

CURRICULUM VITAE

PERSONAL INFORMATION

Full Name: Ali Zuhair Elkarmi

Date of Birth: August 14, 1957

Marital Status: Married

Nationality: Jordanian

Residence Address: P.O.Box 9468, Postal code (11191) Kamaliya- Amman

Tel. (962) (6) 5340428

e-mail : karmi@hu.edu.jo

Current Address: The Hashemite University - Department of Biology and
Biotechnology, P.O. Box (150459) Zarqa, Postal code (13115) - Jordan.

Tel. (962) (5) 3903333 - Fax (962) (5) 3903349

EDUCATION

Ph.D. in Bioengineering, Texas A&M University, 1987. Dissertation title
" Modeling the Neurotransmitter - Receptor Binding Process in the Brain".

M.Sc. in Bioengineering, Texas A&M University, 1984. Thesis title " The
Interaction of Plasma Proteins With Polymers".

B.Sc in Zoology/Microbiology, Kuwait University, 1980.

PROFESSIONAL EXPERIENCE, POSITIONS HELD & NATURE OF WORK

1. Employment

2013- Now: Vice President for the Scientific Colleges and Centers – The Hashemite University

Responsibilities include the administrative, financial and academic supervision of all scientific colleges and centers at the Hashemite University, the accreditation of all university academic programs in all colleges of the university, the formulation and follow up of the university strategic plans and the follow up of the university ranking in the prestigious ranking systems. Furthermore, the chairing of the following committees:

University academic promotion and employment committee

University curriculum development and modification committee

University academic development committee

University world ranking committee

University academic technical committee for faculty employment and promotion

University strategic plans committee

University review of student grades committee

University student academic problems committee

The Chief Editor of Jordan Journal of Biological Sciences, 2015-Now

Editorial Board Member of the Journal of the Association of Arab Universities for Basic and Applied Sciences, 2013-Now

2014-Now: member of the Board of Trustees, Mutah University, Jordan.

2009-2013: Dean of the Faculty of Science – The Hashemite University

2007-2009: Vice Dean of the Faculty of Science – The Hashemite University, Zarqa, Jordan

2008: Full professor

2005-2006: Sabbatical Leave – The Applied Science University, Amman, Jordan

2002 – 2005: Vice Dean of the Faculty of Sciences and Arts – The Hashemite University

2001 – 2002: Director of the Center for Studies, Consultations and Community Services at the Hashemite University.

1998- 2001: Head of Biological Sciences Department at the Hashemite University

2000: Associate Professor – The Hashemite University. Biological Sciences Department.

1995: Assistant Professor - The Hashemite University. Biological Sciences Department.

1990-1995: Ecology Division Head - Environmental Research Center. Royal

1989-1990: Researcher in biotechnology - Technical Affairs and Popularization of Science Division.

1988-1989: Researcher in Biotechnology at the President's Office of the Royal Scientific Society.

1980-1981: Teaching Assistant, Kuwait University (January 1980 - May 1981).

2. Community Services

- **The Royal Society for the Conservation of Nature**

- The chief editor of ALREEM - Nature and Environment Magazine, which is published quarterly by the Royal Society for the Conservation of Nature. Moreover, the participation in the activities sponsored by the society.
- **Jordan Environment Society**
 - Represents the society in the official meetings held by the Jordan Environment Protection Corporation (Ministry of Municipal and Rural Affairs and the Environment) concerned with the Ozone layer protection. Furthermore, the participation in the activities sponsored by the society
- **Jordan Environment Society - Amman Branch**
 - Founding member of Amman branch which is responsible for increasing awareness in the environmental problems that face Amman area and the participation in finding solutions for the environmental problems
- **Presentations in Seminars, Workshops, and Meetings**
 - Participation in presenting lectures on environmental problems in Zarqa area and in other areas of Jordan either in Seminars held by Governmental entities, environmental societies in Jordan or schools in the area.

