

Curriculum Vitae

Ali Ashrafi

Assistant Professor
Department of Materials Engineering
Isfahan University of Technology
Isfahan, Iran
(July 2013 up to now)



Previous Affiliation:
Assistant Professor
Department of Materials Science and
Engineering Faculty of Engineering
Shahid Chamran University
Ahvaz, Iran
(2008- 2013)

Personal Info.

<i>Birthday</i>	<i>14 Jan 1977</i>
<i>Place of Birth:</i>	<i>Isfahan</i>
<i>Citizenship:</i>	<i>Iran</i>
<i>Marital Status</i>	<i>Married, (2 Childrens)</i>
<i>Phone</i>	<i>+98 311 391 5747</i>
<i>Fax</i>	<i>+98 311 3915747</i>
<i>Email</i>	<i>ashrafi@cc.iut.ac.ir</i>
<i>Web page</i>	<i>http://Ashrafi.iut.ac.ir</i>

Academics

(2001-2007)	
<i>PhD, Materials Engineering</i>	<i>Corrosion and Protection of Materials Department of Materials Engineering Isfahan University of technology (IUT)</i>
(1999-2001)	
<i>MSc, Materials Engineering</i>	<i>Corrosion and Protection of Materials Department of Materials Engineering Isfahan University of technology (IUT)</i>
(1994-1999)	
<i>BSc, Materials Engineering</i>	<i>Casting Department of Materials Engineering Ferdowsi University of Mashhad (FUM)</i>

Academic Dissertations

PhD Dissertation Title: ***Electropolymerization of Pyrrole on Mild Steel and Investigating its Corrosion Resistance***
Supervisor: Prof. M. A. Golozar
Advisor: Prof. S. Mallakpour

MSc. Dissertation Title: ***Coating of Mild Steel Using Polypyrrole, Polymethylpyrrole and Poly(pyrrole-co-methylpyrrole) by Electrochemical Polymerization***
Supervisor: Prof. M. A. Golozar
Advisor: Prof. S. Mallakpour

BSc. Dissertation Title ***Aluminizing of Mild Steel by Hot-Dip Process***
Supervisor: Assoc. Prof. Mazinani

Administrative Positions

(2018)

Scientific Secretary of Steel Symposium 96 (Kish, Iran) *Iron & Steel Society of Iran*

(2017)

Scientific Secretary of 14th Heat Treatments Competitions *Isfahan University of Technology*

(2015)

Scientific Secretary of Steel Symposium 93 (Ardakan, Yazd, Iran) *Iron & Steel Society of Iran*

(2014 – 2016)

Responsible for Holding the Scientific Conferences *Department of Materials Engineering, Isfahan University of Technology*

(2011 – 2012)

Head of Nanotechnology Council Establishment Workgroup *Shahid Chamran University of Ahvaz*

(2010 – 2012)

***Vice president of 17th Technical
Committee (steels), (ISIRI-TC17)***

*Institute of Standards and Industrial
Research of Iran*

(2010 – 2012)

***President of 16th Subcommittee (ISIRI-
TC17-SC16), Steels for the Reinforcement
and Prestressing of Concrete***

*Institute of Standards and Industrial
Research of Iran*

(2011 – 2012)

***Member of Research Committee in Power
Generation in Khouzestan, Iran***

Khuzestan Regional Electricity Company

(2010 – 2011)

***Member of Research Committee in Power
Transmission in Khouzestan, Iran***

Khuzestan Regional Electricity Company

Teaching Experience

2017-2018

Advanced Electrochemistry, (MSc Course)
Cathodic Protection, (MSc Course)
Stress Corrosion Cracking, (MSc Course)
Materials Science, (BSc Course)

Isfahan University of Technology

2013

Advanced Electrochemistry, (MSc Course)
Isfahan University of Technology

2012

Advanced Electrochemistry, (MSc course)
Isfahan University of Technology (as visiting Asst. Prof.)

