

# Curriculum Vitae

Mohammad Bagher Ghoshoon

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## Personal Information:

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## Languages:

-Persian (Original Language)

-English

## Education:

### PhD. in Pharmaceutical Biotechnology (2010-2015)

-Department of Pharmaceutical Biotechnology, Faculty of Pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran.

## **Pharm.D. (2004-2010)**

-Department of Pharmaceutical Biotechnology, Faculty of Pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran.

### **Subject of Pharm.D Thesis:**

Cloning and expression of L-asparaginase in *Escherichia coli*

Supervisor: Dr. Younes Ghasemi

### **Subject of PhD Thesis:**

Cloning and expression of extracellular L-asparaginase II enzyme in *Escherichia coli*: whole cell immobilization, experimental design and culture medium optimization

Supervisor: Dr. Younes Ghasemi

## **Publications:**

### **Research Papers:**

1. Ghasemi Y, Afrasiabi N, Ebrahimi N, Ghoshoon MB, Nezafat N, Zamani M, Raei MJ. Cloning, expression and characterization of CYP109B1 gene from *Bacillus subtilis*. *Minerva Biotechnol*, Accepted for publication.
2. Raei MJ, Maghami S, Ghoshoon MB, Zamani M, Mohkam M, Ebrahimi N, Rasoul-Amini S, Ghasemi Y. Molecular cloning, characterization and bioinformatics analysis of CYP152A1 gene from *Bacillus subtilis* in *Escherichia coli*. *Minerva Biotechnol* 2016;28(1):12-8.
3. Ghasemi Y, Hajjghahramani N, Dabbagh F, Ghoshoon MB, Yarahmadi E, Mobasher MA, Montazeri-Najafabady N. Cloning, expression, purification and expression condition optimization of  $\alpha$ -enolase from *Staphylococcus aureus* in *Escherichia coli*. *Minerva Biotechnologica* 2016;28(1):33-8

4. Dabbagh, F., M. B. Ghoshoon, S. Hemmati, M. Zamani, M. Mohkam and Y. Ghasemi. Engineering human urate oxidase: Towards reactivating it as an important therapeutic enzyme. *Current Pharmaceutical Biotechnology* 2016;17(2): 141-146.
5. Ghoshoon, M. B., A. Berenjian, S. Hemmati, F. Dabbagh, Z. Karimi, M. Negahdaripour and Y. Ghasemi. Extracellular Production of Recombinant L-Asparaginase II in *Escherichia coli*: Medium Optimization Using Response Surface Methodology. *International Journal of Peptide Research and Therapeutics* 2015;21(4): 487-495.
6. Zamani M, Berenjian A, Hemmati S, Nezafat N, Ghoshoon MB, Dabbagh F, et al. Cloning, Expression, and Purification of a Synthetic Human Growth Hormone in *Escherichia coli* Using Response Surface Methodology. *Mol Biotechnol.* 2015;57(3):241-50.
7. Ghasemi Y, Yarahmadi E, Ghoshoon MB, Dabbagh F, Hajighahramani N, Ebrahimi N, et al. Cloning, expression and purification of laccase enzyme gene from *Bacillus subtilis* in *Escherichia coli*. *Minerva Biotechnologica.* 2014;26(4):295-300.
8. Ebrahiminezhad A, Rasoul-Amini S, Ghoshoon MB, Ghasemi Y. *Chlorella vulgaris*, a novel microalgal source for L-asparaginase production. *Biocatalysis and Agricultural Biotechnology.* 2014;3(2):214-7.
9. Sadraeian M, Rasoul-Amini S, Mansoorkhani MJK, Mohkam M, Ghoshoon MB, Ghasemi Y. Induction of antitumor immunity against cervical cancer by protein hpv-16 e7 in fusion with ricin b chain in tumor-bearing mice. *International Journal of Gynecological Cancer.* 2013;23(5):809-14.
10. Sadraeian M, Ghoshoon MB, Mohkam M, Karimi Z, Rasoul-Amini S, Ghasemi Y. Modification in media composition to obtain secretory production of STxB-based vaccines using *Escherichia coli*. *Virologica Sinica.* 2013;28(1):43-8.
11. Rasoul-Amini S, Ghasemi Y, Morowvat MH, Ghoshoon MB, Raei MJ, Mosavi-Azam SB, et al. Characterization of hydrocortisone bioconversion and 16S RNA gene in *Synechococcus nidulans* cultures. *Prikladnaia biokhimiia i mikrobiologiya.* 2010;46(2):205-11.

