

## RESUME

### **I. PERSONAL INFORMATION :**

**NAME :** Saeid Minaei

**Date of birth :** 1957

**Place of birth :** Tehran

**Marital status :** M

**Address :** Department of Agricultural Machinery Engineering

Tarbiat Modarres University

P.O. Box. 14115-336 Tehran, Iran

**Tel :** + 9821 48292466

**Fax :** + 9821 4829200

**Email:** sminae@gmail.com

### **II. EDUCATIONAL RECORD**

<u>Degree</u>	<u>Institution</u>	<u>Field of study</u>	<u>Graduation</u>
<i>B. S.</i>	<i>Univ. of Massachusetts</i>	<i>Mechanical Engineering</i>	<i>1981</i>
<i>M. S.</i>	<i>Virginia PoliTech.</i>	<i>Agricultural Engineering</i>	<i>1984</i>
<i>Ph.D.</i>	<i>Texas A&amp;M Univ.</i>	<i>Agricutlural Engineering</i>	<i>1990</i>
<i>Post</i>	<i>Obihiro Univ.- Japan</i>	<i>Automation of Ag. Machinery</i>	<i>1996</i>

### **III. ACADEMIC EXPERIENCE:**

Assist. Professor since 1991

Assoc. Professor since 2005

#### **IV. MEMBERSHIP OF SCIENTIFIC SOCIETIES:**

- ) Iranian Soc. of Agricultural Engineering and Mechanization
- ) Iranian Soc. of Mechanical Engineers
- ) American Soc. of Ag. Engineers
- ) Iran National Energy Committee
- ) Iranian Educational Research Association

#### **V. REFEREE FOR JOURNAL ARTICLES SUBMITTED TO:**

- 1) Scientific Journal of Agriculture
- 2) Journal of Agricultural Engineering Research
- 3) **Journal of Agricultural Science and Technology**
- 4) **Food and Bioprocess Technology**
- 5) Journal of Science and Technology of Ag. & Nat. Resources
- 6) **International Journal of Food Science and Technology**
- 7) **Agricultural Science**
- 8) Ag. Mechanization in Asia, Africa, and Latin America (AMA)

#### **VI. RESEARCH INTERESTS:**

- 1) Measurement and control systems in agriculture
- 2) Mechanical losses of agricultural products
- 3) Soil dynamics
- 4) Design, development, & evaluation of agricultural machinery

#### **VII. PUBLICATIONS:**

**A- BOOK: *Fundamentals of Mechanical-Damage Based Losses of Agricultural crops.***  
*Jehade Daneshgahi Publications, Tehran.*

#### **B- RESEARCH PAPERS:**

- Fathollahzadeh, H., mobli, H., Rajabipour, A., **Minaei, S.**, Jafari, A. and Tabatabaie, S.M.H. (2010). Averege and instantaneous fuel consumption of Iranian conventional tractor with moldboard plow in tillage. APRN journal of engineering and applied science. 5(2):1-6.
- Gazor, H.R., Bassiri, A.L. and **Minaei, S.** (2009). Moisture isotherm and heat of desorption of pistachio (kaleghochi var.). International journal of food engineering. 5(4):1-11.
- Maghsoudi, H., Khoshtaghaza, M.H., and **Minaei, S.**(2010). Selected geometric characteristics, density and mechanical properties of unsplit pistachio nut. International journal of food properties. 13:394-403.
- Amiri chajjan, R., Khoshtaghaza, M.H., Montazer, GH., **Minaei, S.** Alizadeh, M.R. (2009). Estimation of head rice yield artificial neural networks for fluidized bed drying of rough rice. J.sci & technol. Agric & Natur. Resour. 13(48):285-299.
- Ahedi, A., Almassi, M., Javadi, A., **Minaei, S.** and Yasari, E. (2009). Physical properties of some canola varieties. Eco. Env. & Cons. 15(2):289-294.
- Zaki dizaji, H., **Minaei, S.**, Tavakoli hashtjin, T. and Mokhtari, M. (2009). Development of an

ultrasonic system and evaluation of effective parameters in ultrasonic measurement of agricultural product. *Journal of Agriculture Agricultural Research*. 10(1):27-48.

