

## **CURRICULUM VITAE**

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#### **PERSONAL**

**Name:** **Samy AbdelHamid Selim AbdelSalam**  
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#### **Scientific profile**

Dr. Samy Selim earned a Bachelor Degree in Science from the Suez Canal University, Egypt in 1993. That year, he became a researcher in Faculty of Science, Suez Canal University; he completed his M.Sc. in Microbiological 1998. He obtained his Ph.D. in Microbiological Risk Assessment and Water Pollution from Suez Canal University, Egypt. He worked as a postdoctoral fellow in many international universities (Department of General and Environmental Microbiology, Pécs University, Hungary - Department of Genomics and Biotechnology, Institute of Molecular Biology, Slovak Republic - Department Genetics and Applied Microbiology, University of Debrecen, Hungary – Department of Biology, Western Washington University, Bellingham, USA). He currently serves as Associate Professor of Microbiology, Department of Clinical Laboratory Sciences, College of Applied Medical Sciences, Jouf University, KSA. From 1998 to the present, Dr. Samy Selim has made over 100 contributions to national and international conferences. Furthermore, he has around 120 scientific publications in indexed journals (**H-index = 25, 1766 citations**, <https://scholar.google.com/citations?user=AJqcPVAAAAAJ&hl=en>) and book chapters. His research work focuses on Environmental Health and Safety (particularly on Hazardous material and waste management by microorganisms and higher plants, Food Safety and Management, Climate Change and Environment, Microbial role in waste disposal, recycling and agriculture, purification and characterization of enzymes with potential industrial and biotechnological applications, protocol optimisation for genetically manipulating microorganisms, gene regulation characterization and design and development of contaminated water and soil bioremediation processes by means of microorganisms). This research, in which he has been the principal investigator, has received competitive public grants from the Saudi Universities. He has been elected as best researcher in Jouf University (2013 and 2016) due to the highest number of publications in all university colleges. He also served as a reviewer for over 100 peer review journals, as well as numerous national grants. He has supervised over 20 master and Ph.D theses. Dr. Samy Selim served as chairperson of academic advising and counseling and chairperson of student's activity and community services in College Applied Medical Sciences, Jouf University, Saudi Arabia.

#### **ACADEMIC DEGREES AND POSITION HELD:**

- **Associate Professor of Microbiology**, Department of Clinical Laboratory Sciences, College of Applied Medical Sciences, Jouf University, KSA.

- **Visiting Researcher**, Department of Biology, Western Washington University, Bellingham, USA (Prof. Dr. Craig Moyer)
- **Visiting Researcher**, Department Genetics and Applied Microbiology, University of Debrecen, Hungary, (Prof. Matthias Sipiczki)
- **Researcher Fellow** in Department of Genomics and Biotechnology, Institute of Molecular Biology, Slovak Republic (Dr. Domenico Pangello).
- **Post-doctorate** Department of General and Environmental Microbiology, Pécs University, Hungary (Prof. Pesti Miklos).
- **Post-doctorate** in Hungarian Academy of Sciences, Hungary, 2005.
- **Lecturer**, Faculty of Science, Suez Canal University, Egypt, 1998-2002.
- **Demonstrator**, Faculty of Science, Suez Canal University, Egypt, 1994-1998.
- **Certificate (Bioinformatics and Biotechnology)**, Pune University, India, 2015.
- **Ph.D.** (Microbiological Risk Assessment and Water Pollution), 2002, Suez Canal University, Egypt and Balaton Limnological Institute Ecological Research Centre of the Hungarian Academy of Sciences.
- **M.Sc.** (Environmental Assessment), 1998, Suez Canal University, Egypt.
- **B.Sc.**, 1993, Faculty of Science, Suez Canal University, Egypt.

### **COURSES TAUGHT:**

- BT119 (Food Safety and Management)
- BT203 (Water Resources and Treatment Systems)
- BT118 (Hazardous material)
- BIO106 (General Biology)
- BT103 (Genetics and Cell Biology)
- BT127 (Molecular Biology)
- BT316 (Developmental Biology)
- BT222 (Bioinformatics)
- BT103(Molecular Biology)
- CHSE221 (Biostatistics)
- CLS 415 (Environmental microbiology)
- CLS 212(Medical Microbiology)
- BT320 (Microbial Ecology)
- BT322 ( Food Microbiology and Microbial toxins)
- BT421 (Applied Microbiology)
- BT115 (Pollution)
- BT412 (Environmental risk assessments and managements)
- BT206 (Environmental impact assessments)

### **HONORS AND AWARDS:**

- International Scientific Publication, Suez Canal University, Egypt, 2011.
- Best Researcher in Jouf University, Saudi Arabia, 2013.
- International Scientific Publication, Suez Canal University, Egypt, 2014.
- Best Researcher in Jouf University, Saudi Arabia, 2016.

### **SCIENTIFIC MEMBERSHIP:**

- American Society of Biochemistry and Molecular Biology
- American Society of Microbiology.
- Applied Society of Microbiology, UK.
- Malaysian Society of Microbiology.
- Egyptian Society of Natural Toxins.
- Egyptian British Society of Biological Sciences.

