

## Prof. İSHAK KARAKAYA

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: H-5826-2012

ScopusID: 6602371398

Yoksis Researcher ID: 4464

### Education Information

Doctorate, McGill University, Metalurji Mühendisliği, Canada 1981 - 1985

Postgraduate, McGill University, Metalurji Mühendisliği, Canada 1979 - 1981

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, Turkey 1973 - 1978

### Foreign Languages

English, C1 Advanced

### Research Areas

Technical Sciences, Metallurgical and Materials Engineering, Production Metallurgy, Non-Ferrous Alloy Production, Electrolytic Coating, Electrometallurgy

### Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 1994 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 1988 - 1994

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 1987 - 1988

### Academic and Administrative Experience

Middle East Technical University, Faculty of Engineering, Department of Metallurgical and Materials Engineering, 2003 -

## Courses

Materials Processing, Undergraduate, 2018 - 2019

## Advising Theses

- KARAKAYA İ., Effects of copper electroplating parameters on microstructure and mechanical properties of Al-Cu brazed joints, Postgraduate, A.ÖZDEMİR(Student), 2022
- KARAKAYA İ., Synthesizing cation doped stable alpha nickel hydroxide having low self discharge rate by chemical precipitation, Postgraduate, T.İLHAN(Student), 2022
- KARAKAYA İ., Electroless deposition of oxidation resistant high temperature coatings in molten salt, Postgraduate, İ.EMRE(Student), 2021
- KARAKAYA İ., FORMATION OF Au-Ag-Cu TERNARY ALLOYS BY ELECTROCHEMICAL DEPOSITION, Postgraduate, B.ÇAĞAN(Student), 2021
- KARAKAYA İ., A Study on integral recycling of valuable particle embedded composite wastes, Postgraduate, T.Göynük(Student), 2019
- KARAKAYA İ., Electrochemical production of molybdenum refractory metal powders, Postgraduate, B.Akpınar(Student), 2019
- KARAKAYA İ., Değerli Parçacık Gömülü Kompozit Atıkların Entegre Geri Dönüşümü, Postgraduate, T.GÖYNÜK(Student), 2019
- KARAKAYA İ., Metallization of high density polyurethane surfaces, Postgraduate, B.Aykaç(Student), 2019
- KARAKAYA İ., Electrochemical formation of Al-Sc alloy in molten salt, Postgraduate, Ç.Polat(Student), 2019
- KARAKAYA İ., Effects of pulse parameters on surface properties of silver coatings on copper substrates, Postgraduate, C.Başaran(Student), 2019
- KARAKAYA İ., Formation and characterization of electroformed cylindrical accordion geometry, Postgraduate, B.ÇETİNÖZ(Student), 2018
- KARAKAYA İ., Electroformation and characterization of Al<sub>2</sub>O<sub>3</sub> embedded nickel matrix composite coatings, Postgraduate, O.YILMAZ(Student), 2018
- KARAKAYA İ., Cathodic protection of aluminum components of armoured amphibious vehicles in marine environment, Postgraduate, R.ONUR(Student), 2017
- KARAKAYA İ., Electrochemical production of tungsten refractory metal powders, Postgraduate, F.ÖZDEMİR(Student), 2017
- KARAKAYA İ., Cathodic Protection of Steel Components of Armoured Amphibious Vehicles in Marine Environment, Postgraduate, R.AKSU(Student), 2017
- KARAKAYA İ., Computer simulation of processes involving multicomponent multiphase equilibria, Postgraduate, M.SERDAL(Student), 2016
- KARAKAYA İ., EFFECTS OF ANODIZING PARAMETERS ON THE FORMATION OF TITANIUM DIOXIDE NANOTUBE ARRAYS ON Ti<sub>6</sub>Al<sub>4</sub>V ALLOY, Postgraduate, Z.AYÇA(Student), 2015
- KARAKAYA İ., Effects of anodizing parameters on the formation of titanium dioxide nanotube arrays on Ti<sub>6</sub>Al<sub>4</sub>V alloy, Postgraduate, Z.Ayça(Student), 2015
- KARAKAYA İ., Formation of Indium Solder Material by Electrochemical Methods, Postgraduate, O.ORKUT(Student), 2014
- KARAKAYA İ., Electrochemical formation of brazing alloys on metal substrates, Postgraduate, F.ULU(Student), 2014
- KARAKAYA İ., KALKANLI A., Liquid phase sintering of tungsten-nickel-cobalt heavy alloys, Postgraduate, O.DİNÇER(Student), 2014
- KARAKAYA İ., ELECTROCHEMICAL FORMATION OF COLD SHIELD FOR OPTOELECTRONIC DEVICES, Postgraduate, B.ARSLAN(Student), 2014
- KARAKAYA İ., Recovery of tungsten from tungsten bearing compounds, Doctorate, M.ERDOĞAN(Student), 2013