- Alemi, H., Khoshtaghaza, M.H. and **Minaei, S.** (2009). Mechanical properties determination of soybean seed by quasi-static loading. *Iranian Journal of Food Science and Technology*. 6(2): 113-124.
- Rasoli, F., Sadighi, H. and **Minaei, S.** (2009). Factor affecting agriculture mechanization: a case study on sunflower seed farms in Iran. 11:39-48.
- Mohammadzamani, D., **Minaei, S.**, Alimardani, R., Almassi, M., Rashidi, M. and Norouzpour, H. (2009). *International Journal of Agriculture and Biology*. 11 (2): 178-182.
- Mostofi, M.R. and **Minaei, S.** (2009). Mass Flow Rate Measurement system performance on potato harvesters. 11:259-274.
- Kermani, A. M. Tavakoli Hashjin, T. and **Minaei, S.** (2008). Mechanical tensile properties of drying rice kernels in different moisture content and temperatures. *Iranian Journal of Biosystem Engineering*. 39 (1):1-12
- Hazbavi, E and **Minaei, S.** (2008). Determination and investigation of some physical properties of seven variety rapeseed. *Iranian Journal of Food Science and Technology*. 5 (4): 21-28.
- Afkari sayyah, A. H. Esmailiyan, M. **Minaei, S.** and Pirayesh A. (2008). The effect of mechanical loads on apple damage after storage. *Iranian Journal of Food Science and Technology*. 5 (3): 37-44.
- Kermani, A. M. Tavakoli Hashjin, T. and **Minaei, S.** (2008). Investigation and determination of moisture content and temperature effects on the mechanical properties of brown rice. *Journal of Agricultural Engineering Research*. 9 (3): 53-74.
- Afshari, H. **Minaei, S.** Almasi, M. and Abdolmaleki, P. (2008). Examination potato damage under impact loading. *Journal of Food Science and Technology*. 5(2): 69-80.
- Kiani Deh Kinai, M. **Minaei, S.** Maghsodi, H. and Ghasemi Varnamkhasti, M. (2008). Moisture dependent physical properties of red bean (*Phaseolus vulgaris* L.) grains. *International Agrophysics*. 22: 231-237.
- Sadeghi, A. Tavakoli, T. Chobadian, B. Khoshtaghaza, M. H. and **Minaei, S.** (2008). Bulk thermal conductivity of unhulled pistachio nuts. *Journal of Agricultural Sciences*. 18 (1): 215-227.
- Mostofi, M. R. Godwin, R. G. O'Dogherty, M. J. **Minaei, S.** (2007). Investigations on Performance of a continuous mass flow Rate Measurement system for Potato harvesting. *Agricultural Engineering Int'l. CIGR EJournal*, vol. IX. PM 06 031.
- **Minaei, S.** and Afkari Sayyah, A. H. (2007). Design and fabrication of a hardness tester for quality evaluation of food grain tissue. *Journal of Science and Technology*. 6 (1, 2): 5-16.
- Sheikhdavoodi, M.J. and **Minaei, S.** (2007). The effect of forward speed on motion resistance of rubber tires. *The Scientific Journal of Agriculture*. 30 (3): 29-37.
- Gazor, H. R. and **Minaei, S.** (2008). Influence of temperature and air velocity on the canola drying process and its quality. *Journal of Agricultural Engineering Research*. 9 (1): 109-124.
- Moshashai, K. Almasi, M. **Minaei, S.** and Borghei, A. M. (2008). Identification of sugarcane nodes using image processing and machine vision technology. *International Journal of Agricultural Research*. 1-8.
- Rasekh, M. Firooz Abadi, B. **Minaei, S.** Afkari Sayyah, A.H. and Asghari, A. (2007). Comparison of some physical and mechanical properties of sound and sunn pest-damaged wheat kernel of saalary variety. *Iranian Journal of Food Science and Technology*. 4(3): 21-30.
- Bagherpour, H. **Minaei, S.** and Sabbaghpour, S.H. (2007) Effect of moisture content on physical proper ties of lentil seeds. *Journal of Agricultural Science Islamic Azad University*. 13

(1): 1-9.