### **Expertise**

- **Microbiological and Environmental Assessment, Clean Water, Chemical hazards, Environmental Health, Pollution, Environmental risk and impact assessments Environmental managements, Toxicology, Climate Change**

## **RESEARCH PUBLICATIONS :**

### **Papers published in refereed journals**

- Hamada AbdElgawad, Gaurav Zinta, A. Hamed Badreldin, **Samy Selim**, Gerrit Beemster, Wael N. Hozzein, Mohammed A.M. Wadaan, Han Asard, Walid Abuelsoud (2020). Maize root and shoot show distinct profiles of oxidative stress and antioxidant defense under heavy metal toxicity. Environmental Pollution, 258, 113705.

<https://doi.org/10.1016/j.envpol.2019.113705>

- Helena Van De Velde, Hamada AbdElgawad, Han Asard, Gerrit T. S. Beemster, **Samy Selim**, Ivan Nijs, Dries Bonte (2019). Interspecific plant competition mediates impact of climate change on the ecophysiology of a plant-herbivore interaction. Functional Ecology; 33:1842–1853.

<https://doi.org/10.1111/1365-2435.13415>

- Ahmed M. Saleh, Yasser M. Hassan, **Samy Selim**, Hamada AbdElgawad (2019). NiO-nanoparticles induce reduced phytotoxic hazards in wheat (*Triticum aestivumL.*) grown under future climate CO<sub>2</sub>. Chemosphere, Volume 220 ,1047-1057

<https://doi.org/10.1016/j.chemosphere.2019.01.023>

- Alexandra de Sousa, Ahmed M. Saleh, Talaat H. Habeeb, Yasser M. Hassan, Rafat Zrieq, Mohammed A.M. Wadaanf, Wael N. Hozzein, **Samy Selim**, Manuela Matos, Hamada AbdElgawad (2019). Silicon dioxide nanoparticles ameliorate the phytotoxic hazards of aluminum in maize grown on acidic soil. Science of the Total Environment 693 (2019) 133636.

<https://doi.org/10.1016/j.scitotenv.2019.133636>

- Seham M. Hamed, Sherif H. Hassan, **Samy Selim**, Amit Kumar, Sameh M.H. Khalaf, Mohammed A.M. Wadaan, Wael N. Hozzein, Hamada AbdElgawad (2019). Physiological and biochemical responses to aluminum-induced oxidative stress in two cyanobacterial species. Environmental Pollution 251, 961-969.

<https://doi.org/10.1016/j.envpol.2019.05.036>

- Seham M. Hamed, Sherif H. Hassan, **Samy Selim**, Amit Kumar, Sameh M.H. Khalaf, Mohammed A.M. Wadaan, Wael N. Hozzein, Hamada AbdElgawad (2019). Differential responses of two cyanobacterial species to R-metalaxyl toxicity: growth, photosynthesis and antioxidant analyses. Environmental Pollution, 1-20.

<https://doi.org/10.1016/j.envpol.2019.113681>

- **Samy Selim**, Yasser M. Hassan, Ahmed M. Saleh, Talaat H. Habeeb, Hamada AbdElgawad (2019). Actinobacterium isolated from a semi-arid environment improves the drought tolerance in maize (*Zea maysL.*). Plant Physiology and Biochemistry 142, 15–21.

<https://doi.org/10.1016/j.plaphy.2019.06.029>

- Soad Al Jaouni, Samy Selim, Sherif H. Hassan, Hussein S. H. Mohamad, Mohammed A. M. Wadaan, Wael N. Hozzein, Han Asard and Hamada AbdElgawad (2019). Vermicompost Supply Modifies Chemical Composition and Improves Nutritive and Medicinal Properties of Date Palm Fruits from Saudi Arabia. Frontiers in Plant Science, 10 (Article 424), 1-13.

<https://doi.org/10.3389/fpls.2019.00424>

- Hamada AbdElgawad, Ahmed M. Saleh, Soad Al Jaouni, **Samy Selim**, Mahmoud O. Hassan, Mohammed A.M. Wadaan, Ahmed M. Shuikan, Hussein S. Mohamed, Wael N. Hozzein (2019). Utilization of actinobacteria to enhance the production and quality of date palm (*Phoenix dactylifera L.*) fruits in a semi-arid environment. Science of The Total Environment, Volume 665, 690-697.

<https://doi.org/10.1016/j.scitotenv.2019.02.140>

- Wael N Hozzein, Walid Abuelsoud, Mohammed AM Wadaan, Ahmed M Shuikan, **Samy Selim**, Soad Al Jaouni, Hamada AbdElgawad (2019). Exploring the potential of actinomycetes

in improving soil fertility and grain quality of economically important cereals. Science of The Total Environment, Volume 651, Part 2, 2787-2798.

<https://doi.org/10.1016/j.scitotenv.2018.10.048>

- Ahlem Zrig , Jorge F. S. Ferreira, Foued Hamouda, Taieb Tounekti, **Samy Selim**, Soad Al Jaouni, Habib Khemira and Hamada AbdElgawad (2019). The impact of foliar fertilizers on growth, and biochemical responses of *Thymus vulgaris* to salinity stress. Arid Land Research And Management, 33 (3), 297-320.