12. Rasoul-Amini S, Ghasemi Y, Morowvat MH, Ghoshoon MB, Raei MJ, Mosavi-Azam SB, et al. Characterization of hydrocortisone bioconversion and 16S RNA gene in *Synechococcus nidulans* cultures. *Applied Biochemistry and Microbiology*. 2010;46(2):191-7.
13. Ghasemi Y, Rasoul-Amini S, Ebrahiminezhad A, Zarrini G, Kazemi A, Mousavi-Khorshidi S, Ghoshoon MB, et al. Halotolerant amylase production by a novel bacterial strain, *Rheinheimera aquimaris*. *Research Journal of Microbiology*. 2010;5(2):144-9.
14. Ghasemi Y, Rasoul-Amini S, Morowvat MH, Ghoshoon MB, Raei MJ, Khoubani S, et al. C-20 ketone reduction of hydrocortisone by rice field microalga *Chlorella vulgaris* MCCC 013. *Chemistry of Natural Compounds*. 2009;45(6):824-8.
15. Ghasemi Y, Mohagheghzadeh A, Moshavash M, Ostovan Z, Rasoul-Amini S, Morowvat MH, Ghoshoon MB, et al. Biotransformation of monoterpenes by *Oocystis pusilla*. *World Journal of Microbiology and Biotechnology*. 2009;25(7):1301-4.
16. Ghasemi Y, Rasoul-Amini S, Morowvat MH, Raei MJ, Ghoshoon MB, Nouri F, et al. Characterization of hydrocortisone biometabolites and 18S rRNA gene in *Chlamydomonas reinhardtii* cultures. *Molecules*. 2008;13(10):2416-25.
17. Ghasemi Y, Rasoul-Amini S, Morowvat MH, Azam SBM, Shokravi S, Mohagheghzadeh A, Ghoshoon MB et al. Bioconversion of hydrocortisone by unicellular microalga *Oocystis pusilla*. *Biotechnology*. 2008;7(2):293-8.
18. Ghasemi Y, Ebrahiminezhad A, Rasoul-Amini S, Zarrini G, Ghoshoon MB, Raei MJ, et al. An optimized medium for screening of L-asparaginase production by *Escherichia coli*. *American Journal of Biochemistry and Biotechnology*. 2008;4(4):422-4.

### **Nucleotide sequences published at Pubmed (NCBI):**

1. Ghasemi Y, Morowvat M H, Mohagheghzadeh A, Rasoul Amini S, Ghoshoon M B, Raei M J, Shokravi S, Soltani N, (2007), PCR amplification of 18S small subunit rRNA of *Scenedesmus obliquus*, isolated from paddy fields of Fars province, **NCBI**, EF564131.

2. Ghasemi Y, Morowvat M H, Mohagheghzadeh A, Rasoul Amini S, Ghoshoon M B, Raei M J, Shokravi S, (2007), PCR amplification of 18S small subunit rRNA of *Chlorella vulgaris*, isolated from south of Iran, **NCBI**, EF564130.
3. Ghasemi Y, Morowvat MH, Rasoul Amini S, Mohagheghzadeh A, Abolhassanzadeh Z, Hamidi M, Ghoshoon MB, Raei MJ, Shokravi S, (2007), PCR amplification of the 18S rRNA gene of *Dunaliella salina*, isolated from Maharlu salt lake of Iran, **NCBI**, EF682841.
4. Ghasemi Y, Abolhassanzadeh Z, Morowvat M H, Rasoul Amini S, Mohagheghzadeh A, Hamidi M, Ghoshoon M B, Raei MJ, (2007), PCR amplification of the 18S rRNA gene of *Dunaliella salina* CCAP 19/18, **NCBI**, EF682843.
5. Ghasemi Y, Morowvat M H, Rasoul Amini S, Mohagheghzadeh A, Ghoshoon M B, Raei M J, Shokravi S, Ostvan Z, Moshavash M, (2007), PCR amplification of 18S small subunit rRNA of *Chlamydomonas reinhardtii*, isolated from paddy fields of Fars province, **NCBI**, EF682842.
6. Ghasemi Y, Ghoshoon M B, Morowvat M H, Rasoul Amini S, Raei M J, Mohagheghzadeh A, Shokravi S, Khalaj A, (2007), Characterization of antimicrobial activity and 16S rRNA gene of *Nostoc muscorum* strain MCCS 003, isolated from paddy fields of Fars Province, **NCBI**, EU192144.
7. Ghasemi Y, Raei M J, Morowvat M H, Rasoul Amini S, Ghoshoon M B, Mohagheghzadeh A, Shokravi S, Soltani N, (2007), Characterization of antimicrobial activity and 16S rRNA gene of *Fischerella ambigua* strain MCCS 004, isolated from paddy fields of Fars Province, **NCBI**, EU192145.
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9. Ghasemi Y, Morowvat M H, Rasoul Amini S, Ghoshoon M B, Raei M J, Mohagheghzadeh A, Abolhassanzadeh Z, Shokravi S, Niknahad H, (2007), Characterization of the 16S rRNA gene of unicellular cyanobacterium *Chroococcus dispersus* strain MCCS 006, isolated from paddy fields in South of Iran, **NCBI**, EU192147.