KARAKAYA İ., In-situ Formation of Mg-Ni Intermetallics, Postgraduate, F.ERDEN(Student), 2013

KARAKAYA İ., Effect of chromium on the oxidation of steels used in the construction of petroleum refinery heaters, Doctorate, A.SULTAN(Student), 2013

KARAKAYA İ., Electrocodeposition of molybdenum disulfide particles in nickel matrix, Doctorate, E.SARALOĞLU(Student), 2013

KARAKAYA İ., Production of Tungsten by Pulsed Potential Electroreduction, Postgraduate, O.GÖKÇE(Student), 2011

KARAKAYA İ., Reduction of silicon dioxide by electrochemical deoxidation, Postgraduate, E.ERGÜL(Student), 2010

KARAKAYA İ., ÖZTÜRK T., Ferroboron production by electrodeoxidation, Postgraduate, T.ÖRS(Student), 2008

KARAKAYA İ., Tungsten production by electrodeoxidation, Postgraduate, M.ERDOĞAN(Student), 2007

KARAKAYA İ., Electrolytic magnesium production using coaxial electrodes, Doctorate, G.DEMİRCİ(Student), 2006

KARAKAYA İ., High temperature corrosion of steels used in petroleum refinery heaters, Postgraduate, A.SULTAN(Student), 2005

KARAKAYA İ., Hydrometallurgical treatment of Beylikahır rare earth preconcentrate, Doctorate, M.KUL(Student), 2003

KARAKAYA İ., Yiterbiyum-baryum-bakır oksit süperiletken şeritlerin sol-jel metodu ile üretimi ve karakterizasyonu, Doctorate, H.OKUYUCU(Student), 2002

KARAKAYA İ., Development of a computer program for multi-element predominance area diagrams, Postgraduate, E.KONCA(Student), 2000

KARAKAYA İ., Development of a computer program for thermodynamic calculation of binary phase diagrams, Postgraduate, İ.NUMANOĞLU(Student), 1999

KARAKAYA İ., Purification of magnesium-lead alloy by molten salt electrolysis, Postgraduate, K.ÇITAK(Student), 1998

KARAKAYA İ., Molten salt electrolysis of magnesium and its hydrodynamics, Postgraduate, G.DEMİRCİ(Student), 1998

KARAKAYA İ., High temperature corrosion of boiler plant flues., Postgraduate, İ.ATİK(Student), 1998

KARAKAYA İ., Kalay-bizmut sisteminin termodinamiği, Postgraduate, H.OKUYUCU(Student), 1997

TOPKAYA Y. A., KARAKAYA İ., Recovery of lead and cadmium from cinkur waelz oxide by using chloridizing volatilization method., Doctorate, M.Can(Student), 1996

KARAKAYA İ., An interactive computer program for predominance area diagrams, Postgraduate, M.MURAT(Student), 1994

KARAKAYA İ., Electrolysis of MgCl<sub>2</sub> with a top inserted anode and aMg-Pb cathode, Postgraduate, M.GÜDEN(Student), 1992

KARAKAYA İ., Development of an interactive computer program for ternary phase diagrams (Using thermodynamic data), Postgraduate, S.KEMAL(Student), 1992

KARAKAYA İ., Recovery of germanium and other metals from the leach residue of Çinkur, Postgraduate, M.Can(Student), 1991

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

- I. **Investigation of Reduction Mechanism and the Effect of NaCl-CaCl<sub>2</sub> Mixture on Tungsten Production from Tungsten Sulfide**  
YILMAZ O., ERDOĞAN M., KARAKAYA İ.  
Journal of the Electrochemical Society, vol.170, no.6, 2023 (SCI-Expanded)
- II. **Examination of the metallization behaviour of an ABS surface**  
Ünlü B., Öz Y., ERDOĞAN M., KARAKAYA İ.  
Surface Engineering, vol.39, no.7-12, pp.807-815, 2023 (SCI-Expanded)
- III. **A Novel and Eco-friendly Approach for the Simultaneous Recovery of Copper and Diamond from Waste Cutting Segments via Electrodeposition/Deposition**  
Kul M., Erden F., OSKAY K. O., Karasungur O., ŞİMŞİR M., Kumruoğlu L. C., KARAKAYA İ.  
JOURNAL OF SUSTAINABLE METALLURGY, vol.7, no.3, pp.1224-1240, 2021 (SCI-Expanded)
- IV. **Effects and characterisations of pulse electrodeposition parameters of silver in terms of scattering parameter and surface roughness for waveguides operating at high frequencies**  
Başaran C., KARAKAYA İ.

