CURRICULUM VITAE



Name Gulbeniz Forename Mukhtaroya

Position Doc. PhD., leading researcher of "Catalytic cracking and pyrolysis" laboratory of

the Institute of Petrochemical Processes of National Academy of Sciences of

Azerbaijan

Institution Gazi University, Ankara, Turkey, Faculty of Chemistry

Permanent

address Javanshir street 34 apt.25, Khatai district, Baku Az 1027, Azerbaijan Republic,

Phone: +994558278036

Place of birthMingechevir, AzerbaijanDate of birth22 September 1974

Citizenship Azerbaijani

Degrees Graduate: July 1997, Gazi University, Ankara, Turkey, Faculty of Chemistry

Master: September 2001, Gazi University, Ankara, Turkey, Faculty of

Chemistry

PhD: May 2010, Institute of Petrochemical Processes, of National Academy of Sciences of Azerbaijan, Baku, in Chemistry and Technology of Fuel *Title* Thermocatalytical cracking of heavy petroleum residues in the presence of suspended catalysts in the different gaseous atmospheres, Supervisers:

Akademician, Prof., Dr. M.I. Rustamov; Dr.. Kh.I. Abad-zade

Docent: May, 2014.

Previous Positions: Institute of Petrochemical Processes, Baku: 1998-1999 Chemist

Turkey, Ankara, Gazi University: 1999-2000 lecturer

Turkey, Ankara, Education College:1999-2001 instructor in chemistry

Institute of Petrochemical Processes, Baku: 2003-2004 Chemist

2004-2005 junior researcher

2005-2010 researcher

2010-2011 senior researcher 2011- leading researcher

Experience: Catalytic processes (hydrocracking, catalytic cracking,

hydroisomeryzation, hydroadsorption, environmental catalysis)

Prizes: The Prize of The Institute of Petrochemical Processes on 2012

Publications 79 papers : among them

- 20- in Azerbaijan journals,
- 15- in International journals
- 31 Oral Presentations in International Conferences
- 12 Oral Presentations in Russian Conferences
- 1 Patent

Participate in a international conferences: 2011, Turkey, Erzurum.

2012, Turkey Mugla, Fehtiye.

2013, Turkey, Istanbul.

2013, Russia, Sankt-Peterburg

2014, Egypt, Cairo

2014, Russia, Moscow

2014, Turkey, Izmir

2014, Turkey, Istanbul

2015, Egypt, Hurgada

Projects: 2 Azerbaijan Projects with SOCAR, 2 governmental programs

Member of Scientific Boards - Member of the Scientific Council of Institute of Petrochemical Processes

-Scientific Secretary of the Scientific Seminar of Institute of

Petrochemical Processes

LIST OF PUBLICATIONS

I. Papers in Azerbaijan journals

- 1. Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S. The deep refining of mazout // «Processes of petrochemistry and petroleum refining», 3(26)2006, p. 22-29.
- 2. Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S., Kasumova Z.A. Production of ecologically clean automobile gasoline at Oil Refinery named after H.Aliyev // «Processes of petrochemistry and petroleum refining», 3(26)2006, p. 36-42.
- 3. Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S., Kasumova Z.A., Efendiyeva N.Kh. Hydrocracking of mazout in the presence of suspended catalyst / «Processes of petrochemistry and petroleum refining», 2(29)2007, p.46-55
- 4. Abad-zade Kh.I., Mukhtarova G.S., Kasumova Z.A., Eyubova Kh.T., Rustamov M.I. Purification of the mixture of catalytic heavy gasoline with diesel fraction from sulphur by hydrogenation / Azerbaijan Oil Economy, № 10, Baku, 2009. p.28-33

