

Dr. Abdelnasser Salah Shebl Ibrahim

Assistant Professor of Microbial Biotechnology

حاصل على جائزة خادم الحرمين الشريفين عبدالله بن عبدالعزيز العالمية للترجمة (2013)
عن ترجمة كتاب "بكتيرiology البشر نظرة بيئية"



Personal Data:

Name	: Abdelnasser Salah Shebl Ibrahim
Title	: Dr. rer. nat.
Date of Birth	: 28/12/1971
Place of Birth	: Cairo, Egypt
Nationality	: Egyptian
Work Address	: Assistance Professor, National Research Center, Chemistry of Natural and Microbial Products Department, Division of Pharmaceutical Industries, National Research Center, Dokki, Cairo, Egypt
Current Position	: Associate Professor, Department of Botany and Microbiology, Faculty of Science, KSU, Riyadh, KSA
Phone (Mobile)	: 00966597359415
E-mail	: nsalah1973@yahoo.com & ashebl@ksu.edu.sa

Educational Background:

- **Ph. D in Microbiology (Germany, October, 2004):**

Department of Microbiology, Rostock University, Rostock, Germany.

Thesis Title: An alkaline cyclodextrin glycosyltransferase from a new *Bacillus agaradhaerens* strain isolated from an Egyptian soda lake: Purification and properties.

- **MSC in Microbiology (Egypt, September, 2000):**

Department of Microbiology, Ain Shams University, Cairo, Egypt

Thesis Title: Microbiological studies of β -galactosidase

- **B.Sc. with Honor Degree Microbiology/Chemistry (Egypt, May, 1993):**

Department of Microbiology, Ain Shams University, Egypt

Very good with honor degree

Positions held:

Nov. 2008-present:	Associate Professor of Microbiology. Department of Botany and Microbiology, Faculty of Science, KSU, Riyadh, Kingdom Saudi Arabia
Feb. 2012-present:	Assistant Professor. Chemistry of Natural & Microbial Products Dept., National Research Center, Cairo, Egypt
March 2005-Jan.2011:	Researcher in Chemistry of Natural & Microbial Products Dept., National Research Center, Cairo, Egypt
Sept.2006 –Aug.2008:	Postdoctoral Fellowship. Department of Biomedical Science, University of Prince Edward Island, PEI, Canada
March 2006-Jan 2009:	Postdoctoral Fellowship. Department of Biomedical Science, Florida Atlantic University, Florida, USA
Oct. 2005-March 2006:	Postdoctoral Fellowship. Department of Biochemistry, Albert-Einstein College of Medicine, Yeshiva University, New York, USA
Jul. 2005-March 2006:	Visiting scientist. Department of Molecular Biology and Genetic Biotechnology Center, Ithaca, NY, USA
Sept. 2000-March 2005:	Researcher assistant. Chemistry of Natural & Microbial Products Dept., National Research Center, Cairo, Egypt
March 1997-Sept. 2000:	Assistant Researcher. Chemistry of Natural & Microbial Products Dept., National Research Center, Cairo, Egypt

Scholarships and Awards:

1. King Abdullah Bin Abdul-Aziz International Award for Translation (**2013**)
2. Scholarship to support my Ph. D program in Rostock University from DAAD, Germany (2002)
3. Scholarship from Academy of Science, Cairo, Egypt (1995) to support my M.S program

4. Honor degree from Department of Microbiology (1993), Ain Shams University, Cairo, Egypt

Academic activities:

Supervision of Ph D Thesis:

1. Improvement of the performance of activated sludge reactor for treatment of high ammonia concentrations containing raw wastewater (PhD, **Bashir**, Done **2016**).
2. Investigation of genetic basis of virulence and antibiotic resistance in *Salmonella* sp. and induction of antibodies against the most dominant strains in Saudi Arabia. (PhD, Mohamed Abdellatif Eltayeb Ali, Done, **2015**)
3. Host Iron Withholding as a Way to Control Streptococcus pyogenes Infections (PhD, Manal Mohammed Al- Khulaifi, Done **2012**)
4. Investigation of Phenotypic and Genetic Basis of Resistance Mechanisms in Multidrug resistant *Acinetobacter baumannii* in Saudi Arabia (PhD, Abdullah Abdulaziz Abdulrahman Al-arfaj, Done **2011**)

Supervision of MSC Thesis:

1. Genetic Variation among *Enterococcus faecalis* strains isolated from the Saudi Dental Patients (**MSC**; Abdulhakim Suliman Al-badah, **2014**)
2. Molecular characterization of Microbiota colitis patient in Saudi Arabia (MS2C, Azzam Abdul Mohsen Ibrahim Al Quait, Done **2014**)
3. Investigation of Biofilm formation in clinical *Acinetobacter baumannii* strains (**MSC** Abdulaziz Almosa, **Done 2013**)
4. Investigation of enterotoxinogenic *Staphylococcus aureus* prevalence and PCR detection of their enterotoxins (**MSC**, Ali Alharbi Done, **2013**).
5. Studies on purification and characterization of Cyclodextrin glycosyltransferase from Egyptian extremophilic bacteria (**MSC**, Samar Zaim Rashid Al-Sharawi, Done **2009**)

Teaching Courses:

MBIO 330 (Microbial Physiology)

MBIO 260 (General Microbiology)

MBIO 466 (Introduction unto Petroleum Microbiology)

MBIO 499 (Research project)

MBIO 140 (General Microbiology)

Publications List:

1. Mohamed A. El-Tayeb, **Abdelnasser Salah Shebl** Ibrahim, Ali A. Al-Salamah1, Khalid S. Almaary, and Yahya B. Elbadawi (2016) Detection of virulence genes and investigation of immunogenicity of outer membrane proteins of *Salmonella enterica* (**Accepted**) BJM
2. Mohamed A. El-Tayeb, **Abdelnasser Salah Shebl** Ibrahim, Ali A. Al-Salamah1, Khalid S. Almaary, and Yahya B. Elbadawi (2016) Prevalence, serotyping and antimicrobials resistance mechanism of *Salmonella enterica* isolated from clinical and environmental samples in Saudi Arabia (**Submitted**)
3. **Abdelnasser S. S. Ibrahim**, Ahmed Mohamed El-Toni, Al-Salamah AA, Khalid S. Almaary, El-Tayeb MA, Elbadawi YB and Garabed Antranikian (2016) Development of novel robust nanobiocatalyst for detergents formulations and the other applications of alkaline protease. Bioprocess and Biosystems Engineering Volume 39, Issue 5, pp 793-805
4. **Abdelnasser S. S. Ibrahim**, Al-Salamah AA, Ahmed Mohamed El-Toni, Khalid S. Almaary, El-Tayeb MA, Elbadawi YB and Garabed Antranikian (2016). Enhancement of alkaline protease activity and stability via covalent immobilization onto hollow core-mesoporous shell silica nanospheres. Int. J. Mol. Sci. 17(2), 184; doi: 10.3390/ijms17020184
5. **Abdelnasser S. S. Ibrahim**, Ali A. Al-Salamah, Yahya B. El-Badawi, Mohamed A. El-Tayeb, and Shebl Salah Shebl Ibrahim (2016) Production and optimization of alkaline protease by a new alkaliphilic *Bacillus agaradhaerens* strain AK-R (**Accepted**)
6. **Abdelnasser S. S. Ibrahim**, Ali A. Al-Salamah, Yahya B. El-Badawi, Mohamed A. El-Tayeb, and Garabed Antranikian (2015). Detergent-, solvent- and salt-compatible thermoactive alkaline serine protease from halotolerant alkaliphilic *Bacillus* sp. NPST-AK15: Purification and characterization. Extremophiles 19 (5): 961-971
7. **Abdelnasser S. S. Ibrahim**, Ali A. Al-Salamah, Yahya B. El-Badawi, Mohamed A. El-Tayeb, and Shebl Salah Shebl Ibrahim (2015) Production of extracellular alkaline protease by new halotolerant alkaliphilic *Bacillus* sp. NPST-AK15 isolated from hyper saline soda lakes. **E-Journal of Biotechnology** 18 (3): 236–243
8. Abdulhakim Suliman Al-Badah, **Abdelnasser S.S. Ibrahim**, Ali A. Al-Salamah, and Shebl Salah S. Ibrahim (2015) Clonal diversity and antimicrobial resistance of *Enterococcus faecalis* isolated from endodontic infections. **E-Journal of Biotechnology** 18 (3) 175–180

