

# CURRICULUM VITAE

## PERSONAL INFORMATION:

<b>Name</b>	<b>Shamseldin Mohamed Ismail El-Azhari</b>
<b>Nationality</b>	Sudanese
<b>Place of Birth</b>	Omdurman, Sudan
<b>Date of Birth</b>	24/01/1959
<b>Marital Status</b>	Married with three sons
<b>Address in Sudan</b>	P.O Box 635 Khartoum 11111, Sudan +249 918279392 +249 920267374
<b>Address in U.K</b>	29 Edbrook Walk, Victoria Park, Manchester M13 ODA, England, U.K. +44 (0)161 272 6782
<b>Profession</b>	<b>Professor of Agricultural and Environmental Engineering</b>



## EDUCATIONAL BACKGROUND

- Degree Postdoctoral  
Field Studies in Environmental Engineering  
University University of Manchester, UK  
Year July 1998
- Degree MBA  
Field Business Administration  
University University of Exeter, UK  
Year April 1999
- Degree Ph.D.  
Field Agricultural Engineering (Power and Machinery)  
University University of Bath, UK  
Year August 1996
- Degree MPhil  
Field Agricultural Engineering (Machine Design)  
University University of Nottingham, UK  
Year July 1992
- Degree B.Sc.  
Field Agricultural Engineering (Mechanisation)  
University University of Cairo, Egypt  
Year June 1983

## PROFESSIONAL MEMBERSHIPS

- Chartered Engineer (CEng) British Engineering Council, UK.
- Member, Institution of Patentees and Inventors, MInstPI, London, UK.
- Member, Institution of Mechanical Engineers, MIMechE, England, UK.
- Member, American Society of Engineers, MASA, Michigan, USA.

- Member, Institution of Agricultural Engineers, MIAgrE., England, UK.
- Member, Royal College, MRAC, England, UK.
- Member, Engineering Association, MEA, Cairo, Egypt.

#### **PATENT:**

- Registered Patent of the High Velocity Tined Plough (March 1992) at the British Technology Group (BTG) London, UK.
- Inventor of the New Agricultural Equipment-One Pass Operation (Sudan 2000) England, UK.

#### **INTERNATIONAL ACADEMIC COMPETITION**

- Semi-final place award in the International Competition for Innovations and Inventions 1993 held in Cambridge, UK with the invention of the High Velocity Tined Equipment. This competition was organized by the Confederation of British Industry (CBI) and was financed by Toshiba finance.

#### **TRAINING COURSES ATTENDED**

- ☞ Training courses in various computer software (June 1993) at the Royal College, Cirencester, England, UK.
- ☞ Training course in Power and Machinery Specialists under supervision of US Aid for 3-1/2 months, held in Sakha Training Centre for Engineers, Egypt.
- ☞ Training course in Welding and Steel Fabrication, for 3 months (July 1995) at Loughborough College, England, UK.
- ☞ International Training course in Soil Amelioration for the Third World Countries for 3 months (August 1982) held in Egyptian International Centre, Cairo, Egypt.
- ☞ Training course in Engineering Techniques for 14 weeks (November 1982) held in Training Department, Cairo, Egypt.
- ☞ Training course in Extension and Photography for 3 months (1977), Khartoum, Sudan.
- ☞ Institute National De La Recherché Agronomique, INRA, Kénitra, Royaume Du Maroc.
- ☞ Institute Agronomique Et Vétérinaire Hassan II (1995) Rabat, Royaume Du Maroc.
- ☞ Training Workshop on Project/Resource Capacity Management in contract R & D Research, January, January 2003, UNESCO and ministry of Science and Technology, Sudan.

#### **PROFESSIONAL CAREER**

<b>Title</b>	Professor of Agricultural and Environmental Engineering
<b>Employer</b>	University of Kano
<b>Location</b>	Kano State, Federal Republic of Nigeria
<b>Dates</b>	2007 - Present
<b>Responsibilities</b>	Teaching and supervising Post Graduates (H. Diploma, MSc and PhD) beside undergraduate students for Kano state Government Oversaw research programmes and feasibility studies in the fields of Agriculture and Environment.

