Chemistrydepartment) (Thesupervisor of Doctoratethesis) İstanbul Technical Universitye-mail: belkis@itu.edu.tr</p> <p>Assoc.Prof. Nurcan Tüzün (Chemistrydepartment) (Thesupervisor of mymasterthesis) İstanbul Technical University: nurcant@itu.edu.tr</p> <p>Prof. Dr. Ahmet GüL (Kimyabölümü) ,İstanbul Technical University, e-mail: ahmetg@itu.edu.tr</p>