- **5.** Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Kasumova Z.A., Rustamov M.I. The way of solving the problem of decreasing the content of benzene in reformate down to 0,5% / Processes of petrochemistry and petroleum refining 11,3(43), 2010.
- **6.** Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S., Ismayilov E.G., Abbasov Y.A., Huseynova R.I. Study of the coked catalysts of mazout hydrocracking by the method of ferromagnetic resonance / Chemical Problems 2010.№4
- **7.** Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S Development of technology of process of mazut refining. / Proceedings of Institute of petrochemical Processes, 2010, p.7-34.
- **8.** Mukhtarova G.S. Utilization of various polymeric wastes through their joint hydrocracking with mazout / Chemical Problems 2011, №2, p.250-255.
- 9. Mukhtarova G.S. Thermocatalytic cracking of mazout in the presence of suspended catalyst in the atmosphere of CO₂ / Processes of petrochemistry and petroleum refining 2011, №3, p.183-188.
- **10.** Mukhtarova G.S., Kasumova Z. A., Efendiyeva N.Kh., Sadıgova E.İ., İbrahimov H.Dj., Rustamov M.I Destructive hydroisomerization of catalitic cracking gasoline over bifunctional catalyst / Processes of petrochemistry and petroleum refining 2012, №1(49), p.68-73.

Patent: Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S., Piriyev N.N., Kadirov Kh.G., Method of obtaining light petroleum product // Patent i 2010 0016, 2010 of Azerbaijan Republic

II. Papers in international journals

- 1. Guler Somer, G.S. Guliyeva (G.S.Mouktarova) Guler Ekmekci, Olcay Sendil Simultaneous determination of copper, lead, cadmium, zinc and selenium in cow liver by differential pulse polarography/ Canadian Journal of Chemistry / Rev.Can.Chim. 81 (1): 31-36, 2003
- 2. Abad-zade Kh.I., Mukhtarova G.S., Veliyeva F.M., Kadirov Kh.G. Regularities of hydrocracking of heavy petroleum residua / Chemistry and Technology of Fuels and Oils, 2009, № 4, p. 23-25
- 3. Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S., Piriyev N.N., Kadirov Kh.G., / Development of technology and combined scheme for obtaining ecologically clean gasoline and diesel fuel from Kazakhstan petroleum / Petroleum Refining and Petroleum Chemistry, 2009, № 10,p.8-13

- 4. Abad-zade Kh.I., Mukhtarova G.S., Kuliyev A.D., Γ.C., Huseynova M.E., Kadirov Kh.G. Study of coked catalysts in the process of mazout hydrocracking // Petroleum Chemistry, 2010, № 2, p. 174-176.
- 5. Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S., Kadirov Kh.G., Ibrahimov R.G. Utilization of various polymeric wastes through their joint cracking with mazout / Industrial Production and Use of Elastomers №1, 2012 p.43-46.
- 6. Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S., Ismayilov E.G., Kadirov Study of suspended catalyst of mazout hydrocracking by the method of ferromagnetic resonance / World of Petroleum Products 2012, №1, p.29-31.
- 7. Abad-zade Kh.I., Mukhtarova G.S., Kasumova Z.A., Efendiyeva N.Kh. Destructive hydroisomerization as a method of decreasing benzene content in trade gazoline / Chemistry and Technology of Fuels and Oils, № 2, 2012, p. 31-34.
- 8. Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S. Utilization of various polymeric wastes through their joint cracking with mazout / Petroleum Refining and Petroleum Chemistry , 2012, № 6, p.43-46.
- 9. Rustamov M.I., Abad-zade Kh.I., Mukhtarova G.S., Kadirov Kh.G., Kasumova Z.A., Efendiyeva N.Kh. Rational utilization of polymeric wastes / Chemistry and Technology of Fuels and Oils № 3, 2012, p. 53-56.
- 10.E.Abdullayev,V.Abbasov,A.Tursunbayeva,V.Portnov,G.S.Mukhtarova, H.İbrahimov, Y.Lvov Self-Healing Coatings Based on Halloysite Clay Polymer Composites for Protection of Copper Alloys, ACS Applied Materials & Interfaces, 2013, №5, p.4464-4471.
- 11.Г.С. Мухтарова, З.А. Гасымова , Н.Х. Эфендиева, Х.Д. Ибрагимов В.М. Аббасов Влияние температуры на процесс гидрокрекинга гудрона в присутствии суспендированного природного катализатора, Нефтепереработка и нефтехимия, № 7, 2013.с.6-9.
- 12.Mukhtarova G.S., Ibrahimov H.C., Abbasov V.M. Hydrocracking of goudron in the presence of a suspended natural catalyst, Journal of Chemistry and Chemical Engineering №2. V. 8 (2014) 171–175.

