



**Summary Short**  
**Curriculum Vitae**  
**Prof. Adnan Badran**

**Educational Record:**

- Ph.D. 1963 Michigan State University, East Lansing, Michigan, USA.
- M.Sc. 1960 Michigan State University, East Lansing, Michigan, USA.
- B.Sc. 1959 Oklahoma State University, Stillwater, Okla., USA.
- Hon. Ph.D. 1981 Sungkyunkwan University, Seoul, Republic of Korea.
- Hon. Doctorate in Science 2007 Michigan State University, East Lansing, Mich. USA.
- West Watkins distinguished Lectureship Award 2009, Oklahoma State University USA.
- Honorary Professorship 2012, L.N.Gumilev Eurasian National University Astana-Kazakhstan.
- Hon. Doctorate in Business, 2014 Yarmouk University, Jordan.

**Languages:**

English, French, Arabic, some understanding of Spanish.

**Voluntary:**

- Member of the Board of Trustees of the baccalaureate - Amman, Jordan (1983 - ).
- Member, Executive Committee of the Noor Al Hussein Foundation - Amman, Jordan (1985- ).
- Member, Board of Trustees of the King Hussein Foundation - Amman, Jordan (1999- ).
- Chairman of the Jubilee Institute - Amman, Jordan (2000 - ).
- President of Arab Academy of Sciences. Beirut, (2003 - ).





- Member, Board of Trustees of Masdar Institute of Technology, Abu Dhabi (2007 - ).
- Chairman of Board of Trustees of the Arab Forum for Environment and Development (AFED), Beirut (2008- ).
- Member of UNESCO Good-Will committee on Discrimination in Education (2011- ).
- Member, Board of Trustees of Arab Thought Forum, Amman (2012 - ).
- Vice President, The Higher Council for Science & Technology (H.C.S.T), Amman (2014- ).
- Chairman of Board of Trustees of Jordan University, Amman (2014 - ).
- Member of Jordan Strategy Forum, Amman (2017 - ).
- President of the Higher Council of the National Center for Curriculum Development, Amman (2017 - ).
- Chairman of Emaar Jerash, Jerash (2018 - ).
- Chairman of Board of Trustees of Jordan Society for Scientific Research, Amman (2019 - ).

### **Employment History:**

- 2014 - The Chancellor of University of Petra, Amman.
- 2007 - Professor of Biotechnology, University of Petra, Amman.
- 2007-2014 President, University of Petra, Amman.
- 2009-2012 Chairman of the Administrative Board of Arab Thought Forum, Amman
- 2006-2010 Senator and chairman of the senate Committee on education science, culture & media.
- 2005 Prime Minister of Jordan & Minister of Defence
- 1998-2005 President of Philadelphia University
- 1994-1998 Deputy Director General (DDG), UNESCO, Paris.
- 1990-1994 Assistant Director General for Science (ADG/SC), UNESCO. Paris.
- 1989 Minister of Agriculture, Jordan  
Minister of Education, Jordan





- 1986-1987 Secretary General of the Higher Council for Science and Technology, Jordan.
- 1976-1986 Founding President of Yarmouk University, Jordan  
& Founder of the Science & Technology University Campus (JUST University), Jordan.
- 1976-1986 Professor at Yarmouk University and at Jordan University for Science, Technology, and University of Jordan.
- 1971-1976 Dean of the Faculty of Science at the University of Jordan.
- 1966-1971 Assistant, Associate, Professor, Faculty of Science University of Jordan.
- 1963-1966 Senior Research Plant Physiologist and Biochemist at the United Fruit Research Laboratories, U.S. and Central America, and member of the Board of Management.
- 1960-1963 Research Assistant at Michigan State University. USA.

**Courses Taught at the University:**

- General Biology (Science Majors)
- Molecular Biology
- Cellular Physiology
- Plant Physiology
- Biochemistry

**Professional Memberships:**

- Member of the Board of Trustees of the Jordanian Renewable Energy Society - Amman, Jordan (2012- ).
- President, Board of National Center of Human Rights (2008-2011).
- President of the Asia-Pacific Forum on human rights (APF) Sidney (2009-2011).
- Member of Int'l coordinating committee of human rights, Geneva (2010 - ).
- Advisory Board Member, Arab Thought Foundation, Beirut (2009 - 2014).
- Vice President of the Third World Academy of Sciences (TWAS) 1999-2004.