<https://doi.org/10.1080/15324982.2018.1551817>

- Matthias Sipiczki, **Samy Selim** (2019). Antagonistic yeasts from a salt-lake region in Egypt: identification of a taxonomically distinct group of phylloplane strains related to *Sporisorium*. Antonie Van Leeuwenhoek, 112:523–541

<https://link.springer.com/article/10.1007%2Fs10482-018-1184-8>

- **Samy Selim**, Mona Warrad, Nashwa Hagagy (2019). Prevalence of Proteolytic *Staphylococcus aureus* and *Salmonella enterica* contamination in Food. Pollution Research, 38 (4): 253-256.
- Raouf, O., **Selim, S.**, Mohamed, H., Abdel-Gawad, O., Elzanaty, A., Ahmed, S. Synthesis, Characterization and Biological Activity of Schiff Bases Based on Chitosan and Acetophenone Derivatives. Advanced Journal of Chemistry, Section A: Theoretical, Engineering and Applied Chemistry, 2019; (): -.

<https://doi.org/10.33945/SAMI/AJCA.2020.3.5>

- Ahmed M. Saleh, **Samy Selim**, Soad AlJaouni, Hamada AbdElgawad (2018). CO<sub>2</sub> enrichment can enhance the nutritional and health benefits of parsley ( *Petroselinum crispum* L.) and dill ( *Anethum graveolens* L.). Food Chemistry 269, [Volume 269](#), 15 December 2018, Pages 519-526.

<https://doi.org/10.1016/j.foodchem.2018.07.046>

- Soad Al Jaouni, Ahmed M. Saleh, Mohammed A.M. Wadaan, Wael N. Hozzein, **Samy Selim**, Hamada AbdElgawad (2018). Elevated CO<sub>2</sub> induces a global metabolic change in basil (*Ocimum basilicum* L.) and peppermint (*Mentha piperita* L.) and improves their biological activity. Journal of Plant Physiology 224–225 (2018) 121–131.

<https://doi.org/10.1016/j.jplph.2018.03.016>

- Amit Kumar,Hamada AbdElgawad, Immacolata Castellano, **Samy Selim**, Gerrit T.S.Biemster, Han Asard, Maria Cristina Buia, Anna Palumbo (2018). Effects of ocean acidification on the levels of primary and secondary metabolites in the brown macroalga *Sargassum vulgare* at different time scales. Science of The Total Environment, Volume 643, 1 December 2018, Pages 946-956.

<https://doi.org/10.1016/j.scitotenv.2018.06.176>

- **Samy Selim**, Nashwa Hagagy (2018) Pyrosequencing And Functional Annotation Analysis Of Microbial Community In Fresh Water Lake In Saudi Arabia. Scientific Study & Research Chemistry & Chemical Engineering, Biotechnology, Food Industr. 19 (1), pp. 091 – 096.

<http://pubs.ub.ro/?pg=revues&rev=csec6&num=201801&vol=1&aid=4694>

- Alexandra De Sousa, Hamada AbdElgawad, Han Asard, Ana Pinto, Cristiano Soares, Simão BrancoNeves, **Samy Selim**, Soad Al Jaouni, Teresa Braga, Manuel Azenha, Fernanda Fidalgo, Jorge Teixeira. (2017). Metalaxyl Effects on Antioxidant Defenses in Leaves and Roots of *Solanum nigrum* L. Frontiers in Plant Science, 30.

<https://doi.org/10.3389/fpls.2017.01967>

- Seham M. Hamed, **Samy Selim**, Gerd Klöck, Hamada AbdElgawad (2017). Sensitivity of two green microalgae to copper stress: Growth, oxidative and antioxidants analyses. Ecotoxicology and Environmental Safety, Volume 144, Pages 19–25.

<https://doi.org/10.1016/j.ecoenv.2017.05.048>

- Seham M. Hamed, Gaurav Zinta, Gerd Klöck, Han Asard, **Samy Selim**, Hamada AbdElgawad (2017). Zinc-induced differential oxidative stress and antioxidant responses in *Chlorella*

*sorokiniana* and *Scenedesmus acuminatus*. Ecotoxicology and Environmental Safety, Volume 140, Pages 256–263.

<https://doi.org/10.1016/j.ecoenv.2017.02.055>

- Hany M. Elgohary, Soad KH. Al Jaouni, **Samy A. Selim** (2018). Effect of ultrasound-enhanced *Nigella sativa* seeds oil on wound healing: An animal model. Journal of Taibah University Medical Sciences, Available online 27 June 2018

<https://doi.org/10.1016/j.jtumed.2018.02.008>

- Hany M. Elgohary, Soad KH. Al Jaouni, **Samy A. Selim** (2017). Wound healing: In response to natural remedies and phototherapy. International Journal of Research in Pharmaceutical Sciences 8(4):568-575.
- **Samy Selim**, Sherif Hassan, Nashwa Hagagy, Lucia Kraková, Tomaš Grivalský, Domenico Pangallo (2017). Assessment of Microbial Diversity in Saudi Springs by Culture Dependent and Independent Methods. Geomicrobiology, 34 (5), 443-453.