International Journal of Surface Science and Engineering, vol.15, no.2, pp.118-130, 2021 (SCI-Expanded)

- V. **Metallisation of high density polyurethane surfaces**  
Unlu B., Oz Y., ERDOĞAN M., KARAKAYA İ.  
INTERNATIONAL JOURNAL OF SURFACE SCIENCE AND ENGINEERING, vol.15, no.3, pp.242-264, 2021 (SCI-Expanded)
- VI. **Combined effects of ALS and SLS on Al<sub>2</sub>O<sub>3</sub> reinforced composite nickel coatings**  
Yilmaz O., Erdogan M., Karakaya I.  
SURFACE ENGINEERING, vol.36, no.5, pp.477-484, 2020 (SCI-Expanded)
- VII. **Effects of fabrication method on initial powder characteristics and liquid phase sintering behaviour of tungsten**  
Erol M., Erdogan M., Karakaya İ.  
INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS, vol.77, pp.82-89, 2018 (SCI-Expanded)
- VIII. **Removal of Trace Amounts of Copper from Concentrated Hydrochloric Acid Solutions**  
Erdogan M., Karakaya E., Aras M. S., Karagul S. C., Ersoy M. K., Öztürk A., Karakaya İ.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, vol.13, pp.10934-10947, 2018 (SCI-Expanded)
- IX. **Formation and characterization of infrared absorbing copper oxide surfaces**  
Arslan B., Demirci G., Erdogan M., Karakaya İ.  
APPLIED SURFACE SCIENCE, vol.402, pp.218-224, 2017 (SCI-Expanded)
- X. **Investigation of the tribological behaviour of electrocodeposited Ni-MoS<sub>2</sub> composite coatings**  
Güler E. S., Konca E., KARAKAYA İ.  
International Journal of Surface Science and Engineering, vol.11, no.5, pp.418-432, 2017 (SCI-Expanded)
- XI. **Processing and microstructural characterization of liquid phase sintered tungsten-nickel-cobalt heavy alloys**  
DINCER O., PEHLIVANOĞLU M. K., CALISKAN N. K., KARAKAYA İ., KALKANLI A.  
INTERNATIONAL JOURNAL OF REFRACTORY METALS & HARD MATERIALS, vol.50, pp.106-112, 2015 (SCI-Expanded)
- XII. **On the Preparation of Mg<sub>2</sub>Ni by Combining Electrodeoxidation and Electrolysis Techniques**  
ERDEN F., KARAKAYA İ., Erdogan M.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, vol.9, no.11, pp.6627-6639, 2014 (SCI-Expanded)
- XIII. **Effects of current density, coating thickness, temperature, pH and particle concentration on internal stress during Ni-MoS<sub>2</sub> electrocodeposition**  
Guler E. S., KARAKAYA İ., KONCA E.  
SURFACE ENGINEERING, vol.30, no.2, pp.109-114, 2014 (SCI-Expanded)
- XIV. **Effect of Electrodeposition Parameters on the Current Density of Hydrogen Evolution Reaction in Ni and Ni-MoS<sub>2</sub> Composite Coatings**  
Gueler E. S., KONCA E., KARAKAYA İ.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, vol.8, no.4, pp.5496-5505, 2013 (SCI-Expanded)
- XV. **On the Electrochemical Reduction Mechanism of CaWO<sub>4</sub> to W Powder**  
Erdogan M., KARAKAYA İ.  
METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE, vol.43, no.4, pp.667-670, 2012 (SCI-Expanded)
- XVI. **Influence of water vapour on high temperature oxidation of steels used in petroleum refinery heaters**  
Sultan A., KARAKAYA İ., Erdogan M.  
MATERIALS AND CORROSION-WERKSTOFFE UND KORROSION, vol.63, no.2, pp.119-126, 2012 (SCI-Expanded)
- XVII. **Electrochemical decomposition of SiO<sub>2</sub> pellets to form silicon in molten salts**  
Ergul E., KARAKAYA İ., Erdogan M.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.509, no.3, pp.899-903, 2011 (SCI-Expanded)
- XVIII. **Direct synthesis of Mg-Ni compounds from their oxides**  
Tan S., Aydinol K., ÖZTÜRK T., KARAKAYA İ.