9. Ali Alharbi, **Abdelnasser S.S. Ibrahim**, and Ali A. Al-Salamah (2014) Prevalence of Various Enterotoxins among Clinical *Staphylococcus aureus* Strains Isolated from Food Borne Poisoning Patients. *Journal Of Pure And Applied Microbiology*, Vol. 8(4), p. 3079-3088
10. **Ibrahim AS**, Al-Salamah AA, Ahmed Mohamed El-Toni, El-Tayeb MA, Elbadawi YB, (2014) Cyclodextrin glucanotransferase immobilisation onto functionalized magnetic double mesoporous core-shell silica nanospheres. **Electronic Journal of Biotechnology**, Vol. 17: 55–64
11. **Abdelnasser S.S. Ibrahim**, Mohamed A. El-Tayeb, Yahya B. Elbadawi, Ali A. Al-Salamah, Garabed Antranikian (2013). Detoxification of Hexavalent Chromate by *Amphibacillus* sp. KSUCr3 Cells Immobilized in Silica-coated Magnetic Alginate Beads *Biotechnology and Bioprocess Engineering*, 18: 1238-1249
12. **Ibrahim AS**, Al-Salamah AA, Ahmed Mohamed El-Toni, El-Tayeb MA, Elbadawi YB, Antranikian G (2013). Immobilization of cyclodextrin glucanotransferase on aminopropyl functionalized silica-coated superparamagnetic nanoparticles. **Electronic Journal of Biotechnology**, Vol. 16 No. 6, Issue of November 15,
13. **Ibrahim AS**, Al-Salamah AA, El-Tayeb MA, Elbadawi YB, Antranikian G (2013). Enhancement of *Amphibacillus* sp NPST-10 Cyclodextrin Glucanotransferase Production by Optimizing Physio-Environmental Factors. *Journal of Pure And Applied Microbiology*, Vol. 7(4), p. 2597-2606
14. Al-Sharaw SZ, **Ibrahim AS**, El-Shatoury EH, Gebreel HM. Eldiwany A (2013) A new low molecular mass alkaline cyclodextrin glucanotransferase from *Amphibacillus* sp. NRC-WN isolated from an Egyptian soda lake. **Electronic Journal of Biotechnology**, Vol. 16 No. 6, vol16-issue6-fulltext-18
15. **Abdelnasser S. S. Ibrahim**, Ali A. Al-Salamah 1, Mohamed A. El-Tayeb, Yahya B. El-Badawi and Garabed Antranikian (2012). A Novel Cyclodextrin Glycosyltransferase from Alkaliphilic *Amphibacillus* sp. NPST-10: Purification and Properties. *Int. J. Mol. Sci.*, 13, 10505-10522.
16. **Abdelnasser S.S. Ibrahim**, Mohamed A. El-Tayeb, Yahya B. Elbadawi, Ali A. Al-Salamah, Garabed Antranikian (2012). Hexavalent chromate reduction by alkaliphilic *Amphibacillus* sp. KSUCr3 is mediated by copper dependent membrane-associated Cr(VI) reductase. *Extremophiles*. 16(4): 659-68.
17. Hussein H. Al-Khamis, Fahad M. Al-Hemaid, and **Abdelnasser Saah S. Ibrahim** (2012). Diversity of perennial plants at ibex reserve in Saudi Arabia. *Journal of Animal and Plant Sciences* 22 (2): 484-192

- 18. Abdelnasser S.S. Ibrahim**, Mohamed A. El-Tayeb, Yahya B. Elbadawi and Ali A. Al-Salamah (2012). Hexavalent chromium reduction by novel chromate resistant alkaliphilic *Bacillus* sp. strain KSUCr9a . African Journal of Biotechnology Vol. 11 (16), pp. 3832-3841
- 19. Abdelnasser S.S. Ibrahim**, Ali A. Al-Salamah, Ashraf A. Hatamleh, Mohammed S. El-Shiekh, and Shebl S. Ibrahim (2012). Tapping uncultured microorganisms through metagenomics for drug discovery. African Journal of Biotechnology Vol. 11(92), pp. 15823-15834 (**not found**)
- 20.** Abdelnasser S. S. Ibrahim, Ali A. Al-Salamah and Hubert Bahl (2011). An alkaline cyclodextrin glycosyltransferase from a new *Bacillus agaradhaerens* WN-I strain isolated from an Egyptian soda lake: Purification and properties .African Journal of Biotechnology Vol. 10 (32), pp. 6107-6119
- 21. Abdelnasser S.S. Ibrahim**, Mohamed A. El-Tayeb, Yahya B. Elbadawi and Ali A. Al-Salamah (2011). Effects of substrates and reaction conditions on production of cyclodextrins using cyclodextrin glucanotransferases from newly isolated *Bacillus agaradhaerens* KSU-A11. ElectronicJournal of Biotechnnnology, 14 (5):1-12
- 22. Abdelnasser S.S. Ibrahim**, Mohamed A. El-Tayeb, Yahya B. Elbadawi and Ali A. Al-Salamah (2011). Isolation and characterization of novel potent Cr (VI) reducing alkaliphilic *Amphibacillus* sp. strain KSUCr3 from hypersaline soda lakes. . E-Journal of Biotechnchnology, vol 4, 1-14
- 23. Abdelnasser S.S. Ibrahim**, Mohamed A. El-Tayeb, Yahya B. Elbadawi and Ali A. Al-Salamah (2011). Bioreduction of Cr(VI) by potent novel chromate resistant alkaliphilic *Bacillus* sp. strain KSUCr5 isolated from hypersaline soda lakes. African Journal of Biotechnology, 10 (37): 7207-7218,
- 24.** Abdullah A. Al-Arfaj, **Abdelnasser S.S. Ibrahim**, Ali Mohammed Somily, and Ali A. Al-Salamah (2011). Genetic basis of carbapenem resistance in *Acinetobacter* Clinical Isolates in Saudi Arabia. African Journal of Biotechnology, 10(64): 14186-14196
- 25.** Hisham H. Al-Ajlan, **Abdelnasser S.S. Ibrahim** and Ali A. Al-Salamah (2011). Comparison of Different PCR Methods for Detection of *Brucella* spp. in Human Blood Samples. Polish Journal of Microbiology 2011, Vol. 60, No 1, 27.33
- 26. Abdelnasser S.S. Ibrahim**, Mohamed A. El-Tayeb and Ali A. Al-Salamah (2010) Characterization of immobilized alkaline cyclodextrin glycosyltransferase from a newly isolated *Bacillus agaradhaerens* KSU-A11. African Journal of Biotechnology Vol. 9(44): 7550-7559