<b>Title</b>	Professor of Agricultural and Environmental Engineering
<b>Employer</b>	Several Universities
<b>Location</b>	Khartoum, Sudan
<b>Dates</b>	2005/2006 Faculty of Engineering, University of Juba, Khartoum North – Sudan

	2006/2007 Faculty of Engineering Elzaim Elazhari University, Omdurman – Sudan.
<b>Responsibilities</b>	Teach classes in Engineering and provide private consultation in the same fields. I published three university books for students in: <ul style="list-style-type: none"> <li>- Principals of Thermodynamics.</li> <li>- Engineering Drawing part I</li> <li>- Engineering Drawing part II</li> </ul> I also taught Engineering Drawing courses for the students of Urban Sciences at Alzaim Elazhari University, Omdurman, Sudan.
<b>Title</b>	Professor of Agricultural and Environmental Engineering
<b>Employer</b>	The University of Manchester, School of Mechanical Engineering.
<b>Location</b>	Manchester, UK.
<b>Dates</b>	1997 – 2005
<b>Responsibilities</b>	During this period I was acted as a visiting Associate Professor in Agricultural Engineering, Omdurman Islamic University, Khartoum, Sudan and teaching courses at Manchester Metropolitan University. I worked on different commercial research programmes and feasibility studies running within the department, particularly in Environmental Engineering. This included teaching and supervising many projects of MSc. and undergraduate students. I also participated in many academic activities such as workshops, seminars and conferences held in Europe or over the United Kingdom. Courses included Math, Chemistry and Physics based courses including: <ul style="list-style-type: none"> <li>▪ Mathematics (pure and applied).</li> <li>▪ Statistics and Computation.</li> <li>▪ Physics including Dynamics and Thermodynamics.</li> <li>▪ Fluids and Solid Mechanics.</li> <li>▪ Materials.</li> <li>▪ Heat transfer.</li> <li>▪ Vibrations.</li> <li>▪ Design Practices and Manufacture.</li> </ul>
<b>Title</b>	I started work with RICHMAN TOOZE Consultancy Limited, London, U.K as a Mechanical Engineer at Nottinghamshire Site, promoted to Engineering Adviser in May 1992 and to Engineering Consultant in September 1994.
<b>Employer</b>	RICHMAN TOOZE Consultancy Limited
<b>Location</b>	England, UK
<b>Dates</b>	July 1989 – August 1997
<b>Responsibilities</b>	As a Mechanical Engineer I supervised whole field power and mechanical activities as Contractors and Sub-contractors, involved in the supervision of the workshop and spare parts requisition at Nottinghamshire Site. I moved to Cirencester, Gloucestershire, as an Engineer Adviser and then promoted to Consultant. Beside field work and workshops supervision I had a great deal of responsibility for office work in the branch office of the company. The work involved technical and commercial affairs of contracts, administrative work, routine and expandable materials for

different projects. I was responsible for delivery of training workshops in a number of specialist technical areas. Also I was setting technical specification for required materials and equipment supplied from local market or outside the United Kingdom. During this period I had a chance to work in Morocco for European Economic Community (EEC) Project.

**Title** Head of Engineering Sector.  
**Employer** Al-Jouf Agricultural Development Company (JADCO)  
**Location** Sakaka, Al-Jouf, Saudi Arabia  
**Dates** 1988 – 1989.  
**Responsibilities** When the company was set up I joined to supervise the first and second stages of the field project at Bouseta, near Jordan, drilling wells with submersible water pumps and tower Zamatic Centre Pivot irrigators, provided with diesel engines. I helped employ 113 (labourers, machine operators, technicians and foremen) from different countries. Established the workshop provided with mobile workshops. I also supervised field operations, maintenance and storage process in silos of the company to await transfer to government silos. Beside field and workshop, I had responsibility for office work in Head Office of the company (Technical Affairs). This involved administrative work, supervising the requisition of spare parts, and materials such as fuel, oils, steel, welding materials etc.

**Title** Research Assistant at Engineering Department. In the last year I held a position of Deputy Head of the Department.  
**Employer** Deirab Agricultural and Experimental Research Station, King Saud University.  
**Location** Riyadh, Saudi Arabia  
**Dates** 1985 – July 1988  
**Responsibilities** This involved the responsibility of machinery maintenance and operation in the field and how to select optimum conditions for work to increase the efficiency and field capacity of machines, providing power and mechanical services for the Research Station. I participated with my colleagues on different research programs especially in work with re-used water for irrigation and contributed in the teaching of practical courses for Undergraduate students.

**Title** Agricultural Engineer  
**Employer** The Animal Production Public Corporation  
**Location** Khartoum, Sudan  
**Dates** 1984 – August 1985  
**Responsibilities** Supervising the workshop and spare parts, besides field operations and maintenance at different projects of the corporation.

