

## 1- MU\_FSCI\_CHEM\_ PHYS \_DATA\_ Asem.Atea

Name : Asem A.Atiea

### DATE OF BIRTH: 12/11/1959 PRESENT POSITION:

Associate Professor of Physical Chemistry, Chemistry Department, Faculty of Science, Menoufia University, Egypt (from 25.06.2000 till now).

### **PREVIOUS POSITIONS:**

Demonstrator of Chemistry (01/01/1984 - 13/01/1988). Assistant Lecturer of Chemistry (13/01/1988 - 25/07/1993). Lecturer of Physical Chemistry (25/07/1993 - 25/06/2000).

### **MAILING ADDRESS:**

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## ACADEMIC QUALIFICATIONS:

B.Sc. (Chemistry) - 1981M.Sc. (Chemistry) - 1987Ph.D. (Physical Chemistry) - 1993

### **PROFESSIONAL EXPERIENCE:**

09/06/1990 - 09/12/1992 Research Assistant in Chemistry - Ph.D. Program, University of Utah, USA.

09/6/1993 - 01/09/1994

Teaching of surface and catalysis chemistry for under and post graduate studies, Faculty of Science, Menoufia University.

01/09/1994 - 31/12/1995 Post Doctoral Research Fellow (Chemistry), University of Utah, USA.

# 2- MU\_FSCI\_CHEM\_ PHYS \_LINK\_ Asem.Atea

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## **AREAS OF RESEARCH ACTIVITY:**

Adsorption from solutions, minerals processing, flotation, recycling, surfactants, assembling and wetting of monolayers, catalysis, contact angle, corrosion inhibitors, ion-exchange resins, waste and drinking water treatment.

### **PEER REVIEWER FOR:**

- J. Separation and Purification Technology
- J. Reactive and Functional Polymers
- J. Hazardous Materials
- J. Hydrometallurgy
- J. Langmuir

## **COMPUTER SKILLS**:

Most text editing and spreadsheet software.

#### **List of Publications**

- [1] A. Yehia, <u>A.A. Atia</u> and B.G. Ateya, Effects of interfacial adsorption on mineral floatability, *Proceeding of the XX-IMPC*, Aachen, Germany, 21-26 Sept. (1997) 119-127.
- [2] A.Yehia, <u>A.A. Atia</u> and B.G. Ateya, Adsorption of sulphonate on fluorite single crystals as examined by in-situ FT-IR internal reflectance spectroscopy, *Ads. Sci. Technol.* 15 (9) (1997) 685-694.
- [3] A. Yehia, <u>A.A. Atia</u>, and B.G. Ateya, Effects of lateral interaction on the adsorption of surfactants at the air-water interface, *Afinidad LV* (473) (1998) 40-44.
- [4] A. Yehia, <u>A.A. Atia</u>, and B.G. Ateya, Comparative adsorption of cationic and anionic surfactants on fluorite, *Ads. Sci. Technol.* 18 (6) (1998) 431-438.
- [5] M.R. Yalamanchill, <u>A.A. Atia</u>, and J.D. Miller, Analysis of interfacial water at hydrophobic surfaces by internal reflection spectroscopy, *Proceeding of the CIM 34<sup>th</sup> Annual Conference of Metallurgists*, Vancouver, British Columbia, August 19-23 (1995).
- [6] J. Drelich, <u>A.A. Atia</u>, M.R. Yalamanchili, and J.D. Miller, Formation and wetting characteristics of self-assembled layers of unsaturated carboxylic acids at a fluorite surface, *Colloid Interace Sci.* 178 (1996) 720-732.
- [7] M.R. Yalamanchili, <u>A.A. Atia</u>, and J.D. Miller, Analysis of interfacial water at a hydrophilic silicon surface by In-situ FTRI/internal reflection spectroscopy, *Langmuir* 12 (1996) 4176-4184.
- [8]<u>A.A. Atia</u>, and N.R. Radwan, Adsorption of different surfactants on kaolinite, *Ads. Sci. Technol.* 15 (8) (1997) 619-626.
- [9] <u>A.A. Atia</u>, Flotation of resinite from high ash coal, *Afinidad LVI* (479) (1999) 45-51.

