CURRICULUM VITAE

1- Surname: Mostofi Sarkari

2- **First name:** Mohammad Reza

3- Title: Mr. * Dr. *

4- Date of birth: 27/03/1967

5- Place of birth: Tabriz-Iran

6- **Home address:** No. 17, West 8 th Ave., Rajaei Shahr – Karaj- Iran

7- Tel (home):+982634333011

8- Mob: 09125607289

9- E-mail:mostofi08@gmail.com m.mostofi@aeri.ir

10- Professional qualifications:

- 1. B.Sc. in Agricultural Machinery Engineering from- Tabriz University (Iran), Oct. 1986-1990.
- 2. M.Sc. in Mechanics of Agricultural Machinery Engineering from-Tehran University (Iran), Oct.1991 - 1993.

<u>Title of M.Sc. thesis:</u> Design, Construction and Evaluation of Tractor mounted Mower-Binder Performance.

1. - Ph.D. in – Bio-system Engineering from – Cranfield University – Silsoe (England), May 1997-March 2001.

<u>Title of Ph.D. dissertation:</u> Mass Flow Rate Measurement System for Root Crop Harvesting

11- Current position in AERI:

Member of academic staff on Bio-system engineering and Mechanization Department (Associate Professor)

12- Professional employment history:

1992-1997 Agricultural Engineering Research Institute - Karaj-Iran Member of staff (MSc)

1997-2001 Cranfield University at Silsoe – England – Studding PhD 2001- Present Agricultural Engineering Research Institute -Karaj-Iran Member of academic staff (PhD) in Bio-system Engineering and Mechanization Department

13- Research interests:

- 1- Design, construction and modification of farm machinery and implements prototype
- 2- New technology in Harvesting machinery of agricultural products
- 3- Precision Farming (Yield Monitoring and Mapping Systems)
- 4- Conservation Agriculture (Residue Harvesting machinery)
- 5- GPS/GIS Application in Spot Agriculture
- 6- Research Program Planning And Formulation
- 7- Smart Agriculture based on IOT

14- Awards/Inventions:

- 1- Tractor Mounted Mower Binder-National Invention
- 2- Cotton Stalk Puller- National Invention
- 3- Developed Tractor Mounted Mower Binder- National Invention
- 4- Fodder Beet Cleaner-Chopper Machine- National Invention

5- International Certificates:

- RESEARCH PROGRAMME FORMULATION (ISNAR PROGRAMME)

6- Membership in national and international scientific societies:

- 1- Agricultural Machinery Engineering and Mechanization Society
- 2- Iranian Society of Mechanical Engineering

3- Other research activities:

1- Assessment and research on important parameters of cotton harvesting and chopper performance-(MSc thesis) Second Supervisor.

- 2- Introducing arithmetic module and appropriate pattern of technical and mechanical performance of tractors in homogenous unit in Khorasan province-(PhD dissertation) Adviser.
- 4- Design, construction and test of continuous measurement sensor of mechanical soil resistance (MSc thesis) Adviser.
- 5- Assessment of feasibility study of mechanized harvesting of orange using branch shaker in north of country (Ramsar) (MSc thesis) Second Supervisor.
- 6- Technical and Economical Assessment of Feasibility Study of Precision Farming Systems on Different Wheat Production Stages in Dezful (MSc Thesis) Supervisor.

7- Publications (in English):

Journal papers:

- 2. Investigation on Performance of a Continuous Mass Flow Rate Measurement System for Potato Harvesting- Agricultural Engineering International: the CIGR E-Journal. Manuscript PM 06 031. Vol. IX. May 2007.
- 3. Evaluation of a cotton stalk puller performance. 2008. American- Eurasian Journal of sustainable agriculture. 2(1): 19-24.
- 4. Mass Flow Rate Measurement System Performance. 2009. Journal of Agricultural Science and Technology. Vol. 11: 259-274.
- 5. Field Evaluation of Grain Loss Monitoring on Combine JD 955 2010. Advance in Environmental Biology, 4(2): 162-167, ISSN 1995-0756.
- 6. Performance evaluation of mass flow rate measurement system for root crop harvesting to precision farming application-2011-Sustainable Agricultural Science Journal-Vol.(20), No. 4-2011-ISSN 2008-5141.
- 7. Energy and economic analysis of different seed corn harvesting systems in Iran. Energy 43 (1), 469-476.
- 8. Investigation and technical comparison of new and conventional wheat combines performance for improvement and modification. Agricultural Engineering International: CIGR Journal 13 (3).

- 9. Mass flow rate measurement system performance on potato harvesters. Journal of Agricultural Science and Technology 11, 259-274.
- 10. Evaluation of a cotton stalk puller performance. American-Eurasian Journal of sustainable agriculture.
- 11. Optimization of seed corn harvesting losses applying response surface methodology. Research Journal of Applied Sciences, Engineering and Technology 4 (15).
- 12. Technical and Economical Assessment of Applying Precision Farming Using Mathematical Model on Irrigated Wheat Production. Journal of Multidisciplinary Engineering Science and Technology (JMEST) 2 (2).
- 13. Economical and Technical Study of Precision Farming Application in Conventional System of the Wheat Production in Two Agro-Industry Companies of Khuzestan Province. American Association for Science and Technology (AASCIT).
- 14. Evaluation of yield monitoring and mapping system performance in harvesting cereals. Agricultural Engineering Research Institute of Iran AERI.