3. Teaching Experience

- 1- General Biology (1)
- 2- General Biology (2)
- 3- Practical General Biology
- 4- Introduction to Environmental Science
- 5- Biotechnology
- 6- Modeling Biological Systems
- 7- Experimental Design and Data Analysis
- 8- Seminar
- 9- Research Topics

10- Environmental Science and Management (Graduate Level)

11- Research Methods and Data Analysis (Graduate Level)

12- Human Genetics

4. Research Interest and Experience Areas

- * Modeling biological systems.
- * Compartmental analysis.
- * Biotechnology of artificial cells and organs.
- * Biomedical materials.
- * Biocompatibility.
- * Biotechnology of single cell protein.
- * Environmental aspects of biotechnology.
- * Solid waste biotechnological conversion.
- * Utilization of solar energy for water disinfection and the treatment of Organic pollutants.

5. Supported Research Projects

1- Research Proposals granted support from International organizations

- Biodegradation of organic pollutants - Supported by UNDP
- Upgrading of the capabilities of the Environmental Research Center laboratories - EU
- Upgrading biology teaching using computers and multimedia - UNESCO

2- Research Proposals granted support from national organizations

- Water disinfection using new methods- Higher Council for Science and Technology (HCST)
- The treatment of organic pollutants – HCST
- Improvement of Olive Oil Quality: Examination and Modeling. Joint research project between Tunisia-Jordan
- Biodegradation of chlorophenolic compounds originating from pharmaceutical and healthcare industries – Abdul-Hameed Shoman Foundation

3- Research Proposals granted support from the Deanship of Scientific Research and Higher Education of the Hashemite University

- Utilization of UV radiation for the disinfection of drinking water
- The measurement of dielectric properties of human red blood cells
- The biodegradation of solid waste
- Prevalence of Helicobacter pylori infection in Jordanian patients

6. Professional Societies

- * Jordan Environment Society.
- * Jordan Environment Society - Amman Branch (founding member)
- * The Royal Society for the Conservation of Nature.
- * Science and Technology Club of Jordan.
- * Jordan Quality Society
- * American Association for the Advancement of Science (AAAS) (Until 1989).
- * Association for the Advancement of Medical Instrumentation (AAMI) (Until 1988)
- * International Society of Technology Assessment in Health Care (until 1988).
- * Jordanian Alumni Society for graduates of US Universities and Institutes

7. Training Courses & Workshops

- * Radiological safety short course. Spring, 1984.

Training topic: The safe handling and use of radioactive materials during research activities and on the human risk associated with the use of radioactive materials.

Sponsored by: Texas A&M University Radiological Safety Office.

- * Regional training course on integrated system for organic wastes utilization. October 1988.

Training topic: The use of integrated systems for organic wastes use to increase the potential benefits obtained from organic wastes.

Sponsored by: Kuwait Institute of Scientific Research (KISR), ROSTAS and UNESCO.

* Regional training course on industrial project appraisal and management. September 1990.

Training topic: Industrial project development, appraisal, implementation and evaluation.

Sponsored by: The Royal Scientific Society of Jordan and the Economic Development Institute (EDI) of the World Bank.

* Regional workshop on landfill of hazardous industrial waste. June 1992.

Training topic: Techniques for assessing hazardous waste quantities and their disposal options, engineering aspects, operation and management, regulatory and administrative aspects, site selection, environmental assessment and site closure and rehabilitation.

Sponsored by: The United Nations Environmental Programme (UNEP), World Health Organization (WHO) and the International Solid Waste and Public Cleansing Association.

* Environmental impact assessment (EIA). May, 1994.

Training topic: Assessing environmental impacts of developmental projects, methods of EIA, auditing, social impacts, health impacts and legal aspects.

Sponsored by: Jordan Institute of Management, United Nations Environmental Program (UNEP), and the Islamic Bank for Development.

* Middle East Environmental Impact Assessment Training Course. November, 1994.