- [10] M.M. Saleh and <u>A.A. Atia</u>, Removal of some surfactants from dilute aqueous solutions using charcoal, *Ads. Sci. Technol.* 17 (1) (1999) 53-64.
- [11] N.R.E. Radwan, <u>A.A. Atia</u>, and A.M. Youssef, Preparation of porous alumina through precipitation of aluminum hydroxide in presence of surfactants, *Ads. Sci. Technol.* 17 (7) (1999) 523-531.
- [12] A.M. Donia, N.R. Radwan and <u>A.A. Atia</u>, Preparation of mixed Co and Cu oxides via Thermal decomposition of their oxalates, and study of their catalytic properties, *Thermal Analysis and Calorimetry* 16 (2000) 249-261.
- [13] <u>A.A. Atia</u>, Adsorption of silver(I) and gold(III) on resins derived from bisthiourea and application to retrieval of silver ions from processed photo films, *Hydrometallurgy* 80 (2005) 98-106.
- [14] <u>A.A. Atia</u>, Studies on the interaction of mercury(II) and uranyl(II) with modified chitosan resins, *Hydrometallurgy* 80 (2005) 13-22.
- [15] <u>A.A. Atia</u>, A.M. Donia and A.M. Yousif, Comparative study on the recovery of silver(I) from aqueous solutions using different chelating resins derived from glycidyl methacrylate, *Appl. Polym. Sci.* 97 (2005) 806-812.
- [16] A.M. Donia, <u>A.A. Atia</u> and K.Z. Elwakeel, Selective separation of mercury(II) using a synthetic resin containing amine and mercaptan as chelating groups, *React. Funct. Polym.* 65 (2005) 267-275.
- [17] <u>A.A. Atia</u>, A.M. Donia and K.Z. Elwakeel, Adsorption behaviour of non-transition metal ions on a synthetic chelating resin bearing iminoacetate functions, *Sep. Purif. Technol.* 43 (2005) 43-48.
- [18] A.M. Donia, <u>A.A. Atia</u>, H.A. El-Boraey and D. Mabrouk, Uptake studies of copper(II) on glycidyl methacrylate chelating resin containing Fe<sub>2</sub>O<sub>3</sub> particles, *Sep. Purif. Technol.* 49 (2006) 64-70.
- [19] <u>A.A. Atia</u> and M.M. Saleh, Inhibition of acid corrosion of steel using cetylpyridinum chloride, *Appl. Electrochem.* 33 (2003) 171-177.