10. Ghasemi Y, Rasoul Amini S, Morowvat M H, Ghoshoon M B, Raei M J, Mohagheghzadeh A, Shokravi S, Negintaji N, Mosavi Azam SB, Nouri F, Parvizi R, Khoubani S, (2007), Characterization of antimicrobial activity and the 16S rRNA gene of *Synechococcus nidulans* MCCS 008, isolated from paddy fields in Southern Iran, **NCBI**, EU285584.
11. Ghasemi Y, Morowvat M H, Rasoul Amini S, Moshavash M, Ghoshoon M B, Raei M J, Mohagheghzadeh A, Shokravi S, (2008), Characterization of 18S rRNA gene of *Chlorococcum* sp. MCCS 009, isolated from paddy field of Shiraz, **NCBI**, EU374168.
12. Ghasemi Y, Morowvat M H, Rasoul Amini S, Ghoshoon M B, Raei M J, Mohagheghzadeh A, Shokravi S, (2008), Characterization of 18S rRNA gene of *Chlorella vulgaris* MCCS 011, isolated from paddy fields of Fars Province, **NCBI**, EU374169.
13. Ghasemi Y, Morowvat M H, Rasoul Amini S, Mohagheghzadeh A, Ghoshoon M B, Raei M J, Shokravi S, (2008), PCR amplification of 16S rRNA gene of *Oscillatoria splendida* MCCS 019, isolated from soil sample in the Fars province of Iran, **NCBI**, EU621365.
14. Ghasemi Y, Morowvat M H, Raei M J, Ghoshoon M B, Shokravi S, (2008), PCR amplification of 18S rRNA gene from fresh water microalga, *Scenedesmus rubescens* MCCS 018, isolated from south of Iran, **NCBI**, EU621364.
15. Ghasemi Y, Morowvat M H, Ghoshoon M B, Raei M J, Shokravi S, (2008), Characterization of 16S rRNA gene of *Nostoc corneum* MCCS 020, isolated from soil sample in the Fars province of Iran, **NCBI**, EU621366.
16. Ghasemi Y, Rasoul-Amini S, Morowvat M H, Ghoshoon M B, Raei M J, Mosavi- Azam SB, (2008), Microbial metabolism of pinen by immobilized cells of *Oscillatoria amphibia* MCCS 021, **NCBI**, FJ210469.
17. Ghasemi Y, Kazemi A, Ghoshoon M B, Raei M J, Morowvat M H, Ebrahiminezhad A, (2008), Characterization of antibacterial activity and 16S rRNA gene of *Oscillatoria spongelliae*, **NCBI**, FJ392545.
18. Ghasemi Y, Kazemi A, Zarrini G, Kargar M, Rasoul-Amini S, Ghoshoon MB, Raei MJ, Morowvat MH, Ebrahiminezhad A, (2008), Isolation and identification of halophilic lipase-producing bacteria from the Maharlu salt lake in south of Iran, **NCBI**, FJ392547.