- Zaki Dizaji, H. and **Minaei, S.** (2007). Determination of some physical and mechanical properties of chickpea. *Iranina Journal of Food science and Technology*. 4 (2): 57-66.
- Aghkhani, M.H. and **Minaee, S.** (2007). Determining of cutting force of annual medics seed. *Agricultural Science*. 17 (4): 171-178.
- Shafiee, S. Modarres Motlagh, A. Rahmani Didar, A. and **Minaei, S.** (2008). Mechanical properties of whole apple, It's skin and flesh. *Research Journal of Biological Sciences*. 3 (4): 385-390.
- Sheikhdavoodi, M. J. and **Minaei, S.** (2007). The effect of for ward speed on motion resistance of rubber tires. *The Scientific Journal of Agricultural*. 30 (3): 22-37.
- Alizadeh, M.R. **Minaei, S.** Tavakoli Hashtjin, T. and Khoshtaghaza, M.H. (2008). Effect of variety, rotational blade speed and paddy moisture content on performance of a de-awner. *Journal of Agricultural Engineering Research*. 8 (4): 127- 142.
- Amiri Parian, J. Khoshtaghaza, M.H. Kabir, E. and **Minaei, S.** (2008). Volume estimation of potatoes using image processing. 8 (4): 113- 126.
- Gholami porshokoohi , M. **Minaei, S.** Borghei, A. M. and Basiri, A. (2008). In fluence of temperature, air velocity and pretreatments on drying thompson seedless grapes. *Journal of Agricultural Engineering Research*. 8 (4): 65- 80.
- Imanmehr , A. Ghoobadian , B. **Minaei , S.** and Khoshtaghaza, M. H. 2008). Design, construction and evaluation of a canola seed pneumatic conveyer in the dilute phase. *Journal of Agricultural Engineering Research*. 8 (4) : 33-46.
- Askari , E. A. Tavakoli hashjin , T. **Minaei. S** Sabori,. and Alizadeh, M. R. (2007). Determination of threshing losses regression model in a rice auto head feed thresher. *The Scientific Journal of Agriculture*. 30 (1): 115-123.
- Mirzai Moghadm, H. Tavakoli Hashjin, T. **Minaei, S.** and Zaki Dizaji, H. (2006) Affeul of moisture content, ripeness level and cultivation on qualit propertie of dried kiwi sliced. *IJ FS*. 3 (2): 67-76.
- **Minaei, S.** Alizadeh, M.R. Khoshtaghaza, M. H. and Tavakoli, Timor. (2007). Effects of de-awning and misture content on husking characteristics of paddy in robber-roll husker american-eurasian. *Journal Agricultural and Environ. Sci*. 2(1): 1-5.
- Eyvani, A. and **Minaei, S.** (2006). Acoustical measurement of walnut volume through standing waves of a helmholtz resonator. *Iranian Journal of Agricultural Science*. 38 (2): 219 -226.
- Khoshtaghaza, M.H. Amirichayjan, R. Montazer, Gh. and **Minaei, S.** (2007). Prediction of head rice yield in fixed bed drying using artificial neural networks. *Journal of Agricultural Engineering Research*. 8 (2): 135-156.
- Amier chaljan, R. Khoshtaghaza, M. H. Montazer, GH. A. and **Minaei, S.** (2007). An estimation of paddy layers, moisture content at the end of drying process, using artificial neural network. *Iranian Journal of Agricultural and Science*. 38 (1): 113- 123.
- Peiman, S.H. Roohi, R. Alizadeh, M.R. and **Minaei, S.** (2006). Astudy of the effect of cultivars, moisture content and time of operations on rice whitening. *Iranian Journal of Agricultural and Science*. 38 (1): 27-32.
- Alizadeh, M.R. **Minaei, S.** Tavakoil, T. and Khoshtaghaza, M.H. (2006). Effect of de-awning on physical properties of paddy. *Pakistan Journal of Biological Sciences* 9 (9): 1726-1731.
- Zare, D. **Minaei, S.** Mohamadzadeh, M. and Khoshtaghaza, M.H. (2006). Computer simulation of rough rice drying in a batch dryer. *Energy Conversion and Manage Ment*. 47: 3241-3254 .
- Iafari, R. Tavakoli Hashjin, T. **Minaei, S.** and Raoofat, M.H. (2006). 3D nonlinear finite

element analysis of large deformation in soil induced by tillage tools. *Wseas Transactions on Mathematics*. 5: 1218-1225.

- Tavakoly Hashjin, Askari Asli- Ardeh, E. **Minaei, S.** and Allizadeh, M.R. (2006). Design and fabrication of rice automatic head-feed thresher and evaluation of its threshing unit. *Journal of Agricultural Sciences and Natural Resources*. 13(1) : 155-168.

- Imanmehr, A. Ghobadian, B. **Minaei, S.** and Faradmal, J, (2007). Determination of some physical properties of canola seed (Licord cultivar). *Journal of Agricultural Engineering Research*. 7 (29): 119-128.

- Gholami, M. Borghaie , A. M. Bassiri, A. R. and **Minaie, S.** (2006). Estimation of moisture desorption isotherms for black currant raisins and determining the best appropriate model. *Journal of Agricultural Sciences Islamic Azad University*. (3): 703-713.

- Mostofisarkari, M.R. Maleki Tabriz, P. and **Minaei, S.** (2007). Performance evaluation of cotton stalk poller. *Journal of Agricultural Engineering Research*. (29): 47-58.

- Kermani, A. M. Tavakoli Hashjin, T. **Minaei, S.** and Khoshtaghaza, M. H. (2007). Mechanical properties of rice kernels under compressive loading as affected by deformation rates. *Iranian Journal of Food Science and Technology*.

- Kasraei, M. Saboor, A. **Minaei, S.** and Homaei, M. (2006). Abrasive wear along the share of a mold board plow as a function of distance worked. *Journal of Science and Technology of Agriculture and Natural Resources*. 10 (3): 165-173.