- Member and Secretary-General of the Third World Academy of Sciences (TWAS) 1991-1998.
- Member in Islamic World Academy of Sciences (IAS).
- American Institute for Biological Sciences 1963.
- American Plant Physiologists 1963.
- Member of the Board of Trustees of Mutah University 1978-1985.
- Member of the Board of Trustees of the University of Jordan 1976-1985.
- Member of the Royal Commission of Yarmouk University 1976-1985.
- Member of the Executive Board of the International Union of Biological Sciences - IUBS 1985 – 1988.
- Member of the Executive Board COSTED - ICSU 1984-1990.
- Member of the Executive Board of the International Association of Universities (IAU) 1985-1987.
- Chairman, Middle East International Association of Universities Presidents (IAUP) 1978-1986.
- Member of the American Association for the Advancement of Science (AAAS)
- Member of the Board of Trustees of Philadelphia University 1992-1995.
- Member of the Board of Trustees of the University of Jordan for Women 1992.
- Former member of the American Association for Horticultural Sciences.
- President of IAUP, Chapter of Middle East.
- ICSU- CBE, CTS, COSTED-Bioscience networks-UNESCO.
- Member of the 'Comité des hautes institutions' of the European Academy of Arts, Sciences and Humanities - since June 1997.

### **Activities:**

- Development of the biology curriculum for the secondary education cycle in Jordan (1967).
- Development of biology curriculum for the secondary education in the Arab States through the Arab League for Educational, Cultural and Scientific Organization (ALECSO), Cairo, Egypt (1970).





- Chairman, Technical Committee on the establishment of Al-Faisal Vocational College in Jordan (1972).
- Chairman, Technical Committee on the establishment of the Faculty of Engineering & Technology at the University of Jordan-Amman (1972-1976).
- Chairman, Pre-medicine and pre-nursing curriculum committee at the University of Jordan, Amman (1972-1976).
- Chairman, Faculty of Engineering Temp. Council, University of Jordan, Amman (1973-1976).
- Member of the higher committee on the Development of School Curriculum of the Sultanate of Oman (1976-1984).
- Chairman, Technical Committee on re-evaluation of Secondary Education in Jordan (1971).
- Vice-Chairman, Commission of Biological Education of the International Union of Biological Sciences (IUBS), 1975-1980.
- Editor, Biological Education Newsletter of IUBS supported by UNESCO (1973-1982).
- Member, The Committee on the Teaching of Science (CTE) of the International Council of Scientific Unions (1980).
- Member, the Science and Technology Policy Committee in Jordan, 1980.
- Chairman, The Five-year Development Plan of the Social Sector in Jordan (1981-1985).
- Consultant, the Academic and Space Planning of Sciences and Engineering Departments at the newly established King Abdul Aziz University, Jeddah, Saudi Arabia (1970).
- Consultant for assessment the design of King Faisal University, Saudi Arabia (1976).
- Chairman, Technical and Educational Specifications of Yarmouk University comprising faculties of Arts and Sciences, Medical Sciences, Engineering Agriculture and Veterinary Sciences, Social Spine and General Facilities.





- Chairman, Technical Committee prequalification's of Master Plan Consultants of Yarmouk University Campus (2000 acres and 1,000,000 m2 of construction space) 1976.
- Chairman, Technical Committee of prequalifications of Detailed Design and Tender Documents preparation of Yarmouk University Campus, first stage of 500,000 m2 construction space (1977-1980).
- Member of Jordan Guidance Council, Ministry of Information 1980.
- Chairman, Arab Center of Higher Educational Research ALECSO, Tunis-Damascus (1981-1983).
- Member of Executive Committee on Strategy of Science & Technology in the Arab World (1984-1987).
- Member of BOSTID/National Academy of Science Committee on Research Grants for Developing Countries Institution, Washington D.C. (1980-1983).
- Member of the Arab Thought Forum (1978-present).
- Member of the World Affairs Council (1980-present).
- Member of IOC - UNESCO Executive Committee (1984).
- President, National Parks Committee (1981-1989).
- Member, Jordan Higher Board for Science and Technology (1987).
- President, Higher Council for Agricultural Policy in Jordan (1989).
- Director of Agriculture and Biotechnology Sector, Higher Council for Science and Technology (1988).
- Coordinator of AraBN-Bioscience network of the Arab World (1986-1989).
- Rapporteur of the Arab Conference of Ministers of Higher Education in the Arab World (1985-1989).