<http://dx.doi.org/10.1080/01490451.2016.1219430>

- Al Jaouni, S., **Selim, S.** (2017). Antimicrobial and antimutagenicity potentials of *Hordeum vulgare L.* extract. Bioscience Research 14(2), pp. 139-142
- Ashish Dhyani, Ritu Gururani, **Samy Selim**, Priyanka Adhikari, Avinash Sharma, Veena Pande, Anita Pandey (2017). Production of Industrially Important Enzymes By Thermobacilli Isolated From Hot Springs Of India. Research in Biotechnology 2017, 8: 19-28.

<doi:10.25081/rib.2017.v8.3594>

- **Samy Selim** (2016). Metagenomic analysis of Microbial Community in Fresh Water Lake. FEBS Journal, P-03.03.2-023
- **Samy Selim**, Nashwa Hagagy (2016). Genome sequence of carboxylesterase, carboxylase and xylose isomerase producing alkaliphilic haloarchaeon *Haloterrigena turkmenica* WANU15. Genomics Data, 7, pages 70-72. [doi:10.1016/j.gdata.2015.11.031](https://doi.org/10.1016/j.gdata.2015.11.031)
- Khaled Rashed, Ataa Said, Amin Abdo, **Samy Selim** (2017). Antimicrobial activity and chemical composition of *Pistacia chinensis* Bunge leaves. International Food Research Journal, 23(1): 316-321.
- **Samy Selim** and Soad Al Jaouni (2015). Anticancer and apoptotic effects on cell proliferation of diosgenin isolated from *Costus speciosus* (Koen.) Sm. *BMC Complementary and Alternative Medicine* 2015, 15:301 [doi:10.1186/s12906-015-0836-8](https://doi.org/10.1186/s12906-015-0836-8)
- **Samy Selim** and Soad Al Jaouni (2015). Anti-inflammatory, antioxidant and antiangiogenic activities of diosgenin isolated from traditional medicinal plant, Costus speciosus (Koen ex.Retz.) Sm. Natural product research.

<http://www.tandfonline.com/doi/full/10.1080/14786419.2015.1065493>.

- Ismail Hamad, Hamada AbdElgawad, Soad Al Jaouni, Han Assard, Momtaz Hegab, Sherif Hassan, Nashwa Gagagy, **Samy Selim** (2015). Metabolic Analysis of Various Date Palm Fruit (*Phoenix dactylifera* L.) Cultivars from Saudi Arabia to Assess their Nutritional Quality. *Molecules* 2015, 20, 13620-13641; [doi:10.3390/molecules200813620](https://doi.org/10.3390/molecules200813620)
- **Samy Selim**, Abeer S. Amin, Sherif Hassan, Mohamed M. Hagazey (2015). Antibacterial, cytotoxicity and anticoagulant activities from *Hypnea esperi* and *Caulerpa prolifera* marine algae. Pakistan Journal of Pharmaceutical Sciences, 28 (2), 525-530.
- **Selim S.A.** (2015). Thermostable Alkaline Protease Production by *Bacillus Aryabhatai* J4. *The FASEB Journal* vol. 29 no. 1 Supplement 573.4.
- **Samy Selim**, Iman El Kholy, Nashwa Hagagy, Sahar El alfay, Mohamed Abdel Aziz (2015). Rapid Identification of *Pseudomonas aeruginosa* by Pulsed-Field Gel Electrophoresis. *Biotechnology & Biotechnological Equipment*, Vol. 29, No. 1, 152-156.
- Gashgari Rukaia M. and **Samy Selim** (2015). Detection and Characterization of Antimicrobial Resistance and Putative Virulence Genes in *Aeromonas veronii* Biovar Sobria Isolated from Gilthead Sea Bream (*Sparus aurata* L.). *Foodborne Pathog Dis.*; 12(9):806-811. [doi:10.1089/fpd.2015.1976](https://doi.org/10.1089/fpd.2015.1976).