- **Minaei , S.** Nekandish, P. and Sheikh Davodi, M. J. (2006). Completing and testing of a three-shank vibrating subsoiler 16 (1): 51- 59.

- Aghkhani , M. H. **Minaei, S.** and Tavakoli Hashtjin, T. (2006). Measurement and evaluation coefficient of friction of annual medic seeds. *Agricultural Sciences and Technology Journal*. 2 (3): 111- 117.

- Massah, J. Ghazavi, M.R. and **Minaei, S.** (2005). Effect of force control system on power and time consumption in robotic pruning machine. *Journal of Agricultural Sciences, Islamic And University*. 11 (3). 232-243.

- Amoodeh, M. T. Khoshtaghaza, M. H. and **Minaei, S.** (2006). Acoustic on - line grain moisture meter. *Computers and Electronics in Agriculture*. 52: 71-78.

- Naghavi Morad Khanlo, G. Khoshtaghaza, M. H. and **Miniaie, S.** (2006). Effect of ballast and speed on slippage and fuel consumption of ITM 285 Tractor. *Journal of Agricultural Sciences Islamic Azad University*. 12 (3): 694-701

- Mansoori , Y. and **Minaei , S.** (2005). The effect of loading speed and fruit size on the mechanical properties of two date fruit varieties (Estamran and Zahidi )in khuzestan. *The Scientific Journal of Agriculture*. 28 (2): 11-23.

- Massah, J. Ghazavi, M.R. Mohammadi Moghadam, M. and **Minaei, S.** (2004) Design and development of robotic pruning machine with force control system. *Modarres Technical and Engineering Scientific Research Journal*. (20): 45-62.

Afkari Syyah, A. H. **Minaei, S.** (2005). Instrumentation design and development of an impact testing apparatus for investigation of mechanical behavior of agricultural materials and its evaluation using wheat. *IJFST*. 12(2): 13-27.

Firouzi, S. **Minaei, S.** Payman, M. H. Fotohi, H. (2005). The effect of feed rate and outlet pressure on the breakage of rice kernels in a rice jet pearler. *IJFST*. 1(3): 31-44.

**Minaei, S.** Rouhi, Gh. R. Alizadeh, M. R. (2005). Investigation of the effects of drying parameters on rice cracking and breakage during milling. *Journal of Agricultural Engineering Research*. 6(22): 97-112.

Sheikhdavoodi, M. J. **Minaei, S.** Almassi, M. Ghobadian, B. (2005). Development and evaluation of an apparatus for measurement and study of traction phenomenon under controlled

conditions. *The Scientific Journal of Agriculture*. 28(1): 13-27.

Gazor, H. R. **Minaei, S.** Rostammi, M. A. (2005). Influence of temperature and thickness on pistachio drying in batch dryers. *J. Ag. Sci. Nat. Resour.* 11(4): 81-93.

Gholami Parshokouhi, M. **Minaei S.** (2005). Estimation of moisture sorption isotherms for Black Currant Raisins and determining the best appropriate model. *Iranian J. of food Sci. Tech.* 2(2): 63-74.

**Minaei, S.** Ahmadichenarbon, H. Eraghi, M. K. (2005). A study of the effects of various press wheels of rangeland sowing machines on Sainfoin germination and growth rate. *Iranin J. Nat. Res.* (58)1: 231-246.

Jamshidi, S. **Minaei, S.** Khoshtaghaza, M. H. (2005). Effects of fruit and machine parameters on accuracy of an automatic tomato color sorting system. *The Scientific Journal of Agriculture*. 28(1): 1-11.

Gazor, H. R. **Minaei, S.** Rostammi, M. A. (2005). Influence of temperature and thickness on pistachio drying in batch dryers. *Ag. Sci. Nat. Resour.* 11(4): 81-93.

Jamshidi, B. **Minaei, S.** Sarami, Sh. (2005). Color detection system for agricultural products based on electronic vision. *Journal of Agricultural Engineering Research*. 5(21): 1-12.

Momeni Abkharaki, D. Ghobadian, B. Hemmat, A. **Minaei, S.** (2005). Development of a semi-automatic differentiated lock system for MF-285 tractor. *J. Sci. Tech. Agric Nat. Resour.* 8(4): 213-223.

Firouzi, S. **Minaei, S.** Payman, M. H. (2005). Study of the impact of effective parameters on performance of rice jet pearlers. *J. Ag. Sci. Tech.* 19(2): 148-159.

Gazor, H. R. **Minaei, S.** (2005). Influence of temperature and air velocity on drying time and quality parameters of pistachio (*Pistacia vera L.*) *Drying Technology*. 23: 2463-2475.