III. Papers in international conferences

1. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G.S.</u> Rational use of ecologially hazardous catalyst waste of the vegetable oils hydrogenation section/ Materials of international scientific conference "Ecology and protection of life activity". Sumgait, November 26 – 27, 2004, p. 119-120.

- 2. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Kasumova Z.A. Thermocatalytic cracking of mazout in the atmosphere of N₂ / Materials of III international scientific conference «Fine organic synthesis and catalysis» dedicated to 85 years jubilee of Azerbaijan State Oil Academy, Baku, december 14 16, 2005, p. 203-204.
- 3. Rustamov M.I., Abad-zade Kh.I, <u>Mukhtarova G.S.</u>, Mamedov Z.Sh., Efendiyeva N.Kh. Improvement of ecological properties of reforming gasoline/ III International Conference «Catalysis: Fundamentals and Application», july 4-8, 2007, Novosibirsk, Russia, p.562-563.
- 4. Abad-zade Kh.I, <u>Mukhtarova G.S.</u> Obtaining of ecologically clean diesel fuel / Abstracts of reports at VII Russian conference «Mechanisms of catalytic reactions" (with international participation), Saint-Peterbursg, july 3 8, 2006, p.165-166
- 5. Abad-zadeh Kh.I, <u>Mukhtarova G.S.</u>, Efendiyeva N.Kh. Deep refining of mazout // Abstracts of reports at VII Russian conference «Mechanisms of catalytic reactions" (with international participation), St.Peterbursg, july 3 8, 2006, p.167-168
- Kuliyev A.D., <u>Mukhtarova G.S.</u>, Abad-zade Kh.I, Rustamov M.I. / Syntesis of highly-dispersed nickel-molybdenum oxide catalyst in the process of carrying out/ I International Conference «Functional nanomaterials and high-purity substances», 29 september 2008, Suzdal
- 7. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Huseynova R.I., Eyubova Kh.T. Thermocatalytic cracking of mazout in the atmosphere of CO₂ // VII Baku International Mamedaliyev petrochemical conference dedicated to 80 years jubilee of Institute of Petrochemical Processes of National Academy of Azerbaijan, Baku, 29 september-2 october 2009, p. 42-43
- 8. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Kuliyev A.D. / Formation of highly-dispersed carbon during the process of hydrocracking of heavy petroleum fractions / XI International Conference «Hydrogen materials study and chemistry of carbon nanomaterials»Yalta, Ukraine, avgust 25-31, 2009, p.390-391
- Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Abbasov Y.A., Akhverdiyev R.B., Ismayilov E.G., Eyubova Kh.T../ Formation of magnetic nano-sized phases in catalysts of mazout hydrocracking under the action of reaction / Azerbaijani-Russian symposium with international participation "Catalysis in solving problems of petrochemistry and petroleum refining", Baku, september 28-30, 2010
- 10. Sadigova E.I., <u>Mukhtarova G.S.</u>, Efendiyeva N.Kh. / Synthesis of bizeolite catalysts based on zeolite and alumosilicate matrix / Azerbaijani-Russian symposium with international

