

# CURRICULUM VITAE



**Name** : Ali Mohamed Elshafei Ali  
**Place and date of birth** : Cairo, Egypt, 22 June, 1948.  
**Nationality** : Egyptian  
**Previous Occupation** : Head of the Dept. of Microbial Chemistry  
**Present Occupation** : Emeritus Professor, Dept. of Microbial Chemistry.

**Mail address** :  
**a) Private** : 18 El-Shaheed Mohamed Gamal El-Feiky Street,  
Flat 5, El-Sabah Emarat, Heliopolis, Cairo,  
EGYPT. Tel.: 202- 24143149  
Mob. : 02-01005133890  
**b) Office** : Dept. of Microbial Chemistry. Institute of  
Biotechnology Research; Genetic Engineering &  
Biotechnology Building; Room 616, National  
Research Centre, El-Tahrir Street, Dokki, Cairo,  
EGYPT. Tel.: 33371499 / 33371211 / 33371362 /  
33371483; Ext.: 3727/3183; direct: 33335985  
Fax: 00202- 3370931  
E-mail : alielshafei@yahoo.com

**Marital Status** : Married ( 2 boys )  
**Languages** : English - Arabic – French  
**Education** :  
\* B.Sc.in Chemistry and Biochemistry, June 1970,  
Faculty of Science, Ain Shams University.  
\* M.Sc. in Biochemistry, January 1976, Faculty of  
Science, Ain-Shams University.  
\* Ph.D. in Organic Chemistry “Biochemistry”,  
June 1982, Faculty of Science, Cairo University.

**Professional Career:**

<b>Post Held</b>	<b>Institution</b>	<b>Date</b>
Assistant Researcher	Lab. of Cell Biology	1973
Assistant Researcher	Lab. of Microbial Chemistry	1974
Assistant Lecturer	Same	1976
Researcher	Same	1982
Associate Professor	Dept. of Microbial Chemistry	1986
Professor	Dept. of Microbial Chemistry	1991
Head of The Dept.	Dept. of Microbial Chemistry	9 / 7 / 2003
Emeritus Professor	Dept. of Microbial Chemistry	22 / 6 / 2008

**M.Sc. Thesis on:** Biochemical Studies on Newly Isolated Antibiotics. (From Ain-Shams University, 1976).  
**Ph.D. Thesis on:** Utilization and Degradation of Aldonic Acids in Fungi (From Cairo University, 1982).

**Fellowships:**

- 1- Fellowship to Hoechst / UHDE Companies at Frankfurt, Germany through the cooperation channel between Egypt and Germany, in the period from 4 - 14 May, 1981.
- 2- Fellowship to Vrije University, Brussels, Belgium, in the period from February 1, 1985 to June 2, 1985.
- 3- Fellowship to the University of Arkansas, USA for 5 months, in the period from September 4, 1988 to February 3, 1989.
- 4- Field Trip to the Department of Biotechnology, University of Connecticut, USA, in the period from October 21, 1988 to November 1, 1988.
- 5- Attendance of several International Conferences in Scotland, Italy, Poland and Spain.
- 6- Scientific mission to Istituto di Chimica del Riconoscimento Molecolare, Italy (April, 2012).