19. Ghasemi Y, Ghoshoon MB, Raei MJ, Ebrahiminezhad A, Zarrini G, Rasoul-Amini S, Morowvat MH, Kazemi A, (2008), Cloning, expression and characterization of *Escherichia coli* (BCCS 001) L-asparaginase II, **NCBI**, EU999160.
20. Ghasemi Y, Kazemi A, Zarrini G, Kargar M, Rasoul-Amini S, Ghoshoon M B, Morowvat M H, Raei M J, Ebrahiminezhad A, (2008), Isolation and identification of halophilic lipase-producing bacteria from the Maharlu salt lake in south of Iran, **NCBI**, FJ411178.
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22. Ghasemi Y, Kazemi A, Zarrini G, Kargar M, Ghoshoon M B, Raei M J, Morowvat MH, Ebrahiminezhad A, (2008), Characterization of lipase activity and 16S rRNA gene of *Bacillus subtilis* BCCS 005, **NCBI**, FJ422563.
23. Ghasemi Y, Kazemi A, Zarrini G, Kargar M, Ghoshoon M B, Raei M J, Morowvat MH, Ebrahiminezhad A, Sadeghi M, Abbaszadeh S, Hemayatkhah-Jahromi V, (2008), Characterization of 16S rRNA gene of *Bacillus amyloliquefaciens* BCCS 006, **NCBI**, FJ422564.
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28. Ghasemi Y, Kazemi A, Rasoul-Amini S, Zarrini G, Kargar M, Ghoshoon M B, Morowvat M H, Raei M J, Ebrahiminezhad A, Parsaei-Ghaderabadi K, (2008), Isolation and identification of a halophilic lipase-producing bacterium, *Aeromonas veronii* BCCS 010, from the Maharlu salt lake in south of Iran, **NCBI**, FJ422569.
29. Ghasemi Y, Kazemi A, Rasoul-Amini S, Zarrini G, Kargar M, Ghoshoon M B, Morowvat M H, Raei M J, Ebrahiminezhad A, Parsaei-Ghaderabadi K, (2008), Characterization of 16S small subunit rRNA of a halophilic bacterium, *Bacillus subtilis* BCCS 012, **NCBI**, FJ422570.
30. Ghasemi Y, Kazemi A, Rasoul-Amini S, Zarrini G, Kargar M, Ghoshoon M B, Morowvat M H, Raei M J, Ebrahiminezhad A, Parsaei-Ghaderabadi K, (2008), Bacterial diversity of sediment of the Maharlu salt lake in south of Iran, **NCBI**, FJ422571.
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33. Ghasemi Y, Kazemi A, Rasoul-Amini S, Ghoshoon M B, Morowvat M H, Raei M J, Ebrahiminezhad A, (2008), PCR amplification of the 16S rRNA gene of *Chryseobacterium taeanense* BCCS 016 isolated from the Maharlu salt lake in south of Iran, **NCBI**, FJ422574.
34. Ghasemi Y, Rasoul-Amini S, Kazemi A, Mousavi-Khorshidi S, Zarrini G, Ghoshoon MB, Raei M J, Morowvat M H, Ebrahiminezhad A, (2008), Characterization of amylase activity and 16S rRNA gene of *Halomonas aquamarina* BCCS 017, **NCBI**, FJ422575.
35. Ghasemi Y, Rasoul-Amini S, Kazemi A, Mousavi-Khorshidi S, Zarrini G, Ghoshoon MB, Raei M J, Morowvat M H, Ebrahiminezhad A, (2008), Characterization of 16S small



subunit rRNA of a halophilic bacterium, *Staphylococcus pasteurii* BCCS 018, **NCBI**, FJ422576.

36. Ghasemi Y, Rasoul-Amini S, Mousavi-Khorshidi S, Kazemi A, Zarrini G, Ghoshoon MB, Raei M J, Morowvat M, Ebrahiminezhad A, (2008), PCR amplification of the 16S rRNA gene of *Rheinheimera aquimaris* BCCS 019 isolated from the Maharlu salt lake in south of Iran, **NCBI**, FJ422577.
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40. Ghasemi Y, Rasoul-Amini S, Ghoshoon M B, Raei M J, Mousavi-Khorshidi S, Kazemi A, Morowvat M H, Ebrahiminezhad A, (2008), PCR amplification of the 16S rRNA gene of *Rheinheimera aquimaris* BCCS 023, **NCBI**, FJ422581.
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42. Ghasemi Y, Rasoul-Amini S, Raei M J, Ghoshoon M B, Mousavi-Khorshidi S, Kazemi A, Morowvat M H, Ebrahiminezhad A, Parsaei-Ghaderabadi K, (2008), Isolation and identification of halophilic amylase-producing bacteria from the Maharlu salt lake in southern Iran, **NCBI**, FJ429320.
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identification of halophilic amylase-producing bacteria from the Maharlu salt lake in southern Iran, **NCBI**, FJ429321.