2010 -2012

Metallurgical Failure Analysis, (MSc course)
Abadan Institute of Technology (as visiting Asst. Prof.)

2008 - 2013 (Shahid Chamran University of Ahvaz)

Measurement Errors (MSc course)
Nanodestructive Testing (MSc course)
Materials Analysis Methods, (BSc course),
Surface Engineering, (BSc course)
Corrosion and Oxidation, (BSc course)
Engineering Technical Drawing, (BSc course)
Materials Science, (BSc course)
Manufacturing Technology (BSc course)

Laboratory Experience

2017

Founder of "Cathodic Protection Lab", Isfahan University of Technology

2012

Founder of "Plasma Electrolysis Lab", Shahid Chamran University of Ahvaz

2009

Co-Founder of "Advanced Corrosion Lab", Shahid Chamran University of Ahvaz

2004-2005

*Assistant of “**X-ray Diffraction Lab**”, Isfahan University of Technology,*

2001-2003

*Assistant of “**Corrosion Lab**”, Isfahan University of Technology,*

2003-2004

*Assistant of “**Scanning Electron Microscope Lab**”, Isfahan University of Technology,*

2017

MH Allahyarzadeh, M Aliofkhazraei, A Sabour Rouhaghdam, V Torabinejad, Hossein Alimadadi, A Ashrafi
Electrodeposition mechanism and corrosion behavior of multilayer nanocrystalline nickel-tungsten alloy
Electrochimica Acta 258 (2017) 883-899

Abbas Bahrami, Ali Ashrafi, Seyed Mahdi Rafiaei, Maryam Yazdan Mehr
Sigma phase-induced failure of AISI 310 stainless steel radiant tubes
Engineering Failure Analysis 82 (2017) 56-63

Behnoosh Sattari, Morteza Shamanian, Ali Ashrafi, Mehdi Salehi, Farshid Salimijazi
Effect of number of passes on the corrosion behavior of Fe/Al surface composites produced by plasma spraying and friction stir processing
Journal of Materials Processing Technology 250 (2017) 35-44

Asghar Babamir Satehi, Masumeh Ziaee, Ali Ashrafi
Silica nanoparticles: a potential carrier of chlorpyrifos to control two stored-product insect pests as slurries
Entomologia Generalis 36 (2017)

Jalal Kangazian, Morteza Shamanian, Ali Ashrafi
Dissimilar welding between SAF 2507 stainless steel and Incoloy 825 Ni-based alloy: The role of microstructure on corrosion behavior of the weld metals
Journal of Manufacturing Processes 29 (2017) 376-388

Asghar Babamir-Satehi, Masumeh Ziaee, Ali Ashrafi
Toxicity of chlorpyrifos against *Rhyzopertha dominica* and *Tribolium confusum* adults on different surfaces
Toxin Reviews 36 (2017) 57-62

2016

Ali Majedi, Fatemeh Davar, Alireza Abbasi, Ali Ashrafi
Modified Sol–Gel Based Nanostructured Zirconia Thin Film: Preparation, Characterization, Photocatalyst and Corrosion Behavior

Sadaf Shabanian, Fakhreddin Ashrafizadeh, Navid Saeidi, Ali Ashrafi
Failure analysis of carbon steel components in a water bath heater and the influence of ethylene glycol concentration
Engineering Failure Analysis 66 (2016) 533-543

MH Allahyarzadeh, A Ashrafi, A Golgoon, B Roozbehani
Effect of pulse plating parameters on the structure and properties of electrodeposited Ni Mo films
Materials Chemistry and Physics 175 (2016) 215-222

A Moteshakker, I Danaee, S Moeinifar, A Ashrafi
Hardness and tensile properties of dissimilar welds joints between SAF 2205 and AISI 316L
Science and Technology of Welding and Joining 21 (2016) 1-10

2015

M Golmohammadi, M Atapour, A Ashrafi
Fabrication and wear characterization of an A413/Ni surface metal matrix composite fabricated via friction stir processing
Materials & Design 85 (2015) 471-482