- **Samy Selim**, Mohamed Abdel Aziz, Sahar El Alfy, Mona Warrad, El Fatih El Dowma and Mona Mashait (2015). Enumeration, isolation and characterization of *Bacillus cereus* and *Escherichia coli* isolated from food products. Italian Journal of food sciences, 27(3), 336-344. DOI: <http://dx.doi.org/10.14674/1120-1770%2Fijfs.v276>
- **Samy Selim**, Sherif Hassan, Nashwa Hagagy (2015). Genome sequencing and annotation of *Proteus* sp. SAS71. Genomics Data, 6, Pages 70–71. doi:[10.1016/j.gdata.2015.08.015](https://doi.org/10.1016/j.gdata.2015.08.015)
- **Samy Selim**, Sherif Hassan, Nashwa Hagagy (2015). Draft Whole-genome sequence of An Environmental Isolate *Morganella morganii* strain SA36. Genomics Data, 6, 57–58. doi:[10.1016/j.gdata.2015.08.016](https://doi.org/10.1016/j.gdata.2015.08.016)
- **Samy Selim**, Sherif Hassan, Nashwa Hagagy (2015). Genome sequencing and annotation of *Stenotrophomonas* sp. SAM8. Genomics Data, 6, Pages 25–26 doi:[10.1016/j.gdata.2015.07.028](https://doi.org/10.1016/j.gdata.2015.07.028)
- **Samy Selim**, Nashwa Hagagy, Mohamed Abdel Aziz, El Syaed El-Meleigy, Enrica Pessione (2014). Thermostable alkaline halophilic-protease production by *Natronolimnobiusthermophilus* WN18. Natural product research, 28 (18), 1476-1479. DOI: [10.1080/14786419.2014.907288](https://doi.org/10.1080/14786419.2014.907288)
- Nikoletta Kálmán, Zoltán Gazdag, Dániel Márton Tóth, Milan Čertík, József Belágyi, **Samy A. Selim**, István Pócsi and Miklós Pesti. (2014) Adaptation to tert-butylhydroperoxide at plasma membrane level in the fission yeast *Shizosaccharomyces pombe* parental strain and its t-BOOH-resistant mutant. Journal of Basic microbiology, 54 (3), 215–225. DOI: [10.1002/jobm.201200580](https://doi.org/10.1002/jobm.201200580)
- **Samy A. Selim**, Mohammed E Adam, Sherif M Hassan and Abdulrhman R Albalawi (2014). Chemical composition, antimicrobial and antibiofilm activity of the essential oil and methanol extract of the Mediterranean cypress (*Cupressus sempervirens* L.). BMC Complementary and Alternative Medicine 2014, 14:179. doi:[10.1186/1472-6882-14-179](https://doi.org/10.1186/1472-6882-14-179)
- **Samy Selim**, Mervat El Sherif, Saher El-Alfy and Nashwa Hagagy (2014). Genetic Diversity among thermophilic bacteria Isolated from geothermal sites by Using Two PCR Typing Methods. Geomicrobiology; 31(2):161-170. <http://dx.doi.org/10.1080/01490451.2013.822614>
- **Samy A. Selim**, Mohamed H. Abdel Aziz, Amira.M. Zakaria, Salwa A. Fouad and John D. Klena (2014). Comparative study on pathogenicity, toxicity and pulsed-field gel electrophoresis profile of *Escherichia coli* O157:H7 and non-pathogenic *E. coli* O157:H7 owning different virulence genes isolated from different sources. Minerva Biotecnologica 03/2014; 26(1):7-16.
- **Samy A. Selim**, Mohamed H. Abdel Aziz, Mona S. Mashait and Mona F. Warrad (2013). Antibacterial activities, Chemical Constitutes and Acute Toxicity of *Origanum majorana* L., *Peganum harmala* L. and *Salvia officinalis* L. Commercial Essential Oils. African Journal of pharmacy and pharmacology, Vol. 7(13), pp. 725-735. DOI: [10.5897/AJPP2013.3518](https://doi.org/10.5897/AJPP2013.3518)
- **S. Selim**, Sahar El alfy, Mohamed Abdel Aziz, Mona Mashit and Mona Warrad (2013). Antibacterial Activity of Selected Egyptian Ethnomedicinal Plants. Malaysian Journal of Microbiology, Vol 9 (1), 111-115.
- **Samy A. Selim**, Salwa A. Fouad, Mohamed H. Abdel Aziz, Amira M. Zakaria, John D. Klena and Domenico Pangallo (2013). Prevalence and Characterization of Shiga-toxin O157 and non-O157 Enterohemorrhagic *Escherichia coli* isolated from Different Sources. Biotechnology and biotechnological Equipments, 27(3), pp. 3834 - 3842. doi:[10.5504/bbeq.2013.0031](https://doi.org/10.5504/bbeq.2013.0031)
- Mohamed Abdel Aziz, Iman El-Kholy, Amin Abdo, **Samy Selim** (2013). Influence of multi drug resistance Gram negative bacteria in liver transplant recipient. African Journal of Microbiology Research Vol. 7(41), pp. 4857-4861. DOI: [10.5897/AJMR2013.5959](https://doi.org/10.5897/AJMR2013.5959)
- Mohammed E. Adam and **Samy Selim** (2013). Antimicrobial activity of essential oil and methanol extract from *Commiphora molmol* (Engl.) resin. International Journal of Current Microbiology and Applied Sciences. 2 (12), 1-6.
- **Samy Selim**, Sherif Hassan, Bander El Sabty (2013). Antimicrobial Activity of Saudi Mint on some Pathogenic Microbes. Journal of Pure and Applied Microbiology, 7 (3), pp.2155-2160.