## Summary of Scientific Accomplishments

### Principal investigator (PI) of thirteen projects

- Production, purification, characterization and application of  $\alpha$ -galactosidase from fungal source. [NRC: 12020114; PI: Prof/ Ali M Elshafei; From 2019- 2022].
- Green synthesis of silver nanoparticles from fungal source: characterization and different biological activities [NRC: 12020114; PI: Prof/ Ali M. Elshafei; From 2018-2019].
- Principal investigator of the Italian/ Egyptian project entitled" Development of antimicrobial cotton fabrics by immobilized enzymes". P.I./ Prof Dr/ Ali Mohamed Elshafei (2011- 2013).
- Metabolic Studies on the Degradation of Aldonic Acids and Formation of some Microbial Enzymes of Importance. (NRC: 3/2/1/2; PI: Prof/ A.M.Elshafei; July 1992 - June 1995).
- Biochemical studies on the Degradation of Nucleosides and Formation of some Enzymes Involved in Carbohydrate Degradation (NRC: 3/2/3/2; PI: Prof/ A.M.Elshafei; July 1995- June 1998).
- Biochemical Studies on alpha-galactosidase from microorganisms (NRC: 1/3/3/2/6; PI: Prof/ A.M.Elshafei; July 1998 –June 2001).
- Metabolic Studies on the degradation of sugars and their derivatives in filamentous fungi" (NRC: 10/104/5; PI: Prof/ A.M.Elshafei; July, 2001 - June 2004).
- Production of microbial alpha-galactosidase for the improvement of food products characteristics" (NRC: 10/174/5; PI: Prof/ A.M.Elshafei; July, 2001 - June 2004).
- Production of therapeutic yeast and cellulases from microorganisms (NRC:7110401; PI: Prof/ Ali M.Elshafei; July, 2004 - June 2007).
- Production of L-asparaginase, an anticancer agent from locally isolated filamentous fungi using agricultural wastes via solid state fermentation. (NRC:10010108; PI: Prof/ Ali M.Elshafei; July 2013- June 2016).
- Green synthesis of silver nanoparticles from fungal source: characterization and different biological activities. (NRC: AR 111103; Ext of Plan 11; PI: Prof/ Ali M. Elshafei; Jarch 2018- March 2019).
- Production, purification, characterization and application of  $\alpha$ -galactosidase from fungal source. (NRC:12020114; Plan 12; PI: Prof/ Ali M. Elshafei; July 2019-2021).
- Application of laccase enzyme to enhance physicochemical and sensory properties of food products (NRC:13020111; Plan 13; PI:Prof/ Ali M. Elshafei; July 2021-2024; Ongoing Project).

### 1- A member of the following projects: -

- Participating member in the Tunisian/ Egyptian project entitled "Fungal Membrane Bioreactor for the Treatment of Textile Wastewater" P.I. / Prof Dr/ Fatma El-Gohary (2011-2013).
- Participating member in the project entitled "Metabolic reactions in fungi" [National Science Foundation (NSF); P.I./ Prof Dr./ Ahmad Ibrahim Naguib (1977- 1980).
- Application of mixtures of nano-particles for modification of polyester fabrics on experimental scale. [NRC plan 11; ID = 11090404; PI: Prof/ Sami Elsebai [From 1/ 7/ 2016 – 30/ 6/ 2019].

- Establishment of local technological package for production functional filters on pilot scale. [STDF ID = 2723; PI: Prof/ Sami Elsebai; From 1/ 11/ 2012 – 30/ 6/ 2019].
- Application of nanotechnology for modification the properties of polyester fabrics. [NRC Plan 10; ID = 10160001; PI: Prof/ Sami Elsebai; From 2013 – 2016].
- Preparation of Synthetic Fiber Products for for Special Applications. [NRC Plan 9; ID = 8040606; PI: Prof/ Sami Elsebai; From 2007 – 2010].
- Microbial Metabolism and Formation of Some Compounds of Biological Importance Division of Genetic Engineering & Biotechnology PI: Prof / Yehia Shaker [From 1980 - 1987).