S Takhti, M Reihanian, A Ashrafi
Microstructure characterization and mechanical properties of gas tungsten arc welded cast A356 alloy
Transactions of Nonferrous Metals Society of China 25 (2015) 2137- 2146

IMAN BADPEYMA, ALI ASHRAFI, ISFAHANI MOJTABA NASR
THE CORROSION RESISTANCE OF THE COMPOSITE COATINGS POLYANILINE/UREA-FORMALDEHYDE MICROCAPSULES CONTAINING HEALING AGENT
JOURNAL OF ADVANCED MATERIALS AND TECHNOLOGIES 3 (2015) 21-33

2014

Mahdi Nasibi, Milad Mohammady, Ali Ashrafi, Ali Akbar Dehno Khalaji, Masoud Moshrefifar, Elyas Rafiee

Nanosized scale roughness and corrosion protection of mild steel in hydrochloric acid solution and in the presence of Turmeric (Curcuma Longa) Extract as a green corrosion inhibitor: FTIR, polarization, EIS, SEM, EDS, AFM studies, and neural network modeling

Journal of Adhesion Science and Technology 28 (2014) 2001-2015

A Nikfahm, I Danaee, A Ashrafi, MR Toroghinejad

Investigating the corrosion behavior of nanostructured copper strip produced by accumulative roll bonding (ARB) process in acidic chloride environment

Iranian Journal of Materials Science & Engineering 11 (2014) 25-36

A Nikfahm, I Danaee, A Ashrafi, MR Toroghinejad

Corrosion Behavior of Ultra Fine Grain Copper Produced by Accumulative Roll Bonding Process

Transactions of the Indian Institute of Metals 67 (2014) 115-121

A Namjou, R Dehmlaei, A Ashrafi

A comparative study on direct and pulsed current gas tungsten arc welding of 25Cr–35Ni heat resistant steel

Int. J. Nat. Eng. Sci 8 (2014) 22-28

2013

A Nikfahm, I Danaee, A Ashrafi, MR Toroghinejad

Effect of grain size changes on corrosion behavior of copper produced by accumulative roll bonding process

Materials Research 16 (2013) 1379-1386

E. Rafiee, M. Farzam, M.A. Golozar, A. Ashrafi

An Investigation on Dislocation Density in Cold-Rolled Copper Using Electrochemical Impedance Spectroscopy

ISRN Corrosion (2013) 1-6

E Darmiani, I Danaee, M.A. Golozar, M.R. Toroghinejad, A. Ashrafi, A. Ahmadi

Reciprocating wear Resistance of Al-SiC Nano-composite fabricated by Accumulative Roll Bonding process

Materials & Design 50 (2013) 497 - 502

M. Nasibi, M. Mohammady, E. Ghasemi, A. Ashrafi, D. Zaarei, G. Rashed
Corrosion inhibition of mild steel by Nettle (*Urtica dioica* L.) extract: polarization, EIS, AFM, SEM and EDS studies
Journal of Adhesion Science and Technology, 27 (2013) 1873-1885

N. Keyshams, S. R. Fatemi Tabatabaei, H. Najafzadehvarzi, A. Ashrafi
Effect of Amonium Vanadate Nano-Particles on Experimental Diabetes and Biochemical Factors in Male Spargue-Dawly Rats
Zahedan Journal of Research in Medical Sciences, 15 (2013) 59 - 64

2012

S. Hatami Boura, M. Peikari, A. Ashrafi, M. Samadzadeh
Self-healing ability and adhesion strength of capsule embedded coatings—Micro and nano sized capsules containing linseed oil
Progress in Organic Coatings 75 (2012) 292– 300

M. H. Allahyarzadeh, B. Roozbehani, A. Ashrafi, S. R. Shadizadeh, A. Seddighian, E. Kheradmand
A Novel Aspect of Two Imidazolium-Based Ionic Liquids in Electrodeposition of Amorphous/Nanocrystalline Ni-Mo
Journal of the Electrochemical Society, 159 (2012) pp. D473-D478