Afkari sayyah, A. H. and **Minaei, S.** (2004). An investigation of mechanical and rheological. *Iranian J. Ag. Sci. Vol.* 35(3): 561-571.

Mashhadi meighani, H. Almasi, M. Borghaie, A, M. **Minaei, S.** (2004). Using rapeseed methyl ester (RME) as a fuel in a compression ignition engine. *Journal of Agricultural Sciences*. 10(2): 39-46.

Firouzi, S. **Minaei, S.** Payman, M. H. Fotohi, H. (2004). The effect of feed rate and outlet pressure on the breakage of rice kernels in a rice jet pearler. *IJFST*. 1(3): 31-44.

Afkari sayyah, A. H. and **Minaei, S.** (2004). Behavior of wheat kernels under quasi-static loading and its relation to grain hardness. *J. Ag. Sci. Tech.* 6: 11-19.

Gazor, H. R. **Minaei, S.** Bassiri, A. R. (2003). Influence of changes in temperature, Air velocity and layer thickness on drying of Kolehghouchi pistachio. 9(1): 89-103.

Houshyani, B. Araqi, M. H. **Minaei, S.** (2002). Evaluatin of the effects of rangeland seedling planter parameters on planting attributes of Atriplex. *Iranian J. of Nat. Resour.* 55(2): 283-291.

**Minaei, S.** and Khoshhal, M. (2002). Development of relationships between the effective parameters in intermittent drying of paddy. *Journal of Agricultural Engineering Research*. 3(1): 47-60.

Mansouri, Y. **Minaei, S.** Sheikh davoudi, M. J. (2002): Design and development of a rotary tiller as attachment to Ashtad two-wheel tractor. *Journal of Agricultural Sciences*. 8(2): 33-53.

Aghkhani, M. H. and **Minaei, S.** (2002). Investigation of physical properties of annual Medics seeds and determination of optimum threshing clearance. *J. Ag. Sci. & Nat. Resour.* 8(4) : 57-71.

Gazor, H. R. and **Minaei, S.** (2002). Influence of temperature and air velocity on drying time and quality parameters of pistachio. *Journal of Agrincultural Engineering Research*. 3(11): 73-90.

Aghkhani, M. A. and **Minaei, S.** (2002). Investigation of physical properties of annual medics and determination of optimum threshing clearance. *J. Ag. Sci. Nat. Resour.* 8(4): 57-71.

Khoshhal, M. and **Minaei, S.** (2001). Determination of the relationships between the effective

parameters in uninterrupted paddy drying proces J. Ag. Sci. Nat. Resour. 8(3): 123-133.

Sakenian Dehkordi, N. Ghobadian, B. **Minaei, S.** (2001). Effective parameters in water conservation using a modified subsoiler. J. Sci. and Tech. Ag. and Nat. Resour. 5(2): 211-224.

Kamgar, S. and **Minaei, S.** (2001). Evaluaton of the influence of a few effective parameters on soil compaction caused by disk and moldboard plows. Journal of Agricultural Sciences. 6(4): 5-22.

**Minaei, S.** Rahimzadeh, R. and Sadeghi, E. (2000). Modification and improvement of deep planter (seed-cum-fertilizar drill) for placing seed and fertilizer at different depths. J. Soil & Water Sci. 14(2) : 198-210.

**Minaei, S.** Rahimzadeh, R. Sadeghi, E. (2000). And improvement of Iranian row planter for placement of seed and fertilizer at various depths. Journal of Soil and Water Sci. 14(2):198-210

- **Minaei, S.** Sadeghi, M. and sharifi, J. (2000). Testing and evaluation of a rotary disk harrow.

Agricultural Science. 10(4): 23-31.

Peyman, M. H. Tavakkoli Hashtgin, T. **Minaei, S.** (2000). Optimum roll clearance if rubber-roll huller for processing the common varieties of Gilan paddy. Journal of Agricultural Sciences. 5(20): 37-48.

**Minaei, S.** and Alizadeh, M. R. (2000). Design and development of auger drill for attachment to two wheel tractors. Agricultural Science and Technology. 14(1): 19-26.

**Minaei, S.** and Aghkhani, M. H. (1999). Design and development of driven disk harrow. Modarras Agricultural Science. 1(1): 36-44.

Burger, A.J. Perumpral, J. A. Kreh, R. E. Torbert, J. L. **Minaei, S.** (1985). Impact of tracked and rubber-tired tractors on a forest soil. Transactions of the ASAE. 85(3): 369-373.

Burger, J. A. Kreh, R. E. **Minaei, S.** Perumpral, J. V. Torbert, J. L. (1984). Tires and tracks: How they compare in the forest. Agricultural engineering. 65(2): 14-18.