- **Samy Selim**, Sherif Hassan, Khalil Al Soumaa and Suliman EL Anzy (2013). Prevalence, antibiotic resistance and in vitro activity of Yogurt against some gram negative pathogenic bacteria isolated from Arar Hospital, KSA. *Life Sci J* 2013;10(3):1450-1456.
- **Samy A. Selim**, Sahar M. El Alfy, Atef M. Diab, Mohamed H. Abdel Aziz and Mona S. Ewada (2012). Bacteriological and Toxicological Qualities of Dialysis Water and Associated Pyrogenic Reactions Involved in Haemodialysis Patients. *Biosciences Biotechnology Research Asia*, Vol. 9(1), 211-216.
- Meshref A. Al-Ruwaili, Omer M. Khalil and **Samy A. Selim** (2012). Phenotypic and Genotypic differences in the expression of virulence factors in antimicrobial resistance of *Enterococcus faecalis* clinical strains. *Bioscience Research*, 9(1): 50-58.
- **Samy A. Selim**, Sahar M. El Alfy, Atef M. Diab, Mohamed H. Abdel Aziz and Mona F. Warrad (2012). Intestinal bacterial flora that compete on the Heme precursor Iron Fumarate in Iron deficiency anemia cases. *Malaysian Journal of Microbiology*, Vol 8(2) 2012, 92-96.
- Meshref A. Al-Ruwaili, Omer M. Khalil, **Samy A. Selim** (2012). Viral and bacterial infections associated with camel (*Camelus dromedarius*) calf diarrhea in North Province, Saudi Arabia. *Saudi Journal of Biological Sciences*, Volume 19, Issue 1, 35-41. [doi:10.1016/j.sjbs.2011.10.001](https://doi.org/10.1016/j.sjbs.2011.10.001)
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- **Samy Selim**, Sahar El Alfy, Meshref Al-Ruwaili, Amin Abdo and Soad Al Jaouni (2012). Susceptibility of imipenem-resistant *Pseudomonas aeruginosa* to flavonoid glycosides of date palm (*Phoenix dactylifera* L.) tamar Growing in Al Madinah, Saudi Arabia. *African Journal of Biotechnology*. Vol. 11(2), pp. 416-422. [DOI: 10.5897/AJB11.1412](https://doi.org/10.5897/AJB11.1412)
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- Lucia Kraková, Katarína Chovanová, **Samy A. Selim**, Alexandra Šimonovičová, Andrea Puškarová, Alena Maková, Domenico Pangallo (2012). A multiphasic approach for the investigation of the microbial diversity and its biodegradative abilities in historical paper and parchment documents. *International Biodeterioration and Biodegradation*, 70, 117-125. [doi:10.1016/j.ibiod.2012.01.011](https://doi.org/10.1016/j.ibiod.2012.01.011)
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- **Samy A. Selim** (2011). Chemical composition, antioxidant and antimicrobial activity of the essential oil and methanol extract of the Egyptian lemongrass *Cymbopogon proximus* STAPF. *International Journal of Fats and Oils (Grasas y Aceites)*, 62 (1), pp. 55- 61. [doi: 10.3989/gva.033810](https://doi.org/10.3989/gva.033810)
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## **Conference abstracts**

- Abdullah Albaqawi, and **Samy Selim** (2015). Antimicrobial Activity of Methanol Extract of Anziroat (*Astragalus* sp). IAAST June 11-12, 2015 at Antalya (Turkey). <http://dx.doi.org/10.17758/IAAST.A0615>.
- **Selim S.A.** (2015). Thermostable Alkaline Protease Production by *Bacillus Aryabhattachai* J4. Experimental Biology, American Society of Biochemistry and Molecular Biology, taking place at the Boston Convention Center, in Boston, Massachusetts, March 29 – April 1, 2015.
- **Selim S.A.** (2014). Response of *Saccharomyces cerevisiae* mutants with genes deleted in sphingolipid and ergosterol biosynthesis to oxidative, heavy metal stress and antibiotics. General Meeting of American Society for Microbiology, taking place at the Boston Convention Center, in Boston, Massachusetts, May 17 - 20, 2014.
- El-Alfy S. M., **Selim S.A.**, Abdel Aziz M. H., Diab A. M. and Makharita R. R. M. (2013). Commensal Lactic Acid Bacteria carry vancomycin-resistance and pathogen related virulence genes' to the 13<sup>th</sup> Young Scientists Forum (YSF), St Petersburg, Russia; July 2013.
- El-Alfy S. M., **Selim S.A.**, Abdel Aziz M. H., Diab A. M. and Makharita R. R. M. (2013). Molecular identification and characterization of commensal Lactic Acid Bacteria carrying vancomycin-resistance and pathogen-related virulence genes' to the summer conference of the Society of Applied Microbiology (SfAM), Cardiff, Wales, UK; July 2013.
- Amin Abdo, Iman M. El – Kholy, Mohamed Abdel Aziz and **Samy A Selim** (2013). After liver transplant: effect of bacterial infections. the First Young Researchers Conference (YRC) (6 - 7th Mar. 2013), Suez Canal University, Ismailia, Egypt, page 59.
- **Samy A. Selim** and Nashwa I. Hagag (2013). Analysis of plasmids and Restriction Fragment Length Polymorphisms of *Acinetobacter baumannii* Isolated from Hospitals- AL Jouf Region-KSA. ICBMB 2013"International Conference on Bioinformatics and Molecular Biology" held in New York, USA, during June 05-06, 2013.
- Meshref A. Al-Ruwaili and **Samy A. Selim** (2012). Water Bacterial Activities Involved in Immune Depression of Haemodialysis Patients. 17th World Congress of the International Society on Toxinology & Venom Week 2012, 4th International Scientific Symposium on All Things Venomous. Toxicon Volume 60, Issue 2, 160–161.
- **Samy Selim**, Sahar El-Alfy, Nashwa Hagagy, El Syaed El-Meleigy, Mohamed Abdel Aziz (2012). Assessment of Haloalkaliphilic Archeal diversity in Soda Lakes of Wadi Natrun, Egypt. 31<sup>st</sup> Symposium of the Malaysian Society for Microbiology, Theme: Microbiology Research in the Omics Era, Kota Kinabalu, Sabah Date: 13 - 15 December 2012, Proceeding book: 46-53.
- Ala S. Abu Soufa and **S. A. Selim** (2012). Physicochemical and microbiological quality of groundwater in North Province, Saudi Arabia. 31<sup>st</sup> Symposium of the Malaysian Society for Microbiology, Theme: Microbiology Research in the Omics Era, Kota Kinabalu, Sabah Date: 13 - 15 December 2012, Proceeding book: 24-35.
- **S. A. Selim** (2012). Antimicrobial, Antiplasmid and Cytotoxicity Potentials of Marine Algae *Halimeda opuntia* and *Sarcocystis filiforme* collected from Red Sea Coast. Dubai January 2012 ICABBE: International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering, 29-31 January 2012, Dubai, United Arab Emirates. Proceeding of World Academy of Science, Engineering and Technology 61, 1004-1009.
- **S. A. Selim** (2010). Production and Characterization of Thermostable Alpha Amylase Produced by Local Thermophilic Isolate *Geobacillus stearothermophilus* HP GU984043. 14<sup>th</sup> International Biotechnology Symposium and Exhibition, 14-18 September 2010, Palacongressi, Rimini – Italy.
- **S. A. Selim**, S. M. El-Alfy, N. I. Hagagy and E. A. El-Meligy (2010). Biodiversity of Alkaliphilic Archaea Isolated from Soda Lakes of the Wadi An Natrun, Egypt. ISME13-13<sup>th</sup> International Society for Microbial Ecology Conference, Seattle, USA from August 22 - 27, 2010.