**Title** Service Engineer  
**Employer** KUBOTA (Japanese Company)  
**Location** Jeddah, Saudi Arabia  
**Dates** 1983 – July 1984  
**Responsibilities** Supervising the assembly line of heavy and agricultural equipment coming from Japan, besides supervising workshop and post-sales

maintenance around Jeddah. I also worked with a Japanese to study the problems with Kubota equipment under Saudi conditions such as overheating and the damage in casings and the shafts of multi-stage submersible water pumps.

## REFERENCES

- (1) **Professor Musa Rapu**  
Governor of Kano State, Nigeria
- (2) **Professor Andrew Leung**  
Chair of Engineering  
School of Engineering  
University of Manchester, UK
- (3) **Professor Brian Wilton**  
Head of Agricultural and Environmental Engineering  
University of Nottingham, UK
- (4) **Professor Mukhtar Mohamed Mustafa**  
Director of UNESCO Programme for Desertification and draught  
University of Khartoum  
Khartoum North, Sudan
- (5) **Professor Harry Catling**  
Head Biosystems Engineering  
Royal Agricultural and Environmental College  
Cirencester, UK
- (6) **Professor Osman Ahmed Ali Ageeb**  
Ex-Director of Agricultural Research Corporation  
Wad Madani, Sudan

**PATENT:**

- Registered Patent of the High Velocity Tined Plough (March 1992) at the British Technology Group (BTG) London, UK.
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**INTERNATIONAL ACADEMIC COMPETITION:**

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**UNIVERSITY BOOKS:**

- Academic year 2006/2007 at Faculty of Engineering, Al-Zaim Elazhari University, Omdurman, I published three books for students in:
  - Principles of Thermodynamics.
  - Engineering Drawing Part I
  - Engineering Drawing Part II

**PUBLICATIONS:****REPORTS:**

- Elazhari, S.M.I. (1983). Developed design of rotary mower for fodder crops under Egyptian conditions. Unpub. BSc Dissertation, University of Cairo, Egypt.
- Elazhari, S.M.I. (1992). The breaking-up of furrows formed by mouldboard ploughs. Unpub. MPhil thesis, University of Nottingham, England, UK.
- Elazhari, S.M.I. (1994). An Engineering viewpoint of mechanization and soil factors influencing wheat establishment in central Sudan. Unpub. Report, Royal College, England, UK.
- Elazhari, S.M.I. (1995). Conventional tillage and direct drilling technique under semi-arid vertisols conditions of Morocco. Unpub. Report, Royal College, England, UK.
- Elazhari, S.M.I. (1996). Reduced Tillage Systems for Irrigated Wheat Production under Semi-arid Conditions in North Africa. Unpub. PhD thesis, the Royal College and the University of Bath, England, UK.

Agric. Eng. In Arid and Semi-arid Areas, 24-27 May, Rabat, Morocco.

- Elazhari, S.M.I. (1997). Equipment for seed placement below a removed and replaced surface tith. J. Agric. Engng. Res., 53: 167-175.
- Elazhari, S.M.I. (1999). Stability of structural aggregates of dry soil. J. Agric. Engng. Res. 61: 19-25.
- Elazhari, S.M.I. (2000). Effect of furrow packing at ploughing on light soils. Soil and Tillage Res., 29: 203-211.
- Elazhari, S.M.I. (2003). The use of high-velocity tines in breaking clods. J. Agric. Engng. Res., 77: 107-114.
- Elazhari, S.M.I. (2003). The performance of alternative cultivation systems. The Agricultural Engineering, Spring, 8-11.
- Elazhari, S.M.I. (2004). Some basic Engineering considerations of soil mechanics as applied to Agricultural Engineering. Grandlagen de Landlechnik Conference, Paris.
- Elazhari, S.M.I. (2007). What I require in the Developing Countries: Farmers Opinion. Conference, Tillage Equipment Design and Power Requirement. National Agricultural Engineering Centre, UK, October.
- Elazhari, S.M.I. (2008). Relation Between Specific Energy and Clod Size Distribution of a Rotary Tith. 37<sup>th</sup> Conference of ISTRO, Sweden.

#### **PAPERS UNDER PREPARATION:**

- Elazhari, S.M.I, The Design and Testing of a Soil Clod Crushing Machine.
- Elazhari, S.M.I. A New Design of a Rotary Skimmer Driven by Hydraulic Motor.