Training topic: EIA and sustainable development, EIA process, screening, scoping, follow-up studies in EIA, consultation in EIA, transboundary issues in EIA,

coherence and harmonization in EIA processes and EIA requirements of aid agencies.

Sponsored by: Government of Canada through IDRC.

* Basic Web Technology Skills for Courseware Development. October 2000.

Training topic: Information technology workshop designed to enhance the skills of development courses on the internet and computer based courses.

Sponsored by: UNDP and UNESCO.

8. Administrative Experiences

- 1- Head of the Ecology Division of the Royal Scientific Society
- 2- Chairman of the Biotechnology Steering Committee of the Higher Council for Science and technology
- 3- Chairman of the Biological Sciences Department of the Hashemite University
- 4- Director of the Center for Studies, Consultations and Community Services and the Hashemite University
- 5- Vice-Dean of the Faculty of Science and Arts
- 6- Vice Dean of the Faculty of Science
- 7- Dean of the Faculty of Science
- 8- Chief Editor of Al-Reem - Nature and Environment Magazine- Published by the Royal Society for the Conservation of Nature

9. Computer skills

1- Computer applications in research :

- * Statistical analysis software
- * Spreadsheet software
- * Own made software

2- Computer applications in teaching

- * PowerPoint
- * Word processing
- * Spreadsheet

- * Multimedia applications
- * Internet
- * FrontPage
- * Acrobat
- * Web CT
- * Photoshop

10. Supervision of graduate Students

- Supervisor of four M. Sc. Student at the Hashemite University – Biological Sciences department
- Co-supervisor of nine M. Sc. Students at the Hashemite University- Biological Sciences Department
- Co-supervisor of a M.Sc. Student at the University of Jordan - Environmental Science Major

PARTICIPATION IN MAJOR COMMITTEES

1- International Level

- * Jordan's representative (As a National Member) in COBIOTECH (until 1995)

- * Representative of the Federation of Arab Scientific Research Council in the Arab Biotechnology Expert Meeting held in Amman, Jordan.

2- National Level (Ministerial Committees and Governmental Agencies)

- * Biotechnology Steering Committee of the Higher Council for Science and Technology. Responsible for formulating and implementing a national policy on biotechnology.

- * Biotechnology Technical Committee of the Higher Council for Science and Technology. Responsible for evaluating all technical requirements to establish a biotechnology program in Jordan.

* Technical Committee of the First Arab Conference on "Perspectives of Modern Biotechnologies in the Arab Countries".

* Coordinating Committee of the International Symposium on the Role of "Biotechnology in National Development".

* Solid Waste Sub-committee of the Higher Council for Science and Technology. Responsible for evaluating the current solid waste practices and suggest necessary modifications.

* Asbestos Technical Committee of the Ministry of Health. Responsible for formulating Jordanian regulations for the safe use and disposal of asbestos and asbestos containing materials.

* Environmental Biotechnology Sub-committee of the Higher Council for Science and Technology. Responsible for formulating the Jordanian policy in the field of environmental biotechnology.

* Environmental Survey Committee of Amman City Hall. Responsible for evaluating the ecological situation at Amman, Russaifa and Zarqa cities.

* Technical Committee of the Second Arab Conference on "Perspectives of Modern Biotechnologies in the Arab Countries".

* National Jordanian Oceanographic Committee which is responsible for organizing research activities in this field and setting up priorities and objectives to be reached for the management of the coastal region.

* National Jordanian Man and the Biosphere Committee which is responsible for setting up research priorities in this field in addition to organizing all the activities and communications with the International Man and the Biosphere Committee.