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45. Ghasemi Y, Rasoul-Amini S, Ghoshoon M B, Raei M J, Morowvat M H, Kazemi A, Ebrahiminezhad A, Montazeri-Najafabady N, (2009), Characterization of 16S small subunit rRNA of a halophilic bacterium, *Bacillus subtilis* BCCS 028, **NCBI**, FJ517539.
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51. Ghasemi Y, Rasoul-Amini S, Ghoshoon M B, Raei M J, Ebrahiminezhad A, Morowvat M H, Kazemi A, (2009), Characterization of starch-digesting activity of *Bacillus* sp. BCCS 034, **NCBI**, FJ607328.

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58. Ghasemi Y, Rasoul-Amini S, Ebrahiminezhad A, Raei M J, Ghoshoon M B, Kazemi A and Morowvat M H, (2009), Characterization of 16S small subunit rRNA of a halophilic bacterium, *Bacillus* sp. BCCS 041, **NCBI**, FJ645731.
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60. Ghasemi Y, Rasoul-Amini S, Ebrahiminezhad A, Raei M J, Ghoshoon M B, Kazemi A and Morowvat M H, (2009), PCR amplification of the 16S small subunit rRNA of *Paenibacillus polymyxa* BCCS 042, isolated from the Maharlu salt lake in south of Iran, **NCBI**, FJ645733.

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62. Ghasemi Y, Zarrini G and Rasoul-Amini S, (2009), Characterization of the 16S small subunit rRNA and lipase activity of *Halobacterium* sp. EL 002, **NCBI**, FJ660462.
63. Ghasemi Y, Zarrini G and Rasoul-Amini S, (2009), Characterization of starch-digesting activity and 16S ribosomal RNA gene of *Halobacterium* sp. EL 003, **NCBI**, FJ660463.
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90. Ghasemi Y, Fotooh-Abadi E, Rasoul-Amini S, Alami-Saeid K And Ghoshoon M B, (2009), Bioconversion of carvone by immobilized cells of *Chlorella* sp. MCCS 030, **NCBI**, GQ414513.
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### **Abstracts and Congress presentations:**

- 1) Raei M J, Morowvat MH, Ghoshoon MB, Ghasemi Y, Mohagheghzadeh A, Shokravi S. PCR amplification of cyanobacterial 16S rRNA gene isolated from south of Iran. The 12<sup>th</sup> Seminar of Iranian Pharmacy Students, November, 1-3, 2006, Sari, Iran, 39.
- 2) Ghoshoon MB., Morowvat MH, Ghasemi Y, Rasoul Amini S, Mohagheghzadeh A, Shokravi S, Characterization of antimicrobial activity and 16S rRNA gene of *Nostoc muscorum*, The 13<sup>th</sup> Seminar of Iranian Pharmacy Students, November, 1-3, 2007, Tabriz, Iran, 34.

