



1. PERSONAL DATA

NAME: Hany Mohamed Ahmed AbdelDayem

Date of Birth: 1 July 1968

Place of Birth: Cairo, Egypt

Address: Chemistry Department, Faculty of Science, Ain Shams University, 11566 Cairo, Egypt. Tel: +202-22346579 or +20121003307 or +966-35800472, +966-554788700

Present address: Department of Chemistry, College of Science, King Faisal University, Al-Hasa, P.O. Box 380, Hofuf 31982, Saudi Arabia

e-mail: monamohus@yahoo.com

Family Status: Married Children: Two

2. ACADIMEIC HISTORY (Education)

Fulbright postdoctoral (2004) University of Pittsburgh, chemical and petroleum Engineering Department PA, USA

Auf Postdoctoral (2003) University Catholique de Louvain, Louvain-la-Neuve, Belgium.

Doctorat in Sciences (September 2001) (Grand Distnction) Université Catholique de Louvain, Louvain-la-Neuve, Belgium

DEA (September 1999) Chemistry (Distinction), University Catholique de Louvain, Louvain-la-Neuve, Belgium.

M.Sc. (November 1994) Chemistry) Ain Shams University, Cairo, Egypt

B.Sc. (May 1989) Chemistry (Excellent with first class honor degree), Ain Shams University, Cairo, Egypt.

3- EMPLOYMENT HISTORY

Demonstrator, (**November 1989 – December 1994**) Department of Chemistry, Faculty of Science, Ain Shams University, Cairo, Egypt.

Chemistry Assistant Lecturer, (**December 1994 – October 2001**), Department of Chemistry, Faculty of Science, Ain Shams University, Cairo, Egypt.

Assistant Professor of Chemistry, (**October 2001**) Department of Chemistry, Faculty of Science, Ain Shams University, Cairo, Egypt.

4- Scientific Activities

4.1. Membership in Scientific societies

The William J. Fulbright Binational Commission (USA)
Royal Society des Chimie Belge (Belgium)
Agence Universite de Francophone
Alexandrai Biblotque
Egyptian Society for Surfaces and Catalysis (Egypt)
Editorial team of Journal of Chemical Engineering and Material Science

4.2. AWARDS

William J. Fulbright Scholarship, University of Pittsburgh, PA, USA (2003-2004)
Agency Universitaire de la Francophonie Postdoctoral Fellowship, Université Catholique de Louvain, Belgium, /2003-2004.
Egyptian PhD Fellowship, University Catholique de Louvain, Belgium, 1997-2001.

4.3. Projects

- Production of H₂ by the Partial Oxidation of Methanol by KACST 2009, انت-126-29, 2009.
- Design of mixed oxides Catalysts for selective gas phase oxidation of alkanes
Phase 1: Selective oxidative Dehydrogenation of Cyclohexane, Phase 2: Selective oxidation of propane, (CFP) CoRE-PRP-6, by King Fahd University of Petroleum and Minerals (KFUPM) 2008.
 - Improving Methods of Synthesis of Quinoline as an Active Substance of Leishmaniasis Drugs by using a New Family of Palladium-zero complexes. Kingdom of Saudi Arabia Ministry of Higher Education King Faisal University, Deanship of Scientific Research. Project no. 10096, 2009.
- Catalytic Polymerization of Methylmethacrylate using Different Organometallic complexes, Kingdom of Saudi Arabia Ministry of Higher Education King Faisal University, Deanship of Scientific Research. Project no. 9083, 2008.
- Selective Oxidation of Light Alkanes to Valuable Oxygenates Petrochemicals
Part I: Discovery of new catalytic materials for selective oxidation of Propane and Cyclohexane and kinetics of the reactions, Kingdom of Saudi Arabia Ministry of Higher Education King Faisal University, Deanship of Scientific Research. Project no. 7051, 2006.
- “Discovery of a new families of transition metal oxide hydrides of a specific electronic, magnetic and catalytic properties” Hany M. AbdelDayem, Fulbright Binational Commission Fullbright awarded Research project 2003-2004.
- “Selective Oxidation of light alkane” INCO – COPERNICUS program. Joint Research Program. Contract n° ERBIC15-CT96-0725, my Ph.D thesis was carried out in this European research program