- JOURNAL OF ALLOYS AND COMPOUNDS, vol.504, no.1, pp.134-140, 2010 (SCI-Expanded)
- XIX. Electrochemical Reduction of Tungsten Compounds to Produce Tungsten Powder**  
ERDOĞAN M., KARAKAYA İ.  
METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE, vol.41, no.4, pp.798-804, 2010 (SCI-Expanded)
- XX. Synthesis of Fe-4.6 wt% B alloy via electro-deoxidation of mixed oxides**  
Ors T., Tan S., ÖZTÜRK T., KARAKAYA İ.  
JOURNAL OF MATERIALS SCIENCE, vol.44, no.13, pp.3514-3519, 2009 (SCI-Expanded)
- XXI. Synthesis of FeTi from mixed oxide precursors**  
Tan S., Oers T., AYDINOL M. K., ÖZTÜRK T., KARAKAYA İ.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.475, pp.368-372, 2009 (SCI-Expanded)
- XXII. Electrolytic magnesium production and its hydrodynamics by using an Mg-Pb alloy cathode**  
Demirci G., KARAKAYA İ.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.465, pp.255-260, 2008 (SCI-Expanded)
- XXIII. Rare earth double sulfates from pre-concentrated bastnasite**  
Kul M., TOPKAYA Y. A., KARAKAYA İ.  
HYDROMETALLURGY, vol.93, pp.129-135, 2008 (SCI-Expanded)
- XXIV. Collection of magnesium in an Mg-Pb alloy cathode placed at the bottom of the cell in MgCl<sub>2</sub> electrolysis**  
Demirci G., Karakaya I.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.439, pp.237-242, 2007 (SCI-Expanded)
- XXV. ELECTROLYSIS OF MGCL<sub>2</sub> WITH A TOP INSERTED ANODE AND AN MG PB CATHODE**  
GUDEN M., KARAKAYA İ.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.24, no.8, pp.791-797, 1994 (SCI-Expanded)
- XXVI. The Ag B Silver Boron System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, vol.11, pp.547, 1990 (SCI-Expanded)
- XXVII. The Ag N Silver Nitrogen System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, vol.11, pp.486-487, 1990 (SCI-Expanded)
- XXVIII. The Ag Mn Silver Manganese System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, vol.11, pp.480-486, 1990 (SCI-Expanded)
- XXIX. The Ag Se Silver Selenium System**  
KARAKAYA İ., Thompson W. T.  
Bulletin of Alloy Phase Diagrams, vol.11, pp.266-271, 1990 (SCI-Expanded)
- XXX. ADVICE SYSTEM ON HIGH-TEMPERATURE ALLOY CORROSION**  
JOHN R., THOMPSON W., KARAKAYA I.  
MATERIALS PERFORMANCE, vol.28, no.1, pp.69-73, 1989 (SCI-Expanded)
- XXXI. The Ag P Silver Phosphorus System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, vol.9, pp.232-236, 1988 (SCI-Expanded)
- XXXII. PARTIAL MOLAR PROPERTIES OF MGCL<sub>2</sub> IN MGCL<sub>2</sub>-KCL-CACL<sub>2</sub> MELTS**  
ZHU J., KARAKAYA I., THOMPSON W.  
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.135, no.1, pp.122-126, 1988 (SCI-Expanded)
- XXXIII. The Ag Re Silver Rhenium System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, vol.9, pp.243-244, 1988 (SCI-Expanded)
- XXXIV. The Ag Pb Silver Lead System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, vol.8, pp.326-334, 1987 (SCI-Expanded)