- 3) Morowvat M H, Raei MJ., Ghoshoon MB., Ghasemi Y, Rasoul Amini S, Mohagheghzadeh A, Shokravi S. *Scenedesmus*, SCP and PCR amplification of 18S rRNA, The 9<sup>th</sup> Iranian Congress of Biochemistry & the 2<sup>nd</sup> International Congress of Biochemistry and Molecular Biology, Shiraz, Iran, Oct.29-Nov, 1, 2007, 179.
- 4) Ghoshoon MB, Morowvat MH, Moshavash M, Shokravi S, Mohagheghzadeh A, Rasoul-Amini S, Ghasemi Y; Metabolism of limonen and characterization of 18s rRNA gene in *Chlorella vulgaris* MCCS 012. 11<sup>th</sup> Iranian Pharmaceutical Sciences Conference (IPSC). August 18-21, 2008, Kerman, Iran, 80.
- 5) Mosavi-Azam SB, Ghoshoon MB, Morowvat MH, Mohagheghzadeh A, Rasoul-Amini S, Ghasemi Y; In vivo bioconversion of carvone and menthone by *Desmodesmus communis* MCCS 010. 11<sup>th</sup> Iranian Pharmaceutical Sciences Conference (IPSC). August 18-21, 2008, Kerman, Iran, 81.
- 6) Yavari F, Ghoshoon MB, Morowvat MH, Mohagheghzadeh A, Zarrini G, Rasoul-Amini S, Ghasemi Y; Characterization of antibacterial activity and 16S rRNA gene of *Chroococcus dispersus* MCCS 006. 11<sup>th</sup> Iranian Pharmaceutical Sciences Conference (IPSC). August 18-21, 2008, Kerman, Iran, 82.
- 7) Mosavi-Khorshidi S, Kazemi A, Ghoshoon MB, Morowvat MH, Zarrini G, Rasoul-Amini S, Ghasemi Y; Charcterization of halophilic amylase-producing bacteria from the Maharlu salt lake. 11<sup>th</sup> Iranian Pharmaceutical Sciences Conference (IPSC). August 18-21, 2008, Kerman, Iran, 83.
- 8) Khoubani S, Ghoshoon MB, Zarrini G, Rasoul-Amini S, Ghasemi Y; Charcterization of antibacterial activity and 16S rRNA gene of *Nostoc ellipsosporum* MCCS 005. 11<sup>th</sup> Iranian Pharmaceutical Sciences Conference (IPSC). August 18-21, 2008, Kerman, Iran, 83.
- 9) Kazemi A, Ghoshoon MB, Raei MJ, Ebrahiminezhad A, Parasaei-Ghaderabadi K, Kargar M, Zarrini G, Rasoul-Amini S, Ghasemi Y, Morowvat MH; Isolation And Molecular Identification Of *Bacillus* Spp. Producing Lipase From The Maharlu Salt Lake. 2<sup>th</sup> International Student Conference of Biotechnology, November 15-17, 2008, Tehran, Iran.
- 10) Ebrahiminezhad A, Ghoshoon MB, Raei MJ, Kazemi A, Parasaei-Ghaderabadi K, Kafilzadeh F, Zarrini G, Rasoul-Amini S, Ghasemi Y; An Optimized Medium For Screening L-Asparaginase Producing *Escherichia Coli*. 2<sup>th</sup> International Student Conference of Biotechnology, November 15-17, 2008, Tehran, Iran.
- 11) Parasaei-Ghaderabadi K, Ebrahiminezhad A, Ghoshoon MB, Raei MJ, Kazemi A, Kafilzadeh F, Rasoul-Amini S, Ghasemi Y; Screening of Polyhydroxyalkanoates-Producing Bacteria From Different Contaminated Environments. 2<sup>th</sup> International Student Conference of Biotechnology, November 15-17, 2008, Tehran, Iran.



12) Ghoshoon MB, Raei MJ, Mosavi-Azam SB, Kazemi A, Ebrahiminezhad A, Morowvat MH, Rasoul-Amini S, Ghasemi Y; Crude Petroleum-Oil Biodegradation By Immobilized Cells Of *Chlorella Vulgaris* Mccs 011. 2<sup>th</sup> International Student Conference of Biotechnology, November 15-17, 2008, Tehran, Iran.

13) Raei MJ, Ghoshoon MB, Mosavi-Azam SB, Kazemi A, Ebrahiminezhad A, Morowvat MH, Rasoul-Amini S, Ghasemi Y; Alkane Biodegradation In Immobilized Cells Of *Desmodesmus Communis* Mccs 010. 2<sup>th</sup> International Student Conference of Biotechnology, November 15-17, 2008, Tehran, Iran.

14) Ghoshoon MB, Raei MJ, Ebrahiminezhad A, Kazemi A, Morowvat MH, Rasoul- Amini S, Ghasemi Y; Cloning, expression and characterization of *Escherichia coli* (BCCS 001) L-asparaginase II. 14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 83.

15) Jani M, Kazemi A, Ghoshoon MB, Morowvat MH, Rasoul- Amini S, Ghasemi Y; Biodiesel production from a naturally isolated strain of *Chlorella vulgaris*. 14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 84.

16) Raei MJ, Ghoshoon MB, Ebrahiminezhad A, Kazemi A, Morowvat MH, Rasoul- Amini S, Ghasemi Y; Cloning and expression of L-asparaginase II gene of *Shigella* in *E.coli*. 14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 85.