4.4. CONFERENCES AND WORKSHOPS (Attendance)

1. 5th Ibn Sina International conference pure and applied Heterocyclic Compound, 9-12 December (1995), Cairo, Egypt
2. DGMK Conference “Selective Oxidations in Petrochemistry”, 8-9 October (1998), Hamburg-Reinbek, Germany.
3. Day of the Doctorands, , Department of Chemistry, *Université Catholique de Louvain*, 15 May (1998), *Louvain-la-Neuve, Belgium*
4. Second Day of the Doctorands, 15 May (1998), Louvain-la-Neuve, Belgium
5. Physico-Chimie et Analyse des Surfaces Workshop, 10 december (1999), Louvain-la-Neuve, Belgium
6. First Meeting of young chemists “Society Royale de Chemie Belgium ”, 1-3 Mars (2000), *Borzée, Belgium*
7. Seventh International Symposium “Scientific Bases for the Preparation of Heterogeneous Catalysts” 1-4 September (1998), *Louvain-La-Neuve, , Belgium*
8. “Day of Basic Catalys”, Facultes Universitaires *NOTRE-DAME DE LA PAIX Namur*, 28 May (2000), *Namur, Belgium*.
9. “Spectroscopy and Catalysis with Oxides and Zeolites”, 4 May (2001), *Louvain-La-Neuve, Belgium*
10. 5th International Conference on Spillover, 9-12 September (2001), *Saint-Lorenz, Madrid, Spain*
11. 4th World Congress on Oxidation Catalysis, 16-21 September (2001), *Berlin Germany*
12. Work shop in Feature of Petroleum Industries I Middle East”, 22 April (2002), *Cairo, Egypt*
13. The 7th International Conference and Exhibition on Chemistry in Industry, CHEMINDIX 2007, Catalysis in Refining & Petrochemicals, 26-28 March (2007), *Manama, Bahrain,*
14. 17th Annual Saudi Arabia-Japan Symposium, Catalysis in Petroleum Refining & Petrochemicals , 11-12 November (2007), *Dhahran, Saudi Arabia..*
15. 18th Annual Saudi Arabia-Japan Symposium, Catalysis in Petroleum Refining & Petrochemicals , 16-17 November (2008), *Dhahran, Saudi Arabia..*
- 16- 19th Annual Saudi Arabia-Japan Symposium, Catalysis in Petroleum Refining & Petrochemicals , 16-17 November (2008), *Dhahran, Saudi Arabia..*
- 17- The Fourth Saudi Science Conference, 21 to 24 March 2010. *Al-Madinnah Al-Munawwarah, Saudi Arabia.*

- **4.5. books Editing**

I. “**New Trends for Future of Petroleum Technology**”, Editors, Hany M. AbdelDayem and L. Petrov, Publisher: **Springer**:(accepted proposal, in press)

II. **Applied Chemical Kinetics**, Hany M. AbdelDayem, Publisher: Translation, Authorship& Publication Center, King Faisal University, Ministry of Higher Education, , Kingdom of Saudi Arabia (Accepted project, in final form)