8- <u>Conference papers (International):</u>

- 1- Mass Flow Rate Measurement System for Root Crop Harvesting International conference of Euro agricultural engineering research 2002 Budapest Hungary.
- 2- Design, Construction and Evaluation of Cotton Stalk Puller Performance International conference of agricultural engineering research 2004 China.
- 3- Agricultural Mechanization Development Methods First international conference Karaj college of agriculture, University of Tehran. I. R. of Iran. 2004.
- 4- Evaluation of cotton stalk puller performance International Agricultural Engineering Conference Bangkok 2005.
- 5- Performance Evaluation of a Continuous Mass Flow Rate Measurement System for Root Crop Harvesting- World Congress, Bonn/Germany, Sep. 2006.

- 9- Field Evaluation of Grain Loss Monitor in Different Harvesting Conditions on Combine JD 955- 10th International Congress on Mechanization and Energy in Agriculture, 14-17 October 2008-Antalia-Turkey.
- 10- Investigation and technical comparison of new and conventional wheat combines performance to improve and modification-10th International Congress on Mechanization and Energy in Agriculture, 14-17 October 2008- Antalia-Turkey.

11- Other publications (book):

1- Precision Farming –2010- by Terry Brase - Translated by Mostofi, M. R. and A. Sharifi.

2- Persian Journal papers:

- 1. Emerging Technologies in Agricultural Engineering Plant Bio-Engineering.
- 2. Date palm leaf pruning machine.
- 3. Investigation on Performance of a Continuous Mass Flow Rate Measurement System for Potato Harvesting- Agricultural Engineering International: the CIGR E-Journal. Manuscript PM 06 031. Vol. IX. May 2007.
- 4. Performance evaluation of cotton stalk puller. Journal of Agricultural Engineering Research. Vol. 7 No: 29 March, 2007.

3- <u>Conference papers (National):</u>

- 1- Mass Flow Rate Measurement System for Root Crop Harvesting (potatoes/sugar beet) Second national conference of Agricultural Machinery Engineering and Mechanization Society 2003 Tehran Iran.
- 2- Design, Construction and Evaluation of Cotton Stalk Puller Performance -Third national conference of Agricultural Machinery Engineering and Mechanization Society 2004 Kerman Iran.

- 3- Wheat Losses from planting to storage in country-National conference of avoiding resource losses- 2005- Academic science -Tehran Iran.
- 4- Assessment and determination of corn harvesting losses to introduce proper strategy for decreasing losses- Second national symposium on losses of agricultural products- 2005- Tehran Iran.
- 5- Proper machines to harvesting silage crops in order to protect quality of harvested crop- 2005- First national conference of silage crops- Tehran-Iran.

6- Research projects Reports:

- 1. Tractor mounted mower binder.
- 2. Date palm leaf pruning machine.
- 3. Feasibility of using combines harvesting to harvest legumes.
- 4. Assessment possibility of mechanized harvesting of two bean cultivars and economical comparison with conventional method.
- 5. Mass flow rate measurement system for root crop harvesting.
- 6. Design, construction and evaluation of cotton stalk puller performance.
- 7. Assessment and determination of corn harvesting losses to introduce proper strategy for decreasing losses.
- 8. Investigation on performance evaluation of grain loss monitor on combine harvesting.
- 9. Assessment and comparison of new combines with conventional types to recommend modification and improvement parameters.
- 10.Investigation of suitable method of mechanized corn residues harvesting based on quality and quantity of harvested residues and machine performance parameters.
- 11.Design, construction and performance evaluation of tractor mounted date palm leaf pruning machine
- 12. Conceptual Design of Proper Tractor Mounted Date Palm Lifter/Service Machine
- 13. Design, construction and field evaluation of fodder beet chopper (ongoing project)
- 14. Smart agriculture to producing wheat and barley based on Internet of things (IOT) (ongoing project)

7- Research Projects Underway:

- 1. Assessment and Field Evaluation of Grain Loss Monitor Performance on Combine Harvesting JD 1165.
- 2. Installation, Calibration and Field Evaluation of Yield Monitoring and Mapping System Performance on Combine Harvesting JD 1165.
- 3. Investigation on the Methods of Controlling Quantity and Quality Losses of Alfalfa during the Harvesting and Baling Process (research plan with 6 research projects).
- 4. Development and Field Evaluation of Tractor-Mounted Date Palm Leaf Pruning Machine Performance.
- 5. Design, Construction and Field Evaluation of Tractor Three Point Hitch Date Palm Lifter Performance.

8- Other publications:

- 1- Tractor-Mounted Mower Binder–1997-Agricultural Educational Leaflet.
- 2- Date Palm Leaf Pruning Machine—1997-Agricultural Educational Leaflet.