17) Mosavi-Azam SB, Ebrahiminezhad A, Ghoshoon MB, Jani M, Raei MJ, Parvizi R, Rasoul- Amini S, Ghasemi Y; Screening and characterization of L-asparaginase production by microalgae. The 14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 74.

18) Parvizi R, Mardani Z, Negintaji N, Ghoshoon MB, Morowvat MH, Rasoul- Amini S, Ghasemi Y; Production of long chain omega-3 fatty acids by *Scenedesmus rubescens*. The 14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 75.

19) Mardani Z, Parvizi R, Ghoshoon MB, Raei MJ, Morowvat MH, Rasoul- Amini S, Ghasemi Y; Microalgal metabolisms of some monoterpenoids ketones by immobilized cells culture of *Chlorella vulgaris*. The 14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 77.

20) Khubani S, Yavari F, Mosavi-Azam SB, Ghoshoon MB, Morowvat MH, Rasoul- Amini S, Ghasemi Y; Fatty acid evaluation in a natural isolate of *Chlorella vulgaris*. 14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 78.

21) Yavari F, Khubani S, Parvizi R, Mardani Z, Ghoshoon MB, Morowvat MH, Rasoul- Amini S, Ghasemi Y; PCR amplification of the molecular black box, 16S rRNA from three Cyanobacterial species.14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 79.

22) Raoufi SM, Ghoshoon MB, Raei MJ, Rasoul- Amini S, Ghasemi Y; Biotransformation of testosterone by immobilized cells of *Chlamydomonas reinhardtii*.14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 80.

23) Maghami S, Mosavi-Azam SB, Ghoshoon MB, Raei MJ, Rasoul- Amini S, Ghasemi Y; Oil degradation by immobilized cells of *Synechococcus nidulans*.14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 81.

24) Hosseini H, Kazemi A, Ebrahiminezhad A, Ghoshoon MB, Rasoul- Amini S, Ghasemi Y; Isolation and characterization of cellulase-producing bacteria from a hot spring in the south of Iran.14<sup>th</sup> Seminar of Iranian Pharmacy Students, February, 11-14, 2009, Ahvaz, Iran, 82.

25) Ghoshoon MB, Ghasemian A, Ghasemi Y, Clonin, expression and characterization of L-Asparaginase II from E. coli YG 001, European Biotechnology congress, September 28 and October 01, 2011

### **Workshops:**

- 1) Bioinformatics and its Application in Biotechnology, 23-27 October, 2007, Tabriz, Iran.
- 2) Molecular modeling, Shiraz University of Medical Sciences, Faculty of pharmacy, June 2008, Shiraz, Iran.
- 3) Scopus Database, Shiraz University of Medical Sciences, Faculty of pharmacy, Dec 2008, Shiraz, Iran.
- 4) Endnote software, Shiraz University of Medical Sciences, student research council, August 2010, Shiraz, Iran.
- 5) Business plan workshop, Shiraz University of Medical Sciences, Biotechnology Incubator, 26 July 2012, Shiraz, Iran.
- 6) Graph Pad software, Shiraz University of Medical Sciences, Faculty of pharmacy, December 2013, Shiraz, Iran.

## **Laboratory and Technical skills:**

- Escherichia coli* based expression system
- Yeast based expression system
- Gene cloning
- Protein expression and purification
- Primer Design
- Western Blotting
- UV- Vis Spectrophotometry
- Protein Assay
- Experimental design and Response surface methodology (RSM)
- Immobilization of recombinant cells
- Real Time PCR
- DNA electrophoresis
- SDS-PAGE
- Biotransformation of organic compounds by microorganisms.
- Microalgal Biotechnology
- Isolation of Microorganisms from Nature and Screening them for Production of Bioactive Compounds
- Bioinformatics
- Bioremediation
- Cell Culture of Microalgae
- 16S rRNA and 18S rRNA amplification of Microalgae, Bacteria and Plants

## **Research interests:**

- Mammalian based expression system
- Monoclonal antibodies
- Purification of recombinant proteins

- Biocatalysts
- Enzyme Technology
- Microalgal Biotechnology
- Biotransformation of Organic Compounds by Microalgae.
- Isolation and Identification of Antimicrobial-producing Microalgae from Nature.
- Extraction, Purification and Structure Elucidation of Natural Products from Plants and Microalgae.
- Single Cell Protein production from Microalgae.
- Bioinformatics.