- participation "Catalysis in solving problems of petrochemistry and petroleum refining", Baku, september 28-30, 2010.
- 11. Abad-zade Kh.I., Rustamov M.I., <u>Mukhtarova G. S.</u>, Kadirov K.G., Efendiyeva N.K., Farzullayev T.S., Ibragimov R.H. Development of an efficient method of polymer waste recycling/ International conference "Catalysis for renewable sources: fuel, energy, chemicals", June 28- July 2, 2010, St. Petersburg
- 12. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Kadirov Kh.G., Ibragimov R.H., Abdullayev M.A. Utilizationof Polymer Wastes/ 25th National Chemistry Congress With International Participation, 27.06-02.07. 2011. Erzurum, Turkey, p.127
- 13. Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Ibragimov R.H, Piriyev N.N., Kadirov Kh.Q., Mamedov Z.Sh. Low-level hydrocracking of mixture of baku vacuum strippings with lidht gasoil of coking / IX International Conference "Mechanisms of Catalitic Reactions", St. Petersburg, October 22-25, 2012.
- 14. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Kadirov Kh.G. Utilization of various polymeric wastes through their joint hydrocracking with mazout / Conference of International Association on solid wastes (ISWA) «Advanced technologies of processing and landfilling wastes: landmarks of application and criteria of selection», 31 may– 2 june 2011, Moscow
- 15. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Kazimova A.N. Electrono-microscopic study of interface migration of nickel cations in zeolite-containing Ni-Al-Si catalysts / 6-th All-Russian zeolite conference with international participation «Zeolites and mesoporous materials:achievements and perspectives». june 14-16, 2011, Zvenigorod
- 16. Kasumova Z.A., Djafarov R.P., <u>Mukhtarova G.S.</u>, Efendiyeva N.Kh., ibragimov Kh.D. Optimization of the process of hydrotreatment of mixture of catalytic cracking gasoline and straight-run diesel fuel / VIII Baku International Mamedaliyev petrochemical conference october 3-6, 2012, p. 54-55.
- 17. <u>Mukhtarova G.S.</u>, Efendiyeva N.Kh., Kasumova Z.A., Azizov A.G., ibragimov Kh.D, abbasov V.M. Hydrocracking of goudron over suspended natural catalyst / VIII Baku International Mamedaliyev petrochemical conference october 3-6, 2012, p. 345-346.
- 18. R.H. Ibragimov, Kh.I. Abad-zade, Mukhtarova G.S., Efendiyeva N.Kh., Efendiyeva T.Kh. Increase of conversion and efficiency of catalytic cracking unit Q-43-107 M at Baku Petroleum Refining Plant named after Heydar Aliyev / VIII Baku International Mamedaliyev petrochemical conference october 3-6, 2012, p. 137.

- Mukhtarova G.S. Zaira Kasimova, Nazile Efendiyeva, Khikmet Ibrahimov, Vagif Abbasov Hydrocracking of Heavy Petroleum Residues over Suspended Natural Catalyst / 26 th National Chemistry Congress, Turkey October 1-6, 2012, p. 363.
- 20. <u>Mukhtarova G.S.</u>, Zaira Kasimova, Nazile Efendiyeva, Khikmet Ibrahimov Use of nanotechnologies for obtaining catalysts of hydrocarbons destruction / 26 th National Chemistry Congress, Turkey october1-6, 2012, , p. 364.
- 21. <u>Mukhtarova G.S.</u>, Gasimova Z.A., Efendiyeva N.Kh., Huseynova R.I., Efendiyeva T.Kh., Ibrahimov Kh.D. Hydroisomerization of catalytic cracking gasoline over bifunctional catalyst / IX International Conference "Mechanisms of Catalitic Reactions", St. Petersburg, October 22-25, 2012.
- 22. Mukhtarova G.S., Gasimova Z.A., Efendiyeva N.Kh., Ibrahimov H.C., Asbbasov V.M. Influence of temperature to the hydrocracking process of tar in the presence of suspended nanosized catalysts, 44 World Chemistry Congress, 11-16 August, Istanbul, Turkey, 2013.p.1396.
- 23. Mukhtarova G.S., Gasimova Z.A., Efendiyeva N.Kh., Ibrahimov H.C.Abbasov V.M. Influence of regime parameters to the hydrocracking process of goudron in the presence of suspended nanosized catalysts, PPM-2013, International Porous Powder Materials, SYMPOSIUM, 3-6 september, Izmir, Turkey, p.52.
- 24. Mukhtarova G.S., Gasimova Z.A., Ibrahimov H.C., Abbasov, M.I. Rustamov Purification of catalytic cracking gasoline from sulfur by the hydroadsorption method, 17th International Zeolite Conference, jule, 2013, Moscow.
- 25. Mukhtarova G.S, Efendiyeva N.Kh.,M.A. Abdullayev, Ibrahimov H.C.,Asbbasov V.M. Hydrocracking of goudron in the presence of a nanostructural halloysite, The 17th International Conference on Petroleum, Mineral Resources, Development, 9-11 February, 2014 Cairo, Egipth, s.143.
- 26. G.S Mukhtarova, V.M.Abbasov,H.İ.İbrahImov, R.İ. Huseynova, Kh.T.Eyyubova The investigation of the hydrocracking process of tar with heavy gas oil of catalytic cracking in the presence of high-dispersed halloysite, "International Conference on Thermophysical and Mechanical Properties of Advanced Materials" (THERMAM-2014), 12-15 June 2014, Cesme-Izmir Turkey.p.67.
- 27. G.S Mukhtarova, M.A.Abdullayev,F.A.Babayeva,Z.A.Kasimova,H.C. Ibrahimov, V.M. Abbasov/ Hydrocracking of heavy petroleum residues in the presence of a nanostructural halloysite, XII International Conference on Nanostructured Materials (NANO-2014), July 13-18, 2014 Moscow, Russia, p.1028.