- **S. A. Selim**, S. M. El-Alfy, N. I. Hagagy and E. A. El-Meligy (2010). Isolation and characterization of Biosurfactant-Producing Alkaliphilic Archaea Isolated from Soda Lakes of the Wadi An Natrun, Egypt. ISME13-13<sup>th</sup> International Society for Microbial Ecology Conference, Seattle, USA from August 22 - 27, 2010.
- **S. A. Selim**, S. M. El-alfay, M. H. Abdel Aziz, H.A. Hamido, M. S. Mashait and M. F. Warred (2009). Antibacterial activity of selected Egyptian ethnomedicinal plants. Annual Conference of the Association for General and Applied Microbiology (VAAM), Ruhr-Universität Bochum, 2009 March 8 -11, Bochum, Germany.
- **S. A. Selim**, S. M. El-alfay, M. H. Abdel Aziz, H.A. Hamido, M. S. Mashait and M. F. Warred (2009). Evaluation of bactericidal activity of some selected food additives. Annual Conference of the Association for General and Applied Microbiology (VAAM), Ruhr-Universität Bochum, 2009 March 8 -11, Bochum, Germany.
- Nikoletta Kálmán, Zoltán Gazdag, Dániel Márton Tóth, **Samy Selim** and Miklós Pesti (2008). The sensitivity of Tert-butyl hydroperoxide tolerant *Scizosaccharomyces pombe* mutant to hydrogen peroxide stress. Fourth Hungarian Conference of Mycology May 29–31, (2008) Debrecen, Hungary.

## **SCIENTIFIC PROJECTS**

- “**Study the capacity and efficiency of the microalgae in CO2 capture and on the utilisation of the stored carbon after capture**” No. 34/164, sponsored by Al Jouf University, Kingdom of Saudi Arabia, 2014-2015.
- “**Studies on the biodiversity of microorganisms in the hot water springs in the hot springs in Qurayyat, Al Jouf, KSA**” No. 34/155, sponsored by Al Jouf University, Kingdom of Saudi Arabia, 2014-2015.
- “**Isolation and molecular characterization of Aeromonas from clinical and Environmental Sources**” sponsored by King Abdulaziz University, Kingdom of Saudi Arabia, 2013-2014.
- “**Characterization of the plasmid DNA responsible for antibiotic-resistance in clinical Acinetobacter strains isolated from Hospitals- AL Jouf Region- KSA**” No. 33/94, sponsored by Al Jouf University, Kingdom of Saudi Arabia, 2012-2013.
- “**Study on Prevalence and Risk of Obesity in Al Jouf Province, KSA and its relation with Gut Microbiota**” No. 33/42, sponsored by Al Jouf University, Kingdom of Saudi Arabia, 2012-2013.
- “**Experimental studies on the antioxidant, anti-inflammatory, anti-cholinesterase, antimicrobial activities and protective effect of Saudi date palm fruits water extract (*Phoenix dactylifera* L.) on carbon tetrachloride induced hepato-toxicity in Rabbit**” sponsored by Y.A. Jameel Scientific Chair of Prophetic Medical Applications, King Abdulaziz University, Kingdom of Saudi Arabia, 2012-2013.
- “**Develop new methods for the prevention of biodeterioration and treatment of biodeteriorative agents of conservation and restoration of buildings, historical monuments and art works**” sponsored by National Scholarship Programme for the Support of Researchers was approved by the Government of the Slovak Republic, 2009.
- “**Culture Heritage Protection: Risk Assessment and Biodegradation Activities of Culturable Microflora Isolated from Books and Parchments**” sponsored by National Scholarship Programme for the Support of Researchers was approved by the Government of the Slovak Republic, 2008 to 2009.
- “**Sustainable use of Cairo waste water; environmental effects of the Bahr El Baqar Drain Project**” sponsored by The Swedish Research Council, Sweden, **from 2008 to 2010**.
- “**Primycin, A new Topical Antibiotic Project**” sponsored by Pannon Pharma, Hungary, **from 2007 to June /2008**.