- 27.** Mohammed I. AL-Ghonaiem, **Abdelnasser S. S. Ibrahim** and Ali Abdullah Al-Salamah (**2010**) Application of Gamma irradiation in treatment of Waste Activated Sludge to Obtain Class a Biosolids American Journal of Environmental Sciences 6 (6): 500-504
- 28.** Anwar E. Al-Sunaiher, **Abdelnasser S.S Ibrahim** and Ali A. Al-Salamah (**2010**). Association of *Vibrio* Species with Disease Incidence in Some Cultured Fishes in the Kingdom of Saudi Arabia. World Applied Sciences Journal 8 (5): 653-660, 2010
- 29.** Mohammed I. AL-Ghonaiem, **Abdelnasser S.S. Ibrahim** and Ali A. Al-Salamah (**2010**) Influence of exogenous quorum sensing signaling compounds on the hydrogen sulfide production in activated sludge bioreactors. World Applied Sciences Journal 9 (10): 1108-1112
- 30.** **M.I. AL-Ghonaiem, A.S.S. Ibrahim** and **A.A. Al-Salamah** (2009). Swimming Motility in *Agrobacterium tumefaciens* is Controlled by Quorum Sensing and Inhibited by Garlic Bulb Extract. Research journal of Microbiology, 4 (9): 345-354
- 31.** **Abdelnasser S.S. Ibrahim** and Ali A. Al-Salamah (**2009**) Optimization of Media and Cultivation Conditions for Alkaline Protease Production by Alkaliphilic *Bacillus halodurans*. Research journal of Microbiology, 4 (7): 251-259
- 32.** Fabrice Berrue, **Abdelnasser S.S Ibrahim**, Patricia Boland, Russell Kerr (**2009**). A newly isolated marine *Bacillus pumilus* SP21: a source of novel lipoamides and other antimicrobial agents. Pure Appl. Chem., 81 (6): 1027–1031
- 33.** **Abdelnasser S.S Ibrahim**, Abhijeet Kate and Russel Kerr (**2008**). Investigation of the biosynthetic origin of the diterpenes in gorgonian *Pseudopterogorgia acerosa*. JASMR, 3 (2): 177-185
- 34.** **Abdelnasser S. S Ibrahim** (**2008**), Diversity of coral *Eunicea fusca* associated bacteria using culture dependent techniques. Research journal of Microbiology. 3(10): 614-621
- 35.** **Abdelnasser S S Ibrahim** (**2008**). Production of Carotenoids by a Newly Isolated Marine *Micrococcus* sp. Biotechnology, 7 (3): 469-474
- 36.** **Abdelnasser S.S.Ibrahim**, Nefisa M.A. EI-Shayeb and Sohair S. Mabrouk (**2007**). Isolation and Identification of Alkaline Protease Producing Alkaliphilic Bacteria from an Egyptian Soda Lake. Journal of Applied Sciences Research, 3(11): 1363-1368
- 37.** **Abdelnasser Salah Sheble Ibrahim** and Ahmed I El-diwyany (**2007**). Isolation and Identification of New Cellulases Producing Thermophilic Bacteria from an Egyptian Hot Spring and Some Properties of the Crude Enzyme. Australian Journal of Basic and Applied Sciences, 1(4): 473-478