M. H. Allahyarzadeh, B. Roozbehani, A. Ashrafi, S. R. Shadizadeh,
Effect of Surface Preparation on Corrosion Resistance of Electrochemically Deposited Ni-Mo Alloys in the Presence 1-Methyl-Imidazolium Chloride Ionic Liquid
Electrochemical Society Transactions, 41 (2012) pp.29-46

M. H. Allahyarzadeh, B. Roozbehani, A. Ashrafi, S. R. Shadizadeh, E. Kheradmand
Electrochemically Deposition of High Mo Content Amorphous/Nanocrystalline Ni-Mo Using Ionic Liquids as Additive
Electrochemical Society Transactions, 41 (2012) pp.11-28

S. Mallakpour, Z. Rafiee, A. Ashrafi
Synthesis and characterization of novel silver/L-phenylalanine-based optically active polyacrylate nanocomposite
Journal of Applied Polymer Science, 124 (2012), pp. 4491–4495.

M.H. Allahyarzadeh, B. Roozbehani, A. Ashrafi, M. Mohammadi
Electrodeposited Ni-Mo–TiO₂ Nanocomposite Coating with High Resistance to Corrosion in Nitric Acid Solution
Journal of Corrosion Science and Engineering, 15 (2012), pp. 1-14

N. Arianpouya, M. Shishesaz, A. Ashrafi
Analysis of synergistic effect of nanozinc/nanoclay additives on the corrosion performance of zinc-rich polyurethane nanocomposite coatings
Polymer Composites, Volume 33, Issue 8, pages 1395–1402, August 2012

Z. Shirband, M. R. Shishesaz, A. Ashrafi
Investigating the effect of heat treatment on hydrogen permeation behavior of API X-70 steel
Phase Transitions, Volume 85, Issue 6, pages 503-511, 2012

2011

M.H. Allahyarzadeh, B. Roozbehani, A. Ashrafi
Electrodeposition of high Mo content amorphous/nanocrystalline Ni–Mo alloys using 1-ethyl-3-methyl-imidazolium chloride ionic liquid as an additive
Electrochimica Acta 56 (2011) 10210–10216

M.H. Allahyarzadeh, B. Roozbehani, A. Ashrafi, S.R. Shadizadeh
Electrodeposition of high Mo content amorphous/nanocrystalline Ni–Mo alloys using 1-methyl-imidazolium chloride ionic liquid as an additive
Surface & Coatings Technology 206 (2011) 137–142

Z. Shirband, M. R. Shishesaz, A. Ashrafi
Hydrogen degradation of steels and its related parameters, a review
Phase Transitions, Volume 84, Issue 11-12, November 2011, pages 924-943

M. Samadzadeh, S. Hatami Boura, M. Peikari, A. Ashrafi, M. Kasiriha
Tung oil: An autonomous repairing agent for self-healing epoxy coatings
Progress in Organic Coatings, 70 (2011) 383–387

Journal Articles, contd.

2010

M. Samadzadeh, S. Hatami Boura, M. Peikari, S.M. Kasiriha, A. Ashrafi
A review on self-healing coatings based on micro/nanocapsules
Progress in Organic Coatings, 68 (2010) 159–164

2009

A. Ashrafi, M. A. Golozar, S. Mallakpour
Corrosion Behavior of 316L Stainless Steel Coated by Amorphous and Semicrystalline Polypyrrole
Surface Engineering, 25 (2009), 120-126

2008

A. Ashrafi, M. A. Golozar, S. Mallakpour
EIS Investigation of Passive Film Formation on Mild Steel in Oxalic Acid Solution
Journal of Applied Electrochemistry, Vol.38, pp.225-229, 2008.

2006

A. Ashrafi, M. A. Golozar, S. Mallakpour
Morphological Investigation of Polypyrrole Coating on Stainless Steel
Synthetic Metals, Vol.156, No.18-20, pp.1280-1285, 2006.