- "Characterization of lipid peroxid mutant of fission yeast *Schizosaccharomyces pombe* Project" sponsored by Pécs University, Fac. of Sci.,Dept. of Gen. and Environ. Microbiol., Hungary, from 2006 to /2009.
- "Characterization of lipid peroxid mutant of fission yeast *Schizosaccharomyces pombe* Project" sponsored by Pécs University, Fac. of Sci.,Dept. of Gen. and Environ. Microbiol. , Hungary, from 2006 to /2009.
- "Modern methods on bacteria production and water quality in Lake Balaton, Hungary, Project" sponsored by Balaton Limnological institute of Hungarian Academy of Science, Hungary, from 12/8/2005 to 12/11/2005.
- "Participating in Environmental Microbiological Assessment of Water and Sediments of Sharm El-Sheikh region (Red Sea)", sponsored by National Parks of Egypt (South Sinai sector), Marine Science Department, Faculty of Science- Suez Canal University- Ismailia-Egypt, from February 2000 Until March 2001.

### **PROFESSIONAL COMMITTEES AND REVIEW PANELS:**

- World Journal of Microbiology and Biotechnology (Netherland).
- Food Processing and Preservation (USA).
- Journal of Basic Microbiology (Germany)
- Natural product research

### **CONFERENCES:**

- **Experimental Biology, American Society of Biochemistry and Molecular Biology**, taking place at the Boston Convention Center, in Boston, Massachusetts, March 29 – April 1, 2015.
- **General Meeting of American Society for Microbiology**, taking place at the Boston Convention Center, in Boston, Massachusetts, May 17 - 20, 2014.
- **ICBMB 2013"International Conference on Bioinformatics and Molecular Biology"** held in New York, USA, during June 05-06, 2013.
- **31<sup>st</sup> Symposium of the Malaysian Society for Microbiology**, Theme: Microbiology Research in the Omics Era, Kota Kinabalu, Sabah, Malaysia. Date: 13 - 15 December 2012.
- **TM's 1st World Virology & Microbiology Online Conference April 19-21, 2012.** chair the Session: Antibacterial Drug Discovery-I.
- **Dubai January 2012 ICABB BE 2012:** International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering, 29-31 January 2012, Dubai, United Arab Emirates.
- **14<sup>th</sup> International Biotechnology Symposium and Exhibition**, 14-18 September 2010, Palacongressi, Rimini – Italy.
- **Annual Conference of the Association for General and Applied Microbiology (VAAM)**, Ruhr-Universität Bochum, 2009 March 8 -11, Bochum, Germany.
- **The 2<sup>nd</sup> International Conference of The Egyptian Society for Environmental Sciences**, "Genetics and Biotechnology in Conservation of Natural Resources", 9-10 July 2007 Ismailia – Egypt.
- **CESAR 2006 conference on Antimicrobial Resistance**, 18-21 June 2006, held in Poprad Tatray, Slovak Republic.
- **XLVII Conference of Hydrobiology** Organized Balaton Limnological Research Institute of the Hungarian academy of sciences, 5-7 October 2005, held in Balaton Limnological Research Institute, H-8237 tihany, P.O.Box. 35, Hungary.
- **1<sup>st</sup> International conference on Natural toxins**, 6 October University –Egypt, 18- 19 December 2004, Supported by Egyptian Society of Natural Toxins.
- **Third conference of Biology** Organized by Egyptian British Biological Society, 3-5 September 2004 held in St. Katherine, Sinai, Egypt.

- **11<sup>th</sup> conference of Microbiology** Organized by Egyptian Society of Applied Microbiology (ESAM), 12-14 October 2003 held in Agricultural Genetic Engineering Research Institute, Giza, Egypt.

### **GRADUATE STUDENTS SUPERVISED:**

- **Undergraduate Students Supervised:**
  - 35 undergraduate students in Environmental risk assessments field.
- **M.Sc**
  - Studies on Bacterial Urinary Tract Infection in Diabetes Mellitus Patients (2003-2007).
  - Phenotypic and Genotypic Characteristic of Pseudomonas aeruginosa strains isolated from food and clinical specimens in Egypt (2007).
  - Studies on Environmental risk assessments of the biological system of Port Said solar salt works, Egypt (2010).
- **Ph.D**
  - Molecular Characterization of Vancomycin-Resistant Enterococci Isolates from Egypt (2008).
  - Prevalence, Toxicity and Molecular Biology Characterization of the hemorrhagic colitis bacteria (E. coli O157:H7) isolated from Different Sources in Egypt (2008).
  - Studies on Action of the Food Additives on Some Food Microorganisms (2008).
  - Biodiversity and Biotechnological Potential of Archaea Isolated from Soda Lakes of the Wadi An Natrun, Egypt (2009).

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