3- Non-Governmental Organization Level

- * Al-Reem editorial committee- Royal Society for the Conservation of Nature
- * Scientific committee - Jordan Environment Society - Amman branch

4- Hashemite University Level

* University Level

- Member of the Health Insurance Committee (from 1998 - 2000)
- Member of the Council of Studies, Consultations and Community Services
- Member of the World Bank project implementation committee
- Member of the committee for the reuse of As-Samra wastewater for irrigation
- Member of the Bioethics committee
- Member of Council of the Institute of Land, Water and Environment of the Hashemite University (From 1998-2000)
- Member of Scientific Research Council Committee
- Member of Higher Studies Committee
- Member of Students Reprimand Committee
- Member of the University Council
- Member of the Dean's Council
- Member of the Internal Review Board

* College Level

- Member of the Council of the College of Science and Arts as the Biology Department representative (from 1996-1998)
- Member of the Council of the College of Science and Arts as the Chairman of the Biology Department (from 1998 - 2001)
- Member of the Degree Plan committee
- Member of the Appointment and Promotion committee
- Chairman of Scientific research Committee
- Chairman of the Graduate Students Affairs committee

- Chairman of Examinations and Schedules Committee
- Chairman of the Grade Approval committee
- Member of the Library committee

* Department Level

- Chairman of the Graduate Studies committee
- Chairman of Scientific Research Committee
- Chairman of Master of Science Degree Plan committee
- Grade Approval committee
- Bachelor of Science Degree Plan committee

LANGUAGES

	Reading	Writing	Speaking
Arabic	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent

PUBLICATIONS AND PRESENTATIONS

1. Publications

- 1) **A. Z. Elkarmi**, M. Karmi and Z. Alkarmi. A Markov Chain Based Model of the Neurotransmitter - Receptor Interactions. Drug Delivery and Design. Vol. 3, 69-76, 1988
- 2) **A. Z. Elkarmi** et Al. A Study of the Significance, Limiting Factors and Types of Total Artificial Hearts. Jordan Medical Journal. Vol. 23, 7-20, 1989
- 3) W. Khateeb, A. Tamemi and **A. Elkarmi**. Biotechnology Research and Development Potential in Jordan. Proceedings of the First Arab Conference on Perspectives of Modern Biotechnologies in Arab Countries. P. 26-43, 1989

- 4) **A. Elkarmi** and H. Dia. A Stochastic Model for the Assessment of the Environmental Risks From Genetically Modified Microorganisms, *Dirasat (Series B)*. Vol. 20 B(1), 119-129, 1993
- 5) **A. Elkarmi**. Modeling the Effects of Exposure Time and Turbidity on the Elimination of bacteria in Drinking Water by Natural Ultraviolet Radiation. *Dirasat, Natural and Engineering Sciences*. Vol. 25(2), 307-315, 1998
- 6) **A. Elkarmi** and M. Karmi. Markov Chain Based Model for Outcome Prediction in Craniosynostosis. *Jordan Medical Journal*. Vol. 32(1), 39-45, 1998
- 7) **A. Elkarmi** and M. Karmi . The Application of Program Evaluation and Review Technique and Critical Path Method in Surgical Operations. *Jordan Medical Journal*. Vol. 32(1), 7-15, 1998
- 8) R. Musa and **A. Elkarmi**. Utilization of Ultraviolet Radiation for the treatment of organic Pollutants by a Photocatalytic Process. *Dirasat*. Vol. 26(2) ,1998.
- 9) Naim Ismail and **Ali Elkarmi**.. Age, Growth, and Shell Morphometrics of the limpet *Cellana radiata* (Born, 1778) from the Gulf of Aqaba, Red Sea. *Japanese Journal of Malacology*. Vol. 58 (2), 61-69, 1999.
- 10) Salem Yasin, Mawieh Hamad and **Ali Elkarmi**. Jordanian Population Data on the PCR-Based Loci: LDLR, GYPA, HBG, D7S8 and GC. *Forensic Science International*. Vol. 104, 17-21, 1999.
- 11) Naim Ismail, **Ali Elkarmi** and Salem Al-Moghrabi. Population Structure and Shell Morphometrics of the Corallivorous Gastropod *Drupella cornus* (Roding, 1798) in the Gulf of Aqaba, Red Sea. *Indian Journal of Marine Sciences*. Vol. 29, 165-170, 2000.