- 2- Participating in the American Project entitled “Metabolic Reactions in Fungi.” with the financial support from NSF Grant for three years (from 1977 - 1980).
- 3- Taking part in the Project of the Department of Microbial Chemistry, National Research Centre entitled “Microbial Metabolism and Formation of Some Compounds of Biological Importance (from 1980 - 1987).
- 4- Participating in the studies carried out at Hoechst AG/ UHDE Companies, Frankfurt, Germany, at Hoechst Orient S.A.A., Cairo and subsequently at the Sugar and Refinery Company, Hawamdia, Egypt (from 1981 - 1986).
- 5- In cooperation with the German partner in the Egyptian-German Scientific Research Program, I have gained good experience in the operation processes for the production of fodder yeast using the Mobile Fermentation Plant in the period from May 1981 - 1982.
- 6- Participating with Prof. Dr. Michel J. Penninckx on the studies that carried out at Vrije University (CERIA) during my Postdoctoral Fellowship in Belgium concerned with the regulation of proteases from microorganisms, from February 1985 to June 1985.
- 7- Conducting a series of research work at the University of Arkansas, USA, concerned with utilization and degradation of lingo-cellulolytic materials by microorganisms and the production of microbial enzymes (from September 1988 to February 1989).
- 8- Cooperated with the research team at the Department of Biotechnology, University of Connecticut, USA in the studies concerned with the immobilization of microorganisms and enzymes for dextran and dextranase production (October 1988).
- 9- Principal investigator of the bilateral project entitled "Development of antimicrobial cotton fabrics by immobilized enzymes" with the Italian partner in the Egyptian-Italian Scientific Research Program (June 2011- June 2013).

- 10- Member of the Egyptian Society of Applied Microbiology and the American Society for Microbiology (ASM) (Honorary Membership ASM-5303813, Division K since 2002).
- 11- Attending several international conferences.
- 12- Supervised and examined a large number of M.Sc. and Ph.D. Theses.
- 13- Participating in the teaching programs for postgraduate students, Assiut University.
- 14- Publishing many papers in National and International Journals and Conferences.
- 15- Awarded the Bronze Medal on the occasion of the National Research Centre Jubilee, 1982.
- 16- Awarded the National Research Centre (NRC) Prize for scientific contribution in Agricultural and Biological Sciences for the year 1987.
- 17- Awarded the Third World Academy Prize (Italy) in Biological Sciences for the year 1990.
- 18- Awarded the State Prize in Biological Sciences for the year 1993.
- 19- Awarded the National Research Center Prize for scientific assessment in the field of advanced technological sciences that serve the basic sciences for the year 2016.
- 20 Editor of six international Journals (International Journal of Biosciences and Technology (IJBST), Journal of Applied Life Sciences International (JALSI), UPI-Journal of Chemical and Life Sciences (UPI-JCLS), Journal of Food Microbiology (JFM), Scholarly Journal of Food and Nutrition (SJFN), Journal of Nutrition and Dietetic Practice (JNDP).
- 21- Reviewer for different International Journals.
- 21- Name included in the Encyclopedia of Distinguished Arab Scientists, Baghdad, Iraq (1994).
- 22- Name included in the Encyclopedia of Distinguished Egyptian Personalities for specific achievements, Cairo, Egypt (1994).
- 23- Name included in Marquis Who's Who in the World (15th Edition), Who's Who in Medicine & Healthcare and International Biographical Centre, Cambridge (27<sup>th</sup> Edition).
- 24- Selected by the Academy of Scientific Research and Technology, Egypt, for Tyler Prize in Environmental Sciences (1993).
- 25- Awarded the State Medal Prize for Excellency (first class) from the Egyptian President (1995).
- 26- Member of the scientific Committee of the First International Conference on Fungi. "Hopes and Challenge, Strategies for controlling fungal activities in the environment, in the period from 2-5 September, 1996.

- 27- Member of the office of Research Development and Technology Transfer (from June, 1998 - Dec., 2001) and scientific registration Committee (from January 2001 - Dec 2003; January 2020- till now).**
- 28- Member of the Committee of Sensors and Markers program (from May, 7, 2001 - Dec., 2001).**
- 29- Selected by the American Biographical Institute for Distinguished standing to the Research Board of advisors (member since 2003).**
- 30- Awarded NRC Prize for distinguishing international publications for the year 2011, 2012, 2013 and 2016.**