#### VIII. PAPERS PRESENTED IN CONFERENCES:

Mostofi, M. R. Godwin, R. G. O'Dogherty, M. J. **Minaei, S.** (2006). Performance evaluation of a continuous mass flow Rate Measurement system for root crop harvesting. Agricultural Engineering for a Better world. Bonn.

**Minaei, S.** Zare, D. Mohamad zadeh, M. Khoshtaghaza, M. H. (2006). Development of computer simulation software for drying of paddy in deep-bed batch dryer. Agricultural Engineering for a Better world. Bonn.

Bakhoda, H. Almassi, M. **Minaei, S.** Nasirian, N. (2006). Studying Suitability of using Camelina Sativa as Biodiesel. Agricultural Engineering for a Better world. Bonn.

Shahi, T. Tvakoli, T. **Minaei, S.** Zaki dizagi, H. (2006). Development and Testing of Alfafa chopper for small farms. 4<sup>th</sup> National Congress on Agricultural machinery Engineering and Mechanization. Tabriz.

Sheykhdavudi, M. **Minaei, S.** effect of forward (2006). 4<sup>th</sup> national congress on agricultural machinery engineering and mechanization. Tabriz.

Rasoli, F. Sedeghi, h. **Minaei, S.** (2006). Assessing Agricultural Mechanization coefficient and sunflower farmers Technical knowledge on agricultural mechanization (A case study in Qom province, Iran) 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Eyvani, A. **Minaei, S.** Hasani, D. (2006). Major spectrum of walnut acoustical response to a non-destructive impact. 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and

Mechanization. Tabriz.

Eyvani, A. **Minaei, S.** Measurement of walnut by standing waves of a helmholtz acoustical resonator. (2006). 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Nikbkht, A **Minaei, S.** Ghobadian, B Zakidizaji, H(2006). Study of soil mechanical parameters using horizontal sensor. 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

MemarDactjerdi, R. **Minaei, S.** MostofiSarekari, M,R. (2006). Design, development and testing of an instrument for continuous measurement of soil mechanical strength. 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Sadeghi, M. Khoshtaghaza, M,H. **Minaei, S.** estimation of antiparticle force between tea particles in vibrated beds (2006). 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Momeni, D. Ghobadian, B. Hmat, A. **Minaei, S.** optimizing of differential lock system for Massey Ferguson 285 (2006). 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Momeni, D. Ghobadian, B. Hmat, A **Minaei, S.** (2006). Effects of differential lock on wheel slip in MF-285 Tractor 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Vahedi, A. **Minaei, S.** (2006). comparison rice production in two methods (conventional method and mechanized). 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Mohamadi, A. Almassi, M. Borgheei, A **Minaei, S.** (2006). Qualitative and quantitative study of factories manufacturing agricultural equipments in Isfahan province. 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Nasirian, N. Almassi, M. **Minaei, S.** Bakhoda, H. (2006). Energy efficiency study in sugarcane production industry, south of Khuzestan province, Iran. 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Zakidizaji, H. Amirichayjan, R. **Minaei, S.** (2006). Coma ration of artificial neural network approach, statistical models and elastic behavior model for prediction of apparent modulus of elasticity for chickpea kernel. 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Msah, J. Ghazavi, M, R. Mohamadimoghadam, M. **Minaei, S.** (2006). Effect of force control system oc power and time consumption in robotic pruning machine. 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Bandaei, M. **Minaei, S.** (2006). Utilization of GPS guidance-aided system in tractor. 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Masah, J. Ghazavi, M,R. Mohamadimoghadam, M. **Minaei, S.** (2006). Design and development of robotic pruning machine with force control system. 4<sup>th</sup> National Congress on Agricultural Machinery Engineering and Mechanization. Tabriz.

Kasraei, M. **Minei, S.** (2006). Study of wear at different of moldboard plow shares. 4<sup>th</sup> national congress on agricultural machinery engineering and mechanization. Tabrez.

Afkari, A. H. and **Minaei, S.** (2003). Using mechanical methods for determining quality of weat blend. The proceeding of the first national symposium on losses of agricultural products, Tehran.

Mansoori, H. and **Minaei, s.** (2003). Evaluation of machine parameters affect on wheat Foss at jhondeer combine the proceeding of the first national symposium on loss of agricultural



products. Tehran.

Zakeidizaji, H. **Minaei, S.** and Afkari, A. H. (2003). Determination of apparent modulus of elasticity and development of elastic behavior model for chickpea seeds. The proceeding of the first national symposium on losses of agricultural proudest. Tehran.

**Minaei, S.** Roohi, A. R. and Alizade, M. R. (2003). Affect of rice crop parameters and dryers on paddy processing loss and toughness rate. The proceeding of the first national symposium on losses of agricultural proudest. Tehran.