### **Awards:**

- Renaissance, Al-Nahda Medal.
- Yarmouk Khalid Bin Walid Medal.
- Alfonso the tenth Medal, Spain.
- Hall of Fame Alumni Award, Oklahoma State University, USA.





- Independence National Medal, Estiklal, 1995.
- Nahda National medal 2005.
- Arab Thought Foundation Award for best Arab Scientist in higher education research 2005.
- TWAS Regional Prize for "Building Scientific Institutions", Durban, South Africa, Oct. 2009.
- World Education Asia award for Outstanding Contribution to education 2011.
- Shoman award for Peer review of young Arab scientists.

### **Affiliations and Honours:**

- Member of the Board of Trustees of the Jordanian Renewable Energy Society - Amman, Jordan (2012 - ).
- President, Board of National Center of Human Rights (2008-2011).
- President of the Asia-Pacific Forum on human rights (APF) Sidney (2009-2011).
- Member of Int'l coordinating committee of human rights, Geneva.
- Advisory Board Member, Arab Thought Foundation, Beirut (2009 – 2014).
- Past Vice president and Treasurer of the World Academy of Sciences (TWAS).
- Executive Board member of: International Union of Biological Sciences (IUBS).
- Member of International council of Scientific Union (ICSU), and International Association of Universities (IAU) and Universities presidents (IAUP).
- Member of UNESCO Bio-Science network. Royal Society of Conservation of Nature (RSCN), etc...
- Royal Conservation Society.
- Presidential Fellow of Aspen.
- World Affairs Council.
- Honorary President of the Renewable Energy Network (REN).
- Member of AAAS award for International Scientific Cooperation, Washington D. C..





**Books Published:**

1. Badran A.M., Kanawati, 1968. *Laboratory Manual-General Biology, Science, University of Jordan.*
2. Badran A.M, Lutfi, Nazer, 1973. *General Biology for the 1st Secondary Education (text book), Ministry of Education, Jordan.*
3. Badran A.M, Lutfi, Awad, 1974. *General Biology for the 2nd Secondary Education (text book), Ministry of Education, Jordan.*
4. Badran A.M, Alawi, 1975. *General Biology for the 3rd Secondary Education (text book), Ministry of Education, Jordan.*
5. Editor, Badran A.M. 1975. *General Biology for the Secondary Class (text book) - ALECSO Cairo.*
6. Badran A.M, Buchari, Awad, 1976. *General Biology for the Agricultural Secondary Education (text book), Ministry of Education, Jordan.*
7. Badran A.M et al. 1976 *General Biology for the 2nd Secondary Class (text book), ALECSO Cairo.*
8. Badran A.M. *Energy chapter in a book on environment, ALECSO, Cairo.*
9. Badran A.M., Alawi, 1976. *Manual of Biology Laboratory (text book), Yarmouk University.*
10. Badran A.M. et al. 1977. *General Biology for the third Secondary Class (textbook), ALECSO, Cairo.*
11. Badran A. M. & Baydoun E, 1981. *General Biology 1<sup>st</sup> Secondary Class (textbook), Oman.*
12. Badran A. M. & Baydoun E, 1981. *General Biology 2nd Secondary Class (textbook), Oman.*
13. Badran A. M. & Baydoun E, 1983. *General Biology 3rd Secondary Class (textbook), Oman.*
14. Badran A. M. & Baydoun E, 1984. *Teacher's Guide for Biology books of the Secondary Cycle, Oman.*