- XXXV. **A THERMODYNAMIC STUDY OF THE SYSTEM MGCL<sub>2</sub>-NACL-CACL<sub>2</sub>**  
KARAKAYA İ., THOMPSON W.  
CANADIAN METALLURGICAL QUARTERLY, vol.25, no.4, pp.307-317, 1986 (SCI-Expanded)
- XXXVI. **THERMODYNAMIC PROPERTIES OF MGCL<sub>2</sub>-NACL MELTS FROM EMF-MEASUREMENTS**  
KARAKAYA İ., thompson w.  
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.133, no.4, pp.702-706, 1986 (SCI-Expanded)
- XXXVII. **The Ag Ir Silver Iridium System**  
KARAKAYA İ.  
Bulletin of Alloy Phase Diagrams, vol.7, pp.359-360, 1986 (SCI-Expanded)
- XXXVIII. **The Ag Os Silver Osmium System**  
KARAKAYA İ., thompson w.  
Bulletin of Alloy Phase Diagrams, vol.7, pp.360-362, 1986 (SCI-Expanded)
- XXXIX. **Thermodynamic properties of 1 x MgCl<sub>2</sub> xCaCl<sub>2</sub> melts**  
KARAKAYA İ., thompson w.  
J. Chemical Thermodynamics, vol.18, pp.859-866, 1986 (SCI-Expanded)
- XL. **Introduction of boundary conditions in the Pelton Flengas Gibbs Duhem Integration for ternary solutions**  
KARAKAYA İ., thompson w.  
Canadian Journal of Chemistry, vol.63, pp.2808-2809, 1985 (SCI-Expanded)
- XLI. **Correction**  
KARAKAYA İ., thompson w.  
Can. J. Chem., vol.63, pp.3634, 1985 (SCI-Expanded)
- XLII. **Thermodynamic properties of SnO in SnO TiO<sub>2</sub> melts**  
KARAKAYA İ., William T T.  
Canadian Metallurgical Quarterly, vol.22, pp.61-65, 1983 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Investigation of Au-Ag-Cu Alloy Electrodeposition to Electromechanical Systems**  
Çağan B., Erdoğan M., Yılmaz C., Yurdakul B., Karakaya İ.  
ECS Transactions, vol.97, no.7, pp.485-490, 2020 (Scopus)
- II. **Effects of Pulse Electroplating Parameters on Return Loss (S<sub>11</sub>) and Surface Roughness of Silver Coatings**  
Başaran C., KARAKAYA İ.  
ECSArxiv, 2019 (Peer-Reviewed Journal)
- III. **ERİMİŞ TUZ İÇİNDE ELEKTROKİMYASAL İNDİRGEME YÖNTEMİYLE SİLİSYUM ÜRETİMİ**  
ERDOĞAN M., Ergül E., KARAKAYA İ.  
Selçuk Üniversitesi Mühendislik Bilim ve Teknoloji Dergisi, 2017 (Peer-Reviewed Journal)
- IV. **Katı Molibden Bileşiklerinin Elektrokimyasal İndirgenmesiyle Molibden Üretimi**  
ERDOĞAN M., Akpınar B., KARAKAYA İ.  
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, 2017 (Peer-Reviewed Journal)
- V. **Friction Reducing Composite Plating in Rocket Launchers. International Journal of Engineering Research Development**  
SARALOĞLU GÜLER E., KARAKAYA İ.  
International Journal of Engineering Research Development, 2017 (Peer-Reviewed Journal)
- VI. **Oxidation of Low Chromium Steels in Dry and Moist Atmospheres**  
ERDOĞAN M., SULTAN a., KARAKAYA İ.  
OXIDATION COMMUNICATIONS, vol.40, pp.51-60, 2017 (Scopus)
- VII. **Taguchi Design of Internal Stress and Friction Measurements during Electrodeposition**  
SARALOĞLU GÜLER E., KARAKAYA İ.

Journal of Material Science Engineering, vol.6, 2017 (Peer-Reviewed Journal)