- 38.** S Mabrouk, N.M.A El-Shayeb, **A.S. Ibrahim** and O. Sobieh. (2002) Optimization of β -galactosidase productivity by *Bacillus macerens* DSMZ 314. Advanced food science 24 (1): 12-19

Conferences:

1. The 6th International Chemistry Conference (6th ICC), Saudi Arabia, Riyadh 8-10/11/2016.
2. European Biotechnology Congress 2015, Bucharest, Romania, May 07-09, 2015. **Abdelnasser S.S. Ibrahim**, Ali A. Al-Salamah, Yahya B. Elbadawi, and Mohamed A. El-Tayeb. Production of extracellular alkaline protease by new halotolerant alkaliphilic *Bacillus* sp. NPST-AK15 isolated from hyper saline soda lakes
3. European Biotechnology Congress 2014, Lecce, Italy, 15 - 18 May. **Abdelnasser S.S. Ibrahim** Mohamed A. El-Tayeb, Yahya B. Elbadawi, Ali A. Al-Salamah, Garabed Antranikian. Detoxification of Hexavalent Chromate by *Amphibacillus* sp. KSUCr3 Cells Immobilized in Silica-coated Magnetic Alginate Beads.
4. Conference of the Society of General and Applied Microbiology (VAAM), March, 2012, Tubingen, Germany. **Abdelnasser S. S. Ibrahim**, Mohamed A. El-Tayeb and Ali A. Al-Salamah. Isolation and characterization of novel potent Cr (VI) reducing alkaliphilic bacterium from hypersaline soda lakes
5. The Saudi International Biotechnology Conference, held at KACST, Riyadh, Saudi Arabia, 18-19/09/2012
6. Saudi Society of Biological Science, 24th meeting, Tieba University, Al-Madina Almonawara, KSA, 10-12/03/2010.
7. The 2nd International Conference of the Arab Society for Medical Research November, 11- 13th, 2008, Cairo, Egypt. **Abdelnasser S.S Ibrahim**, Abhijeet Kat and Russel Kerr. Investigation of the biosynthetic origin of the diterpenes in gorgonian *Pseudopterogorgia acerosa*.
8. IUPAC International Conference on Biodiversity and Natural Products. July 13-18th, 2008, Charlottetown, Prince Edward Island, Canada. Fabrice Berre, **Abdelnasser S.S Ibrahim**, Patricia Boland, Russell Kerr. A newly isolated marine *Bacillus pumilus* SP21: a source of novel lipoamides and other antimicrobial agents.
9. Gordon Research Conference, Marine Natural products. Feb. 24-29, 2008 Ventura Beach Marriott Ventura, CA.USA Abhijeet Kate, **Abdelnasser Ibrahim** and Russell Kerr. Comparative study between the “gall” tissue and healthy tissue of the gorgonian

Pseudopterogorgia acerosa: variations in diterpenoid composition, proposed ecological role and biomimetic synthesis

10. Gordon Research conference, Marine Natural products. Februaru 24-29, 2006. Ventura Beach Marriot Ventura, CA, USA. Fabrice Berrue and **Abdelnasser Ibrahim**, Patricia Boland, Russell Kerr *Bacillus pumilus*, a source of Antimicrobial agents
11. Gordon Research conference. Cellulase and Cellulosome Conference, August 7th , 2005, Proctor Academy, Andover, NH, USA
12. Drug discovery, NRC, March 2005 Cairo, Egypt. **Abdelnasser S Ibrahim** and H. Bahl. An Alkaline cyclodextrine glycosyltransferase from a new *Bacillus agaradhaerens* WN strain isolated from an Egyptian soda lake: Purification and properties
13. Talk in the annual meeting of the Society of General and Applied Microbiology (VAAM), Mars, 2004 Germany
14. International work shop in Microbial ecology, USA-Egypt, May 2002 Cairo, Egypt

Research Project:

Principle investigator of the following Project funded by National Plan for Science, Technology and Innovation Plan (NSTIP), Saudi Arabia:

1. Development of a bioprocess for cyclodextrins production using novel cyclodextrins glucanotransferase immobilized on mesoporous silica nanospheres (**01/2012-01/2014**).
2. Development of a bioprocess for bioremediation of toxic chromium using novel potent chromate resistant bacteria immobilized on nano-materials (**01/2012-01/2014**).
3. Development of novel robust nanobiocatalyst for detergents formulation and the other industrial applications of alkaline protease (**06/2014-06/2016**)