- 12) Khaled Abu-Elteen, Samir Awadallah and **Ali Elkarmi**. Antibiotic Resistance of Pathogenic Bacteria in Patients with Urinary Tract Infection. Jordan Medical Journal. Vol. 34(2), 117-122, 2000
- 13) Mawieh Hamad, Salem R. Yasin and **Ali Elkarmi**. Genetic Polymorphism of the PCR-based Locus HLA-DQA1 in Jordanians. Korean Journal of Genetics. Vol 23(1) 7-11, 2001
- 14) Mawieh Hammad, Salem Yasin and **Ali Elkarmi**. Polymorphism of HUMvWA31, HUMTH01, HUMF13A1 and HUMFES/FPS STR Genetic Loci in Jordanians. Korean Journal of Genetics. Vol. 23(2), pp 157-161, 2001
- 15) Khaled Abu-Elteen, **Ali Elkarmi** and Mawieh Hamad. Characterization of phenotype-based pathogenic determinants of various *Candida albicans* strains in Jordan. Japanese Journal of Infectious Diseases. Vol. 54, 229-236, 2001
- 16) S. Awadallah, N. Salem, A Saleh, M. Mubarak and A. Elkarmi. Zinc, Magnesium and Gamma Glutamyltransferase levels in human seminal fluid. Bahrain Medical Bulletin. Vol. 25(3), 122-126, 2003
- 17) K. Salem, S. Yasin, **A. Elkarmi**, M. Hamad and A. Jaran. Jordanian Population Data on Five STR Forensic Loci: D16S539, TPOX, CSF1PO, Penta D and Penta E. Legal Medicine. Vol. 5, 251-252, 2003.
- 18) S.M. Awadallah, K. H. Abu-Elteen, **A. Z. Elkarmi**, S. H. Qaraein, N. M. Salem and M. S. Mubarak. Maternal and Cord Blood Serum Levels of Zinc, Copper and Iron in Healthy Pregnant Jordanian Women. The Journal of Trace Elements in Experimental Medicine. Vol. 17, -8, 2004.
- 19) H. Al-Abeid, K. Abu-Elteen, **A. Elkarmi** and M. Hamad. Oral Candidiasis in Jordanina Cancer Patients: Prevalence, Pathogenic Determinants and Antifungal Sensitivity. Japanese Journal of Infectious Diseases. Vol. 57(6), 279-284, 2004.

- 20) S. R. Yasin, M. M. Hamad, **A. Z. Elkarmi** and A. S. Jaran. African Jordanian Population – Genetic Database of Fifteen Short Tandem Repeat (STR) Genetic Loci. *Croatian Medical Journal*. Vol. 46(4), 587-592, 2005
- 21) R. Abu Eideh and **A. Elkarmi**. Allometric Relationships of *Malva parviflora* Growing in Two Different Bioclimatic Regions. *Journal of Plant Biology*. Vol. 48(3), 319-325, 2005
- 22) **A. Elkarmi** and R. Abu Eideh. Allometry of *Urtica urens* in Polluted and Unpolluted Habitats. *Journal of Plant Biology*. Vol. 49 (1), 9-15, 2006.
- 23) **A. Elkarmi** and R. Abu Eideh. Modeling the Growth of *Urtica urens* Growing in Polluted and Unpolluted Regions. *Asian Journal of Plant Sciences*. Vol. 5(2), 335-340, 2006
- 24) N. Ismail and **A. Elkarmi**. Age, Growth and Shell Morphometrics of the Gastropod *Monodonta dama* (Neritidae Prosobranchia) from the Gulf of Aqaba, Red Sea. *Pakistan Journal of Biological Sciences*. Vol. 9(5), 843-847, 2006
- 25) **A. Elkarmi** and N. Ismail. Population Structure and Shell Morphometrics of the Gastropod *Theodoxus macri* (Neritidae Prosobranchia) from the Azraq Oasis, Jordan. *Pakistan Journal of Biological Sciences*. Vol. 9(3), 549-552, 2006
- 26) **A. Elkarmi** and R. Abu Eideh. Modeling the Growth of *Malva parviflora* Growing in Two Different Bioclimatic Regions. *Asian Journal of Plant Science*. Vol. 5(3), 498-503, 2006
- 27) K. Al-Qaisi, **A. Elkarmi**, E. Qoneis, L. Tahtamouni and M. Abu-Samak. Allometry of Postnatal Rat Brain Development Prenatally Exposed to Aspirin. *Pakistan Journal of Biological Sciences*. Vol. 9(7), 1212-1218, 2006