**Minaei, S.** Khoshtaghaza M. H. and Afkari, A. H. (2003). Determination of elastic and viscoelastic model of wheat grain quality identification. The proceeding of the first national symposium on losses of agricultural proudest. Tehran.

**Minaei, S.** Zakeidizaji, H. and Afkari, A. H. (2003). Determination of chickpea physical and mechanical properties as related to quantitatively losses of agricultural products Tehran.

Afkari, A. H. Sahari, M. A. and **Minaei, S.** (2003). Determination of kernel mechanical properties for predicting milling quality by using mechanical test. 14th national congress of food industry.

Zakeidizaji, H. and **Minaei, S.** (2003). Determination of some biophysical properties of chickpea kernel as related to processing and transport 14<sup>th</sup> national congress of food industry. Tehran.

Khoshhal, M. and **Minaei, S.** (2003). optimization of energy consumption at paddy during by using of thin layer. The proceeding of the fourth national energy congress.

Zakeidizaji, H. **Minaei, S.** and Afkari, A. H. (2003). Affect of agricultural machines parameters on soil compact. First student conference on agricultural machinery engineering. Uremia (231-236).

JamShidi, B. **Minaei, S.** and sarami, SH. (2003).optoelectronic agricultural crops color sorting system. First student conference on agricultural machinery engineering. Uremia. (25-29).

Gazor, H. **Minaei, S.** and Basiri, A. (2003). Drying pattern of tow varieties Iranian pistachio. First student conference on agricultural machinery engineering. Uremia (82-92).

**Minaei, S.** and Afkari, A. H. (2002). Mechanical damage of agricultural products, specially cereals. proc. Second National Cong. of Agr. Eng. and Mech. 5-6. Karaj.

Gazor, H. R. and **Minaei, S.** (2002). Effects of temperature and layer thickness on batch drying of pistachios. Proc. Second National Cong. of Agr. Eng and Mech. 14-16.

Sarami, SH. and **Minaei, S.** (2002). Design and development of rotary cutting head for the rew-crop selective thinner. Proc. Second National Cong. of Agr. Eng. and Mech. 17-20.

**Minaei, S.** and Alboozahar, A. (2002). Application of automatic control systems for reduction of losses in combine harvesting. Proc. Second National Cong. of Agr. Eng. and Mech. (46-47).

Tavassoli, A. and **Minaei, S.** (2002). Investigation of combine's exit losses as affected by forward speed. Proc. Second National Cong. of Agr. Eng and Mech. (61-64).

Afkari, A. M. and **Minaei, S.** (2002). Study of wheat kernel mechanical properties and its relationship with kernel hardness. Proc. Second National Cong. of Agr. Eng. and Mech. (72-73).

**Minaei, S.** and Kamrani, A. (2002). Hydraulic system design for unloading mechanism of the sugarcane transporter. Proc. Second National Cong. of Agr. Eng. and Mech. (82-83).

**Minaei, S.** and Ensannejad, H. (2002). Development of 10-ton Hydraulic trailer for sugarbeet transporter. Proc. Second National Cong. of Agr. Eng. and Mech. (104-106).

**Minaei, S.** and Mansoor Dehghan, H. (2002). Investigation of wheat losses during transport and storage. First Int'l. Wheat Cong.. Tehran.

**Minaei, S.** and Afkari, A. H. (2001). Design and development of instrumentation for investigation of single kernel wheat milling characteristics. First Int'l. Wheat Cong., Tehran.

Afkari, A. H. and **Minaei, S.** (2001). Instrumentation method for determination of wheat mixture milling quality. First Int'l. Wheat Cong.. Tehran.

**Minaei, S.** and kamgar, S. (2002) . Soil compaction caused by disk and moldboard plows. Proc.

AgEng 2002 Conf. Budapest, 2: 69-70.

Tabasizadeh, M. **Minaei, S.** and Kianmehr, M.H. (2002). Use of a Two-wheel tractor's engine waste heat for operation of a batch dryer. Proc. AgEng. 2002 Conf. Budapest, 2: 128-129.

**Minaei, S.** and Alboozahar, A. (2001). An automatic system for dual control of combine header height. Proc. Intelligent Control for Agricultural Applications. Mali.

**Minaei, S.** Sarami, S. and Kianmehr, M. H. (2001). Smart thinning machine. Proc. Intelligent Control for Agricultural Applications. Mali.

**Minaei, S.** and Kamrani, A. (2001). Hydraulic system design and development for the track-type sugarcane transporter. Proc Fifth Int'l. Mech. Eng. Conf. Vol. 4 : 537-544.

Kamrani, A. and **Minaei, S.** (2001). Design and development of traction system for sugarcane transporter. Proc Fifth Int'l. Mech. Eng. Conf. Vol. 4 : 537-544.