15. Badran A. M. & Baydoun E, 1985. *The Cell*, a textbook for Teacher's Training College, Oman.
16. Badran A, Baydoun E, 1985. *The Cell*. For Community Colleges, Ministry of Education, Muscat, Oman (in Arabic).
17. Badran A, Baydoun E, Suleiman SA, Ismail N, 1985. *The Biology of the Living Organisms*. For Community Colleges, Ministry of Education, Muscat, Oman (in Arabic).
18. Badran A. M. & Baydoun E, 1985. *Biology of the Living Organisms*, a textbook for Teacher's Training College, Oman.
19. Badran A. M. 1985. *The University - a creating process*. Louvain Centre of Middle Eastern Journal, Louvain, Belgium.
20. Badran A, Baydoun E, 1986. *Biology guide- A Practical Guide to Accompany "The Cell" and "The Biology of Living Organisms"*. For Community Colleges, Ministry of Education, Muscat, Oman (in Arabic).
21. Badran A. M. 1987. *Education in the Middle East: Transition from traditional to modern society*, Paragon Book in press (edited).
22. Edited by Khader & Badran A. M. 1987. *The Economic Development of Jordan*, Croom Helm, London.
23. Badran A, Baydoun E, Ahlawat KS, Vemuri S, 1987. Some Reflections about the Future Issues Concerning Economic Development in Jordan. In: Badran A, Khader B (eds.). *The Economic Development of Jordan*. Croom Helm Ltd. Publishers, London.
24. Badran A. M. et. al, 1989. *Strategy of Science and Technology for development in the Arab Region*, ALESCO-UNESCO, and publication centre of Arab Studies, Beirut, Lebanon.
25. Badran A. M. (Editor) 1989. *At the Crossroads: Education in the Middle East*, PWPA Book, Paragon House, N.Y.
26. DaSilva E, Badran B, Baydoun E, 2004. *Biotechnology in the Developing World*. In: Majali A, Ergin M, Zou'bi M (eds.), *Biotechnology and Genetic Engineering for Development in the Islamic World*. Islamic Academy of Sciences, Amman, Jordan, 39-86.





27. Badran A. M. 2014 Introduction chapter pps. 13-35. *Sills to the Future: biography and process*. Dar Yafa Publishing House.
28. Badran A. M. 2016. Opening Doors; Chapter in a book: "A voice for Science in the South", edited by Daniel Schaffer, World Scientific Publishing.
29. Badran, A. M. (2016). *Bridging Science and Policy in Water Management*. Managing Water in the 21<sup>st</sup> Century: Challenges and Opportunities pps. 9-29, University of California.
30. Badran, A. M. (Chief Editor), et. al, 2017. *Water-Energy-Food Nexus in the Arab Middle East: The Sustainability Triangle*. Introduction and Scope pages v-viii & chapter *Climate Change and Water Science Policy in Management* pps. 3-19, Springer Publishing.
31. Badran, A. M. (Chief Editor), et. al, 2018. *Universities in Arab Countries: An Urgent Need for Change, Underpinning the Transition to a Peaceful and Prosperous Future.*, Springer Publishing.
32. Badran, A. M., 2018. *Landscape of Higher Education in the Arab World: Quality, Relevance, and Student Mobility*, pps. 71-84, Springer Publishing.
33. Badran, A. M., 2018. *Landscape of R&D in the Arab Region Compared with the Rest of the World*, pps. 85-104, Springer Publishing.
34. Badran, S. A. & Badran, A. M., 2018. *Who Pays What for Public & Private University Education in the Arab Region Compared with the Rest of the World: Context of Jordan*, pps. 225-248, Springer Publishing.

### **Papers and Patents Published:**

35. Badran A. M. 1963. Environmental Study on McIntosh Maturation, AIBS Symposium, University of Massachusetts, Amherst, USA, ASHS No. 320, 24.
36. Badran A. M. 1965. Polyethylene Glycols - Tannins Interactions in Extracting Enzymes. *Nature* 206: 622-624.
37. Badran A. M. 1965. Mechanism of Core Browning in Bananas, Physiology and Storage Section, AIBS Symposium, University of Illinois, Urbana, ASHA No. 104 21.