- VIII. **The Role of Electrolyte Composition on Codeposited Ag and Cu**  
ulu f, Demici G., ERDOĞAN M., KARAKAYA İ.  
ECS Transactions, vol.72, pp.35-44, 2016 (Scopus)
- IX. **A Pulse Voltage Application in Electrochemical Reduction of Solid CaWO<sub>4</sub> Powder**  
Goksu O. G., ERDOĞAN M., KARAKAYA İ.  
ECS Transactions, vol.72, pp.31-39, 2016 (Scopus)
- X. **Formation of gold plated electroformed copper structures**  
ARSLAN B., Demirci G., KARAKAYA İ., ERDOĞAN M.  
Advances in Materials and Processing Technologies, vol.1, pp.384-393, 2016 (Scopus)
- XI. **Formation of Titanium Dioxide Nanotube Arrays by Anodizing Ti6Al4V Alloy**  
KARAKAYA İ., ERDOĞAN M.  
ECS Transactions, vol.58, pp.45-52, 2014 (Scopus)
- XII. **The Ag C Silver Carbon System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.9, pp.226-227, 1988 (Peer-Reviewed Journal)
- XIII. **The Pb Sn Lead Tin System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.9, pp.144-152, 1988 (Peer-Reviewed Journal)
- XIV. **A Database for the Selection of Materials for High Temperature Service**  
KARAKAYA İ., Randy C J., William T T.  
Materials & Components in Fossil Energy Applications, US Department of Energy Newsletter, pp.1-3, 1988 (Peer-Reviewed Journal)
- XV. **The Ag Pd Silver Palladium System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.9, pp.237-243, 1988 (Peer-Reviewed Journal)
- XVI. **The Ag Sn Silver Tin System**  
Karakaya İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.8, pp.340-347, 1987 (Peer-Reviewed Journal)
- XVII. **The Ag Pt Silver Platinum System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.8, pp.334-340, 1987 (Peer-Reviewed Journal)
- XVIII. **The Ag Co Silver Cobalt System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.7, pp.259-263, 1986 (Peer-Reviewed Journal)
- XIX. **The Ag Ru Silver Ruthenium System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.7, pp.365-368, 1986 (Peer-Reviewed Journal)
- XX. **The Ag Rh Silver Rhodium System**  
KARAKAYA İ., William T T.  
Bulletin of Alloy Phase Diagrams, vol.7, pp.362-365, 1986 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Modeling and Experimental Validation of Critical Distance and the Maximum Depth of Galvanic Corrosion-Induced Pitting on the 2024-T3 with CFRP Joint**  
Yıldırım M. A., Erdoğan M., Karakaya I.  
237th ECS Meeting, Montreal, Canada, 10 May 2020
- II. **Formation of Mo Metal Powder By Electrochemical Reduction of CaMoO<sub>4</sub> and MoS<sub>2</sub> Compounds**  
akpınar b., ERDOĞAN M., KARAKAYA İ.

237th ECS Meeting, Montreal, Canada, 10 May 2020

- III. **Metallization of High Density Polyurethane Surfaces**  
Aykaç B., KARAKAYA İ., ERDOĞAN M., Öz Y.  
237th ECS Meeting, Montreal, Canada, 10 May 2020, vol.97, pp.1
- IV. **Effects and Characterizations of Pulse Electrodeposition Parameters of Silver on Surface Roughness and Scattering Parameters of Horn Antennas**  
Başaran C., KARAKAYA İ.  
235th ECS Meeting, 26 - 29 May 2019
- V. **Effect of Heat Treatment on the Microstructure and Surface Properties of Ni-Based Platings**  
Başkan M., Erdoğan M., Karakaya İ.  
19th International Metallurgy and Materials Congress (IMMC 2018), İstanbul, Turkey, 25 - 27 October 2018, pp.1008-1011
- VI. **Electrochemical Formation of Alloys of Aluminum in Molten Salts**  
Polat Ç., Erdoğan M., Karakaya İ.  
19th International Metallurgy and Materials Congress (IMMC 2018), İstanbul, Turkey, 25 - 27 October 2018, pp.132-135
- VII. **Electrochemical Deposition of Au-Ag-Cu Alloys on CuBe<sub>2</sub>**  
Çetinöz B., Erdoğan M., Karakaya İ., Yurdakul E. B.  
19th International Metallurgy and Materials Congress, ISTANBUL (IMMC 2018), İstanbul, Turkey, 25 - 27 October 2018, pp.1052-1056
- VIII. **Electrochemical etching of an Fe-Ni-Co alloy**  
Aksu Y., Demirci G., Erdoğan M., Karakaya İ.  
5th International Conference on Welding Technologies and Exhibition (ICWET'18), Sarajevo, Bosnia And Herzegovina, 26 - 28 September 2018, pp.56
- IX. **Electrochemical etching of an Fe-Ni-Co alloy**  
Aksu Y., Demirci G., Erdoğan M., Karakaya İ.  
5th International Conference on Welding Technologies and Exhibition (ICWET'18), Sarajevo, Bosnia And Herzegovina, 26 - 28 September 2018, pp.56
- X. **Optimization of Mechanical Properties of Nickel-Cobalt Coatings from Sulphamate Baths**  
Karakaya E., Başkan M., Erdoğan M., Karakaya İ.  
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- XI. **Electrochemical Removal of Copper from Regenerated Pickling Solutions of Steel Plants**  
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Erol M., Erdoğan M., Karakaya İ.  
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- XVI. **Investigation of the Mechanical Properties of Al<sub>2</sub>O<sub>3</sub> Reinforced Nickel Composite Coatings, Metal-Matrix Composites Innovations, Advances and Applications**  
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