- 28) **A. Elkarmi** and N. Ismail. Population Structure and Biometry of the Gastropod *Melanopsis praemorsa* (Thiaridae: Prosobranchia) From Azraq Oasis, Jordan. Pakistan Journal of Biological Sciences. Vol. 9(7), 1359-1363, 2006.
- 29) M. A. Hamad and **A. Z. Elkarmi**. Modeling Acquired Immunity as an Outcome of the Interaction Between Host-related Factors and Potential Antigen Repertoires. Rivista di Biologia / Biology Forum. Vol. 99 (3), 483-498, 2006.
- 30) **Ali Elkarmi**, Mahmoud Abu-Samak and Khalid Al-Qaisi. Modeling the Effects of Prenatal Exposure to Aspirin on the Postnatal Development of Rat Brain. Growth, Development & Aging. Vol. 70, 13-24, 2007.
- 31) M. K. Abu Sini, K. H. Abu-Elteen, **A. Z. Elkarmi**, M. A. Hamad and R. F. Khuzaie. Influence of Various Ultraviolet Light Intensities on Pathogenic Determinants of *Candida albicans*. Biotechnology. Vol. 6(2), 210-217, 2007
- 32) **Ali Elkarmi** and Naim Ismail. Growth Models and Shell Morphometrics of two Populations of *Melanoides tuberculata* (Thiaridae) Living in Hot Springs and Freshwater Pools. Journal of Limnology. Vol. 66(2), 90-96, 2007.
- 33) **Ali Elkarmi** and Mawieh Hamad. T Helper Cell Polarization and the Generation of Varied Antigen-dependent Immune Responses: A Markov Chain Model. Rivista di Biologia / Biology Forum. Vol. 100 (3), 419-438, 2007.
- 34) **Ali Elkarmi**, Khaled Abu-Elteen and Muhammad Khader. Modeling the Biodegradation Efficiency and Growth of *Pseudomonas alcaligenes* Utilizing 2,4-Dichlorophenol as a Carbon Source Pre-and Post-Exposure to UV Radiation. Jordan Journal of Biological Sciences. Vol. 1(1), 7-11, 2008.
- 35) **Ali Elkarmi**, Khaled Abu-Elteen and Anan Al-Karmi. Disinfecting Contaminated Water With Natural Solar Radiation Utilizing a Disinfection Solar

Reactor in a Semi-arid Region. Jordan Journal of biological Sciences. Vol. 1(2), 47-53, 2008.

36) K. Qudiesat, K. Abu-Elteen, **A. Elkarmi**, M. Hamad and M. Abussaud. Assessment of Airborne Pathogens in Healthcare Settings. African Journal of Microbiology research. Vol. 3(2), 66-76, 2009.

37) **Ali Z. Elkarmi**, Khaled H. Abu-Elteen, Atta A. Atta, and Nisreen A. Abu-Sbitan. Biodegradation of 2, 4-dichlorophenol Originating From Pharmaceutical Industries. African Journal of Biotechnology. Vol. 8(11), 2558-2564, 2009

38) **Ali Elkarmi**, Rajaa Abu Eideh and Amani Zaiter. The Growth of *Chenopodium murale* Irrigated with Polluted and Unpolluted Water: A Modeling Approach. Australian Journal of Basic and Applied Sciences. Vol. 3(3), 1827-1837, 2009

39) Lubna H. Tahtamouni, Rania A. Wahdan, Randa M. Bawadi, **Ali Z. Elkarmi**. Effect of Sperm Chromatin Integrity on Parameters of In Vitro Fertilization. Jordan Journal of biological Sciences. Vol. 2(4), 171-176, 2009.