38. Badran A. M. 1965. Preparation of Enzymes from Plant Tissues Containing High Molecular-weight Polyphenols. Phenolics, Auxins and Oxidases Section. Plant Physiology Suppl. Vo. 10, AIBS University of Illinois, Urbana.
39. Badran A. M. April 22, 1969. Method of Preparing Enzymes from Plant Tissues Containing Phenols. Patent, Ser. U.S. 3,440,143.
40. Badran A. M. June 17, 1969. *Controlled Atmosphere Storage of Green Bananas*, Ser. U.S. No. 3,450,542 Patent Office, and Washington D.C.
41. Badran A. M. 1967. Polyphenolexidase Preparations and the Interaction of Polyethylene Glycols with Tannins. 8th Science Symposium, University of Damascus, pps 1-20.
42. Badran A. M. June 17, 1969. Method of Packing Ripening Plant Foods with climacteric rise of respiration to Prolong Storage, Patent, Ser. U.S. 3450,543,, Washington D.C. Pat. Office.
43. Badran A. M. June 17, 1969. Method of Packing Ripening Perishable Plant Foods to Prolong Storage, Patent, Ser. U.S. 3450,544, Washington D.C. Pat. Office.
44. Badran A. M. 1972. Endogenous Activation and Inhibition of Polyphenoloxidase in Plant Tissues Containing Phenols. Publ. The Lebanese Society for Advancement of Science, Beirut.
45. Badran A. M. 1972. Biochemical Study on Changes of Phenolic Compounds in Banana Fruit during Ontogeny, Chilling and respiration Climateric. Disarat Vol. 2 (No. 2).
46. Badran A. M. 1986. Biology and Health Education: Innovative Techniques. UNESCO Book on New Trends in Education, Paris.
47. Badran A. M. 1988. Orientation of Education and Training Policy toward Science and Technology Self-reliance, IAS Journal, Islamabad, Pakistan.
48. Badran A. M. 1988. Science & Technology and Human Resources, ISESCO, Dakar, Senegal.





49. Badran A. M. 1988. New Trends in Computer Education, IUBS-CTS, Sydney, Australia.
50. Badran A. M. 1988. Higher Education in the Arab world, International Association of Universities (IAU) Publication, Rio, Brazil.
51. Badran A. M. 1989. Access to Higher Education in the Arab World, IAU, Higher Education Policy, Vol.2 , No. 1.
52. Badran A. M. 1989. Meeting the demand for Higher Education, Chapter 20: 243-252, PWPA Book, Paragan House, New York.
53. Badran A. M. 1990. Protected Cultivation in the Middle East: A promising future, Chapter 19, pps. 289-301. Agriculture in the Middle East, Paragan House, New York.
54. Badran A. M. January 1991. Integration of Traditional and Frontier Technologies. New Technologies: Reaching the Unreached. I. Biotechnology, Swaminathan Research Foundation, Madras, India.
55. Badran A. M. November 1991. Global Change and the Human Prospect: UNESCO's Scientific Contribution, pps. 245-257, Sigma Xi: The Scientific Research Society; Washington D.C.
56. Badran A. M. 1992. The Role of UNESCO in science and technology manpower development in developing countries, IAS Journal: Royal Scientific Society Press, Amman.
57. Badran A. M. August 1993. Sustainable Development and the changing ecosystems, IAS Journal: 81-123, Kuala Lumpur, Malaysia.
58. Badran A. M. August 1993. The Role of Education in the protection of the environment, IAS Journal: 433-462, Malaysia.
59. Badran A. M. 1995. Transboundary Waters: Prospects for Peace or Conflict, IAS Journal: 225-252, Varan Printing House, Ankara, Turkey.
60. Badran A. M. 1995. Israel and Arab Waters: Prospects for Peace or Conflict, Water in the Islamic World an Imminent Crisis, IAS, pps. 225-252, Amman, Jordan.