- [20] <u>A.A. Atia</u>, A.M Donia and A.E. Shahin, Studies on the uptake behavior of a magnetic Co<sub>3</sub>O<sub>4</sub>-containing resin for Ni(II), Cu(II) and Hg(II) from their aqueous solutions, *Sep. Purif. Technol.* 46 (2005) 208-213.
- [21] A.M. Donia, <u>A.A. Atia</u> and K.Z. Elwakeel, Gold(III) recovery using synthetic chelating resins with amine, thio and amine/mercaptan functionalities, *Sep. Purif. Technol.* 42 (2004) 111-116.
- [22] <u>A.A. Atia</u>, A.M. Donia, S.A. Abou-El-Enein and A.M. Yousif, Studies on uptake behaviour of copper(II) and lead(II) by amine chelating resins with different textural properties, *Sep. Purif. Technol.* 33 (2003) 295-301.
- [23] A.M. Donia, <u>A.A. Atia</u>, H.A. El-Boraey and D. Mabrouk, Adsorption of Ag(I) on glycidyl methacrylate/N,N'-methylene bisacrylamide chelating resins with embedded iron oxide, *Sep. Purif. Technol.* 48 (2006) 281-287.
- [24] <u>A.A. Atia</u>, A.M. Donia and A.M. Yousif, Synthesis of amine and thio chelating resins and study of their interaction with zinc(II), cadmium(II) and mercury(II), *React. Funct. Polym.* 56 (2003) 75-82.
- [25] <u>A.A. Atia</u>, N.R. Radwan and A.M. Donia, Comparative studies on catalytic properties of metal oxides of silver, nickel and zinc, *Afinidad* 496 (2001) 431-436.
- [26] <u>A.A. Atia</u> and M.M. Saleh, Effect of structure of the ionic head of cationic surfactant on its inhibition of acid corrosion of mild steel, *Appl. Electrochem.* 36 (2006) 899-905.
- [27] <u>A.A.Atia</u>, Fatma M. Farag and A.M. Youssef, Studies on the adsorption of dodecylbenzensulfonate and cetylpyridinium bromide at liquid/air and bentonite/liquid interfaces, *Colloids & Surfaces A* 278 (2006) 74-80.
- [28] <u>A.A. Atia</u>, Synthesis of a quaternary amine anion exchange resin and study its adsorption behaviour for chromate oxyanions, *J. Hazard. Mater.* B137 (2006) 1049-1055.

- [29] <u>A.A. Atia</u>, A.M. Donia, S.A. Abou-El-Enein and A.M. Yousif, Effect of chain length of aliphatic amines immobilized on a magnetic glycidyl methacrylate resin towards the uptake behaviour of Hg(II) from aqueous solutions, *Sep. Sci. Technol.* 42 (2007) 1-18.
- [30] <u>A.A. Atia</u>, A.M. El-Nahas, A.M. Marie, L.D. Al Mahdy, Adsorption of oleic acid on silica gel derived from rice ash hulls: Experimental and theoretical studies, *Ads. Sci. Technol.* 24 (9) (2006) 797-814.
- [31] A.M. Donia, <u>A.A. Atia</u> and K.Z. Elwakeel, Recovery of gold(III) and silver(I) on a chemically modified chitosan with magnetic properties, *Hydrometallurgy* 87 (2007) 197-206.
- [32] A.M. Donia, <u>A.A. Atia</u> and K.Z. Elwakeel, Selective separation of mercury(II) using magnetic chitosan resin modified with Schiff's base derived from thiourea and glutaraldehyde, *J. Hazard. Mater.* 151 (2008) 372-379.
- [33] <u>A.A. Atia</u>, A.M. Donia and A.M. Yousif, Removal of some hazardous heavy metals from aqueous solution using magnetic chelating resin with iminodiacetate functionality, *Sep. Purif. Technol.* 61 (2008) 348-357.
- [34] <u>A.A. Atia</u>, A.M. Donia and M.M. Elhawary, Effect of crosslinker type and embedded magnetite on the uptake behaviour of amine containing glycidyl methacrylate resins towards iron(III), *Sep. Sci. Technol.* 43 (2008) 403-419.
- [35] <u>A.A. Atia, A.M. Donia and H.A. Awed, Synthesis of magnetic chelating resins functionalized with tetraethylenepentamine for adsorption of molybdate anions from aqueous solutions, *J. Hazard. Mater.* (2007) in press: doi.10.1016/j.jhazmat 2007.11.035.</u>
- [36] A.M. Donia, <u>A.A. Atia</u> and A.M. Heniesh, Efficient removal of Hg(II) using magnetic chelating resin derived from copolymerization of bisthiourea/thiourea/glutaraldehyde, *Sep. Purif. Technol.* (2007) in press: doi:10.1016/j.seppur.2007.07.045.

[37] <u>A.A. Atia</u>, Adsorption of chromate and molybdate by cetylpyridinium bentonite, *Appl. Clay Sci.* (2007) in press: doi:10.1016/j.clay.2007.09.011.