**Minaei, S.** and Sadeghi, M. (2000). Effect of forward speed and gang angle of a new, powered disk harrow on tractor slippage and draft requirement. Proc. Ag. Eng. 2000 Conf. Vol. 2 : 251-252.

**Minaei, S.** and Jafari Naimi, K. (1998). Determination of shearing force and design of harvester for Atriplex. First Ag. Eng. and Mech. Cong. Abs.

**Minaei, S.** and Mohsenimanesh, A. (1998). Electrohydraulic system for oscillatory motion of combine cutter bar. First National Ag. Eng. and Mech. Cong. Abs.

Mohsenimanesh, A. and **Minaei, S.** (1998). Design of hydraulic auger for two-wheel tractors. First National Ag. Eng. and Mech. Cong. Abs.

Hosseini, A. M, and **Minaei, S.** (1997). Design and development of a continuous speed converter for seed metering. Proc. Fifth Mech. Eng. Conf. Vol. 4 : 1487-1493.

**Minaei, S.** and Khosh-hal, M. (1997). Design and development of an automatic controller for paddy dryer and determination of associated energy savings. Proc. First National Iran Energy Conf. Vol. (3) : 220-236.

**Minaei, S.** Hashemi, A. (1997). Design and development of a powered disk plow. Proc. Fifth Mech. Eng. Conf. Abs.

Aghkhani, M. H. and **Minaei, S.** (1996). Design and development of a rotary disk harrow. Proc. Third Prod. and Manufac. Eng. Conf. Vol. (1) : 183-191.

Peyman, M. H. and **Minaei, S.** (1995). Development of computer model for determination of a vibrating subsoiler's draft. Proc. Third Mech. Eng. Conf. Vol. 2 : 791-801.

Shamsabadi, H. A. and **Minaei, S.** (1995). Investigation and design of a wind turbine for pumping water in windy areas of Iran. Proc. Third Mech. Eng. Conf.

**Minaei, S.** and C. G. Coble. (1989). Effect of oxygen on germination and respiration of MAR cotton. American Society of Agricultural Engineers, Paper No. 89-1558.

**Minaei, S.** J. V. Perumpral, J. A. Burger, and P. D. Ayers. (1984). Soil bulk density by core and densitometer procedures. American Society of Agricultural Engineers, Paper No. 84-1041.

Burger, J. A. J. V. Perumpral, **S. Minaei,** J. L. Torbert, and R. E. Kreh. 1983. The effect of track and rubber-tired vehicles on soil compaction. American Society of Agricultural Engineers, Paper. No. 83-1621.

Khoshhal, M. and **Minaei, S.** (2003). Optimization of energy consumption in the paddy drying process using a vertical thin layer drayer. The Fourth National Energy Cong. Teh.

#### **IX. RESEARCH PROJECTS COMPLETED:**

Loss reduction and energy conservation in paddy drying process - Sponsored by the National Scientific Research Council.

Design and development of hydraulic power transmission system for combine platform

-Sponsored by Tarbiat Modarres Univ.

Improvement and development of equipment for increasing yield and quality of agricultural crops - Sponsored by the Ministry of Industry and Mines.

Investigation of paddy processing losses in Gilan province and ways of its reduction - Sponsored by the Ministry of Reconstruction Jihad.

Design and development of hydraulic auger drill for two-wheel tractors - Ministry of Agriculture.

Reduction of wheat losses from production to consumption - Sponsored by the National Scientific Research Council.

Investigation of effective parameters in design of pistachio dryers at 60-95°C temps - Sponsored by the ministry of Industry and Mines.

#### ***XVI. AWARDS AND HONORS :***

1978 STCC Award for Engineering Excellence, U.S.

1995 Tarbiat Modarres Univ. Outstanding Professor of the year.

2005 Tarbiat Modarres Univ. Distinguished Researcher of the year.

#### ***IV. ACADEMIC AND RESEARCH POSITIONS HELD:***

- 1- Head of the Center of Excellence for Recycling & Loss Reduction of Strategic Ag. Crops.
- 2- Associate Dean of Agriculture, Tarbiat Modarres Univ.
- 3- Chairman, Dept. of Agricultural Machinery Eng.
- 4- Vice president, Iranian Society of Ag. Engineering & Mechanization
- 5- Managing editor, Modarres Journal of Agricultural Sciences
- 6- Vice president, Iranian Committee for development of Standards for Agricultural Machinery
- 7- Member, Technical Committee of the Iranian Agricultural Engineering Research Institute
- 8- Member, Research council - Parks and Greenery Organization of Tehran Municipality
- 9- Advisor to the Scholarships Administration, Ministry of Higher Education