28. G.S Mukhtarova, M.A.Abdullayev, Efendiyeva T.Kh.,H.C. Ibrahimov, V.M. Abbasov/ Influence of temperature to the hydrocracking process of goudron in the presence of nanostructural halloysite/5th EuCheMS Chemistry Congress, İstanbul, Turkey, 31-4 september, 2014.,p.818.

III. Papers in Russian conferences

- Abad-zade Kh.I., <u>Mukhtarova G.S.</u> Obtaining of highly-porous catalysts for hydrocracking of residual fractions / V Russian conference «Scientific bases of preparation and technology of catalysts» Omsk, Russia, September 13 – 16, 2004, p. 48-49.
- Abad-zade Kh.I., Aliyev B.M., <u>Mukhtarova G.S.</u>, Murselzade E.M., Efendiyeva N.Kh. Study of structural characteristics of mazout thermal cracking products by method of NMR // Abstracts of reports at V Republic Conference on chemistry, Tbilisi, september 28 30 2004, p. 78 80.
- 3. Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Hydrocracking of mazout in the presence of suspended catalyst // Abstracts of reports at conference "Molecular design of catalysts and catalysts in the processes of hydrocarbons refining and polymerization", Omsk, Russia, june 14 18, 2005.
- 4. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G. S.</u>, Huseynova M.G., Kuliyev A.D., X-Ray phase study of coked catalysts of mazout thermal cracking // Abstracts of reports at conference «Fundamental science in the interest of critical technologies development» Vlad imir, september 12 14, Russia, 2005 ,p.186-187.
- 5. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G. S.</u>, ismailov E.H., Abbasov Y.A. Ferromagnetic resonance of coked catalysts of mazout hydrocracking // Abstracts of reports at XVIII Mendeleyev congress on general and applied chemistry Moscow, september 23-28, 2007. p.430.
- 6. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G. S.</u>, Huseynova M.G., Kuliyev A.D., Kadirov Kh.G. Formation of highly-dispersed catalysts in the process of mazout hydrocracking / VI Russian conference with participation of CIS countries «Scientific bases of preparation and technology of catalysts», V Russian conference with participation of CIS countries «Problems of catalysts deactivation», september 4-9, 2008, Novosibirsk, p.156-157
- 7. Abad-zade Kh.I., Rustamov M.I., Kuliyev A.D., <u>Mukhtarova G. S.</u>, Huseynova M.G., Efendiyeva N.Kh., Kadirov Kh.G. // Study of coked catalysts in the process of mazout

- hydrocracking / Abstracts of reports at the Third All-Russian conference on nanomaterials-NANO 2009, Yekaterinburg, april 20-24, 2009.
- 8. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G. S.</u>, Aliyev B.M. / Study of structural parameters by method of ^HNMR of diesel fractions of the process of hydrocracking of mazout mixture with polymer wastes / 1-st All-Russian scientific conference "Methods of study of composition and structure of functional materials MISSFM-2009, Novosibirsk, October 11-16, 2009 ,p.171
- 9. Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G. S.</u>, Kadirov K.G., Efendiyeva N.K. Development of technology for utilization of polymeric wastes / I Russian Petroleum Forum. march 14-16, 2011, Moscow, TsMT, Proceedings p.240-243.
- Rustamov M.I., Abad-zade Kh.I., <u>Mukhtarova G.S.</u>, Ahmedov V. Use of nanotechnologies for obtaining catalysts of hydrocarbons destruction / Russian congress on catalysts « RossCatalysts», october 3-7, 2011, Moscow ,p.161.