5- List of PUBLICATIONS

- 1- Green Polymerization Method: Catalytic Polymerization of Methylmethacrylate using Nickel phthalocyanine in water, Hany M. AbdelDayem and Shar El-Shihry, Fourth Saudi Science Conference, Al-Madinah Al-Munawwarah, KSA, March 21 - 24, 2010
- 2- Modifications in the Phase Transition and Catalytic Performance of α -NiMoO₄ in Oxidation of cyclohexane by γ -Irradiation, Hany M. AbdelDayem, Salwa A. Sadek, Mohamed Al-Omair, 6th World Congress of Oxidation, 6th World Congress on Oxidation Catalysis, 5-10 July, 2009 Lille-France.
2. Partial Oxidehydrogenation of Cyclohexane to Cyclohexene over Nickel Supported Catalysts Modified by Rare-Earth Metal Oxides Hany M. AbdelDayem, Mohamed A. Alomair, Salwa S. Sadek and Hosham Samir, 19th Annual Saudi Arabia-Japan Symposium, Catalysis in Petroleum Refining & Petrochemicals , 7-8November (2009), Dhahran, Saudi Arabia
3. 'How does γ -Irradiation Influence the Phase Transition of α -NiMoO₄? Hany M. AbdelDayem, Salwa A. Sadek, Thermochimca. Acta. 473 (2008) 96.
4. 'Phase Composition and Catalytic Activity of α -NiMoO₄ Reduced with Hydride Anion, Hany M. AbdelDayem and Mohamed Al-Omair, Ind. Eng. Chem. Res. 47 (2008) 1011.
5. Synthesis of Stable PMMA Against γ -Irradiation and Thermal Degradation Using Cobalt Tetraphenyl Porphyrin Catalyst" oral presentation at the upcoming symposium on Catalysts in Petroleum Refining & Petrochemicals at KFUPM, Dhahran November 16-17, 2008.
6. " Effect of Cobalt Tetraphenyl Porphyrin as a Catalyst for the Synthesis of PMMA Stable Against Irraditation and Thermal Degradation" Mohamed A. Mekewi, Ahmed Shebl El-Sayed, Hany AbdelDayem and Sherif Moussa" Ain Shams Science Bulletin, 45 (2007) 90.
7. 'Platinum-Copper on Carbon Catalyst Synthesized by Reduction with Hydride Anion
8. INITIAL FINDINGS ON REACTIVITY AND DISPERSION CHARACTERISTICS' Hany M. AbdelDayem, Platinum Metals Rev. 51 (3) (2007) 138.
9. "Dynamic Phenomena during Reduction α -NiMoO₄ in Different Atmospheres: In situ Thermo-Raman Spectroscopy Study" Hany M. AbdelDayem, Ind. Eng. Chem. Res. 46 (2007) 2427.
10. "Physicochemical and Reactivity Studies on Polystyrene-Cu/Al₂O₃ Catalysts: An attempt to control copper dispersion" Hany M. AbdelDayem, Hamdi A. Hassan, Salah A. Hassan, Journal Dispersion Science Technology 28 (2007)6.
11. "Catalytic and physical characteristics of axially modified cobalt (III) tetraphenyl porphyrin immobilized on chemically different supports". Salah A. Hassan, Hamdi A. Hassan, Khaled M. Hashem and Hany M. Abdel Dayem, Applied Catalysis A: 300 (2006) 14.
12. "Structure and Reactivity of V₂O₅/Al₂O₃ Catalyst modified by Cerium in Oxidative Dehydrogenation of Cyclohexane" Hany M. AbdelDayem, Adsorp. Sci. and Technol. 22 (9) (2004) 755.