40) Hassan Abusini, Khaled Abulteen, **Ali Elkarmi**, Faris Alenzi and Mahmoud Lotfy. Investigation of Helicobacter pylori infection in Jordanian patients using six enzyme immunoassays for immunoglobulin G (IGG) and IGA testing. Roum Arch Microbiol Immunol. Vol 68 (4), 240-245, 2009

41) Ayad Ahmed Hussein, Randa M. Bawadi, Lubna H. Tahtamouni, Haydar Frangoul, and Ali Z. Elarmi. Feasibility of Collecting Umbilical Cord Blood in Jordan and the Effect of Maternal and Neonatal Factors on Hematopoietic Stem Cell Content.

Mediterr J Hematol Infect Dis 2014, 6(1): e2014019, DOI: 10.4084/MJHID.2014.019

42) E. H. Mustafa, H. T. Mahmoud, M. Y. Al-Hudud, M. Y. Abdulla, I. M. Ahmad, S. R. Yasin, A. Z. Elkarmi, L. H. Tahtamouni. 2-seoxy-D-Glucose Synergizes with Doxorubicin or L-Buthionine Sulfoximine to Reduce Adhesion and Migration of breast Cancer Cells. *Asian Pacific Journal of Cancer Prevention*. Vol. 16, 3213-3222, 2015.

43) Lubna Hamid Tahtamouni, Rema Ahmad Al-Khateeb, Reem Nasser Abdellatif, Zainab Ali Al-Mazaydeh, Salem Refaat Yasin, Samer Al-Gharabli, Ali Zuhair Elkarmi. Anti-spermatogenic Activities of *Taraxacum officinale* Whole Plants and Leaves Aqueous Extracts. *Veterinary research Forum*, vol 7, (2), 89-97, 2016.

44) L. Tahtamouni, R. Abdellatif, R. Al-Khateeb, Z. Al-Mazaydeh, S. Yasin, S. Al-Gharabli and A. Elkarmi. Inhibitory Effects of *Taraxcum officinale* L (Compositae) Aqueous Root Extract on Spermatogenesis. *Trop. J. Pharm. Res.* 16(1), 109118, 2017.

2) Paper Presentations

Arafat Altamemi and **Ali Elkarmi**. Preliminary Biotechnology Potential Indications in Jordan. Presented at the International Symposium on Biotechnology for Sustainable Development. IFIAS, ACTS and UNEP. Gigiri, Nairobi, Kenya. February 27 - March 3, 1989.

W. Alkhateeb, A. Altamemi and **A. Elkarmi**. Biotechnology Research and Development Potential Of Jordan. Presented at the First Arab Conference on Perspectives of Modern Biotechnology in the Arab Countries. ESCWA, FASRC, HCST, RSS, UNIDO, FAO, UNEP and ICSU/ARBN. Amman, Jordan, March 27-30, 1989.

A. Elkarmi. Solid Waste Disposal Methods and Recycling. Presented at the Workshop on Environment for Journalists. Jordanian Society for the Control of Environmental Pollution (JSCEP) and Fredrich Newman Foundation. Amman, Jordan, May 29-30, 1991.

A. Elkarmi. Solid Waste Disposal Methods and Recycling. Presented at the Workshop on Introduction to the State of the Environment, JSCEP and Fredrich Newman Foundation, Irbid, Jordan, June 11-12, 1991.

N. Akeel and **A. Elkarmi.** Assessment of the Level of Odour Emissions From Russaifa Landfilling Site by H₂S Concentration Measurement. Presented at the Seminar on the Control of Environmental Pollution. Mutah University, Karak, Jordan, October 21-22, 1991.