2003

A. Ashrafi, M. A. Golozar, S. Mallakpour
Electropolymerization of pyrrole and N-methylpyrrole on mild steel surface
Iranian Polymer Journal Vol.12, No.6, pp.485-490, 2003.

Conference Papers (selected)

2012

N. Arianpouya, M.R.Shishesaz, A.Ashrafi
Investigating the Microstructure, Morphology and Electrochemical Properties of Polymer-based Polyurethan/nanoclay/nanozinc Nanocomposite,
*The first International Conference on Oil, Gas, Petrochemical and PowerPlants,,
Tehran, Iran*

E.Rafiee, M. Farzam, M.A.Golozar, A. Ashrafi
Electrochemical Impedance Spectroscopy as a New Inspection technique of Metallic Structures,
2nd Conference on safety and inspection in oil and energy industries, Tehran, Iran

2011

A.Moteshaker, M.Peikari, I.Danaee, A. Ashrafi
Investigating the Microstructure and Corrosion of Dissimilar Joint of Duplex Stainless Steel to Austenitic Stainless Steel Using GTAW,
12th National Conference of Welding and Inspection, Isfahan, Iran

2010

S. Hatami Boura , M. Samadzadeh, , M. Peikari, A. Ashrafi
Smart and multifunctional coatings based on micro/nano sized additives and their implementation
SPE Interantiona Conference on Oilfield Corrosion, 24-25 May 2010, Aberdeen, UK,

2009

M. Samadzadeh, S. Hatami Boura, M. Peikari, A. Ashrafi, M. Kasiriha
Technical and economical aspect of self healing coatings
International Petroleum Technology Conference (IPTC), Doha, Qatar, Dec 2009

2005

A. Ashrafi, M. A. Golozar, S. Mallakpour
Nucleation and Growth of Polypyrrole Coating on Pretreated Aluminum Alloy 7075
*11th Seminar of Organic Chemistry,
Isfahan University of Technology, Feb. 2005, Isfahan, Iran*

A. Ashrafi, M. A. Golozar, S. Mallakpour
Effect of Substrate Pretreatment on Morphology of Polypyrrole Coating on 316L Stainless Steel
4th International Conference on Polymer Science and Technology (ISPST2005) Amirkabir University of Technology, 2005, Tehran, Iran

A. Ashrafi, M. A. Golozar, S. Mallakpour
Replacement of Chromate Conversion Coating with Polypyrrole for Corrosion Control

of Aluminum 7075 Surface

4th International Conference on Polymer Science and Technology (ISPST2005) Amirkabir University of Technology, 2005, Tehran, Iran

A. Ashrafi, M. A. Golozar, S. Mallakpour

Effect of Substrate Pretreatment on Corrosion Resistance of Polypyrrole-coated Aluminum Alloy 7075

Proceeding of the International Symposium on Materials Degradation: Innovation, Inspection, Control and Rehabilitation, 44th Annual Conference of Metallurgists of CIM, Aug. 2005, Calgary, Alberta, Canada

2004

A. Ashrafi, M. A. Golozar, S. Mallakpour

Effect of Pyrrole and N-methyl pyrrole Coating on Corrosion Resistance of Mild Steel *Proceeding of the 14th IFHTSE Congress,*

China, 2004

Published in Transaction of Materials and Heat Treatment, Vol.25, No.5, 2004

2003

A. Ashrafi, M. A. Golozar, S. Mallakpour

Electropolymerized Coating of Pyrrole and N-methylpyrrole on Mild Steel Surface

Proceeding of the International Symposium on Environmental Degradation of Materials and Corrosion Control in Metals, 42nd Annual Conference of Metallurgists of CIM, Aug. 2003, Vancouver, Canada.

2002

M. A. Golozar, S. Mallakpour, A. Ashrafi,

Production and Characterization of Copolymer Coatings of Pyrrole and N-Methylpyrrole on Mild Steel, Produced by Electropolymerization from T4SNa Aqueous Solution,

UK CORROSION 2002,

22-24 October 2002, Wales, England