13. "New Trends and Future of Catalytic Oxidation Processes in Petrochemicals," Hany M. AbdelDayem, "Workshop in FUTURE of the Petroleum Industries in Middle East", (Cairo) (2002), p. 60-64 (Oral presentation)
14. "Enhancement of the Catalytic Performance of NiMoO₄ and Modification of the Kinetic Parameters of Oxidative Dehydrogenation of Propane over NiMoO₄/Sb₂O₄ Biphase Catalyst by Oxygen Spillover," H.M. AbdelDayem and P. Ruiz, *Stud. Surf. Sci. Catal.* 138 (2001) 363.
15. "Dynamic Phenomena and Catalytic Reactivities of Oxide Surfaces," E.M. Gaigneaux, H.M. AbdelDayem, E. Godard and P. Ruiz, *Appl. Catal. A* 202 (2002) 265.
16. "Dynamic Processes during Oxidation Reactions: Modification of the Number of Selective Sites by Addition of Gas Dopants and by Addition of an External Oxide Phase," H. M. AbdelDayem, F. Dury, F. Christiaens, E.M. Gaigneaux and P. Ruiz, 17th International Symposium on Chemical Reaction Engineering, Hong Kong, China, August 2002 (oral presentation)
17. "Modification of the Kinetics in the Two-Step Oxidation of Propane to Acrolein: Role of an Added Oxide Phase," H.M. AbdelDayem, F. Christiaens, P. Ruiz and B. Delmon, '4th World Congress on Oxidation Catalysis' (Berlin), Book of Extended Abstract, Vol. I (2001) 183-186.
18. "Kinetics of oxidative dehydrogenation of propane over NiMoO₄/Sb₂O₄ biphasic catalyst", H. M. AbdelDayem, F. Christiaens and P. Ruiz, 4th World Congress on Oxidation Catalysis' (Berlin), Germany, Last minute information, (2001).
19. "Oxidative dehydrogenation of propane over α -Sb₂O₄/NiMoO₄ as a function of Mo coordination in NiMoO₄: a combined confocal Raman Imaging and reaction kinetic study", H. M. AbdelDayem and P. Ruiz, Symposium 9: Catalytic Reaction and Reactor Engineering, 5th European Congress on Catalysis, (Limerick) Ireland (2001) p.412.
20. "Mastering the Chemical State of Mo at the Surface of Oxide Catalysts in the Selective Oxidation of Hydrocarbons: Towards a Fine Optimization of the Catalytic Performance," E.M. Gaigneaux, M.-L. Naeye, H.M. AbdelDayem, E. Godard, P. Ruiz and B. Delmon, *Stud. Surf. Sci. Catal.* 130A (2000) 1697.
21. "Catalytic Cooperation in Oxidative Dehydrogenation of Ethane and Propane over Mo-V-O Catalyst," T. Osawa, P. Denruyter, H.M. AbdelDayem, E. Godard, P. Ruiz and B. Delmon, XVIII Simposio Ibero-Americano de Catalise (Portugal) (2000) (oral presentation).
22. "Selective oxidation of propene into acrolein on biphasic catalysts synergetic effect and kinetic of reaction", Hany.M. AbdelDayem, P. Ruiz and B. Delmon, Journées de rencontre des Jeunes Chimistes, Societe Royale de Chimie, Boezee, Belgium, (2000) p.96.
23. Optimizing the performances of oxide catalysts in selective oxidation of hydrocarbons by tuning the chemical state of superficial Mo atoms", E. M. Gaigneaux, E. Godard, H.M. AbdelDayem, P. Ruiz and B. Delmon, Assemblee Generale Annuelle de la Societe Royale de Chimie, UCL- Louvain-la-Neuve, Belgium, (2000) p.111.
24. "Structural Characterization of Bi-Nuclear Cobalt (III) Axial-Methyl Alcohol Hydrochloric Acid Tetraphenyl-Porphyrin Complex," K.M.E. Hashem, H.A. Hassan, H. M. AbdelDayem and Salah A. Hassan, *J. Coord. Chem.* 48 (1999) 191.
25. "A New Dynamic Kinetic Model Based on the Remote Control Mechanism to Fit Experimental Data in Selective Oxidation on Biphasic Oxide Catalysts," Hany M. AbdelDayem, Day of the Doctrand, Universite Catholique des Louvain (louvain-La- Neuve) Belgium, 1, (1999).

26. Modification of the kinetic parameters of selective oxidation of propene into acrolein on biphasic catalyst by action of oxygen spillover”, Hany M. AbdelDayem, Second day of doctorands, Universite Catholique des Louvain (louvain-La-Neuve) Belgium, 6, (1998).
27. “A New Kinetic Model Based on the Remote Control Mechanism to Fit Experimental Data in Selective Oxidation of Propene into Acrolein on Biphasic Oxide Catalysts,” H.M. AbdelDayem, P. Ruiz, F.C. Thyron and B. Delmon, Proc. Of the DGMK Conference on Selective Oxidation in Petrochemistry (Hamburg-Reinbek) 1 (1998) 45-52. (Oral Presentation).
28. “Structural Speculation of Cobalt- Tetraphenyl Prophyrine Specially Prepared for Catalytic Purposes”, Khaled M. E. Hashem, Hamdi A. Hassan, Hany. M. AbdelDayem, Salah A. Hassan, Proc. Of 5th Ibn Sina International Conference on Pure and Applied Hetrocyclic Chemistry,1995, p311.
29. “Catalytic and physical characteristics of dispersed Cobalt- Tetraphenyl Prophyrine on different supports”, Salah A. Hassan, Hamdi A. Hassan, Khaled M. E. Hashem and Hany M. AbdelDayem, Proc. Of 5th Ibn Sina International Conference on Pure and Applied Hetrocyclic Chemistry ,(1995) p314.