A. Elkarmi and N. Akeel. The Factors Affecting Air Pollution in Down Town Amman Area: Deterministic Models. Presented at the Seminar on Air Pollution and the Environment. JSCEP, February 1992.

Ali Elkarmi. Jordan's Country Report. Presented at the Seminar on Environment in the Middle East 1992. Tokyo, Japan, Japan International Cooperation Agency. September 13, 1992.

Ali Elkarmi. Environmental Impact Assessment of Amman Municipality Landfill. Presented at the Seminar on Solid waste Treatment in Jordan, Jordan Engineers Association, September 1994.

Ali Elkarmi. Natural Disaster Reduction Through Risk Assessment Studies. Presented at the Seminar on Natural and Industrial Disasters in Jordan, Civil Defense Directorate and JSCEP, September 1994.

Ali Elkarmi. The Use of Natural Ultraviolet Radiation for the Elimination of Bacteria in Contaminated Drinking Water at Desert Areas. Presented at the

Conference on “Past, Present and Future of the Middle East Desert” , Yarmouk University, July 1996.

Ali Elkarmi and Anan Al-Karmi. Disinfecting Contaminated Water with Natural Solar Radiation in a Semi-Arid Region. Presented at the 3rd International Conference on Solar Electricity: Photovoltaics and Solar Thermal Technologies. UAE University, NREL/DOE (USA), UAE 1998.

Ali Elkarmi and Anan Al-Karmi. A Solar Water Disinfection Reactor. Presented at the 3rd International Conference on Solar Electricity: Photovoltaics and Solar Thermal Technologies. UAE University, NREL/DOE (USA), UAE 1998.

3. Technical Reports

* A Preliminary Study of the Potential of Biotechnology in Jordan. Royal Scientific Society (RSS) Publication, March 1988.

Description of the Biotechnological Capabilities of RSS and Jordan. RSS Publication, December, 1988.

* Biotechnology Research and Development Potential of Jordan. Higher Council for Science and Technology and RSS Publication, January 1989.

* Assessment of the Level of Odor Emissions From Russaifa Landfill Site. RSS Publication, December 1990.

* Evaluation of the Validity of Solar Water Disinfection System. RSS Publication, July 1992.

* Domestic and Industrial Solid Wastes / Science and Technology Policies and Strategies in the Field of Environment. HCST Publication, January 1993.

* Evaluation of the Validity of Utilizing Solar Radiation for the Treatment of Organic Pollutants by a Photocatalytic Oxidation Process. RSS Publication, Sept. 1993.

4. Other Publications

* A. Elkarmi. Ecological Studies of Priority to Jordan. Al-Reem, No. 39, P. 4-5, June 1990.

- * A. Elkarmi. Solid Waste Disposal and Recycling. Almohandes Alurdoni, No. 48, P. 47-52, February 1992.
- * A. Elkarmi. Health Hazards of Toxic Gases on Firemen. Civil Defense, No. 3, P. 22-23, May 1992.
- * A. Elkarmi, M. Hindiya and M. Itayem. Water Disinfection Using Solar Energy. Jordanian Journal of Energy Abstracts, vol. 1, No. 3, P. 261-262, September 1992.
- * A. Elkarmi. Greenhouse Earth - Book Review. Jordanian Journal of Energy Abstracts, vol. 1, No. 3, P. 305-308, September 1992.
- * A. Elkarmi and A. Al-Hasan. Global Climate Change. Jordanian Journal of Energy Abstracts, vol. 1, No. 4, P. 409-410, December 1992.
- * A. Elkarmi. Natural Disasters and its Effects on the Environment. Almohandes Alurdoni, No. 57 , P. 25-28, June 1995.
- * A. Elkarmi. Water Disinfection by Natural Ultraviolet Radiation. Al-Reem, No. 57. P.28-29, March 1996.
- * A. Elkarmi. Sorting Out the Waste. Al-Reem, No. 66, Spring 2000