61. Badran A. M. 1995. The Role of Education in Health, Nutrition & Development: Experience of UNESCO, IAS Journal: 161-172, Varan Printing House, Ankara, Turkey, 1995.
62. Badran A. M. 1995. Global Overview: State of Health Education in the World: Towards Partnership; Health Care Delivery and Medical Education: A blueprint for change. World Federation for Medical Education. Medical Education Journal, Vol. 29, Supp. 1, pps. 16-23, Blackwell Science.
63. Badran A. M. 1995. Promoting Clean Technology Through the Use of Multimedia Learning Material in Environmental Engineering, European Journal of Engineering Education, Vol. 20, No. 2, pps. 183-185.
64. Badran A. M. 1995. UNESCO Policy on Data Exchange: Grave disparities in scientific data access (Data and knowledge in a changing world), CODATA-ICSU, Paris.
65. Badran A. M. June 1996. Solar Energy for Environment and Sustainable Development. World Renewable Energy Congress IV, Denver, Colorado.
66. Badran A. M. 1996. Globalization and Higher Engineering Education. Australian Journal of Engineering Education, Vol. 7, No. 2.
67. Badran A. M., May 24th 1998. Human Capital and Quality Management: Strategies for an Era of Globalization. Journal of ECSSR - 4th Annual Conference. Abu-Dhabi.
68. Badran A. M., May 17th 1998. Human Resources and Economic Development. Discussant IMF World Bank Arab Fund paper. Journal of Arab Monetary Fund - Abu Dhabi.
69. Badran A. M., 2000. Human Capital, Management and Quality: Globalization and Education Strategies 3rd. Millennium Challenges, the Emirate Centre for Strategic Studies and Research, (PP 129-164), Abu Dhabi, UAE.
70. Badran A. M., May 2000. What a higher education needed for 21st Century, Shoman Forum, pps 235-251, Amman.





71. Badran A. M., 2000. Science and Technology: Arab World Perspective of Science and Technology in the Arab World: Reality and Ambition, Abdul Hameed Shoman Foundation Publications, PP 107-123, Amman, Jordan.
72. Badran A. M., 2001. University Learning and Contemporary Requirements: Future Overview, Abdul Hameed Shoman Foundation Publications, pps 277-288, Amman, Jordan.
73. Badran A. M., 2002. Creativity and Innovation in Education for the Challenges of 2000+: Capacity Building of Entrepreneurship, Information Technology for Development in the Islamic World, pps 303-323, Amman, Jordan.
74. Badran A. M., April 2002 (co-author). Biotechnology and Developing world. Electronic Journal of Biotechnology, Vol.5 No.1, Issue of April 2002.
75. Badran A. M., April 2002 (co-author). Biotechnology and Developing world. Electronic Journal of Biotechnology, Vol.5 No.1, Issue of April 2002.
76. Badran A. M., 2006. State of Science and Technology in the Arab Region: A Sketch, Energy for Sustainable Development and Science for the Future of the Islamic World and Humanity, pps 317-330, Amman, Jordan.
77. Badran A. M., 2004. Status of Science & Technology in the Arab Region. UNESCO World Science Report.
78. Badran A. M., 2006. Higher Education: Reality and vision. Shoman Foundation, pps 31-41, Amman.
79. Badran A. M., 2009. What is What in S&T and Higher Education in the Arab Region for 2006, Higher Education Excellence for Development in the Islamic World, IAS Journal pps 67-75, Amman, Jordan.
80. Badran A. M., 2009. One-Way Ticket to Science, Abstract, P 14, TWAS 11th General Conference, Durban, South Africa.
81. Badran A. M. & Zou'bi, 2010. UNESCO World Science Report 2010, Arab Status on Science & Technology, pps. 251 – 277, Paris.





82. Badran A. M. December 2010. Science & Technology Landscape of the OIC: The Arab countries in focus, Towards the Knowledge Society in the Islamic World: Knowledge Production, Application and Dissemination, pps 227 - 242, Shah Alam, Selangor, Malaysia. <<http://www.iasworld.org/wp-content/uploads/2017/01/Contents-New.pdf>>.
83. Badran A. M., 2013. Scientific research in Jordan and the Arab world, Diresat, No. 34, pps 211-214, Emirates.
84. Badran A. M., 2015. Charting the Political Map of the Middle East, Poland/V4 - Middle East Partnership, pps 17 - 20, Amman, Jordan.

