

Curriculum Vitae (CV)

Personal Information

Name: Dr. Seyed Ahmad Mireei
Assistant Professor, Department of Biosystems Engineering, Isfahan University of Technology
Nationality: Iranian
Date of Birth: 3/19/1981
Marital Status: Married
Number of Children: One daughter



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Educational Background

Ph.D.

Agricultural Machinery Engineering, Department of Agricultural Machinery Engineering, Faculty of Agricultural Engineering and Technology, University of Tehran, Iran. 2005- 2010.

Thesis title: Nondestructive Determination of Effective Parameters on Maturity of Mazafati and Shahani Date Fruits by NIR Spectroscopy Technique.

M.Sc.

Agricultural Machinery Engineering, Department of Agricultural Machinery Engineering, Faculty of Agricultural Engineering and Technology, University of Tehran, Iran. 2003- 2005.

Thesis title: Static and Vibration Analysis of Budsan Truck Engine Mount.

B.Sc.

Agricultural Machinery Engineering, University of Shiraz, Iran, 1999-2003.

Sabbatical Leave.

Agricultural Economics and Engineering Department, University of Bologna, Italy. January-July, 2009.

Awards and Honorary

1. First Class Student in B.Sc. of Agricultural Machinery Engineering, University of Shiraz, Iran, (2003).
2. Second Class Student in M.Sc. of Agricultural Machinery Engineering, University of Tehran, Iran, (2005).

3. A patent titled: *Design a Counter-Rotating Cams Mechanism in Reciprocating Mowers*, certified by Patent Organization of Iran, (2005).

Research Interests

- Nondestructive quality evaluation of agricultural products.
- NIR and laser spectroscopy.
- Machine vision.
- Artificial intelligence.
- Sensor technology.

Teaching Experiences

Undergraduate and Postgraduate Courses:

- Mathematics (BS).
- Physical Properties of Agricultural Products (BS).
- Mechanical Properties of Agricultural Products (BS).
- Engineering Drawing (BS).
- Fundamentals of Harvesting Machines (BS).
- Non-destructive Quality Evaluation of Agricultural Products (MS).
- Advance Mathematical Modeling (PhD).

Research Experiences

M. Sc. Supervision:

2014- Haghshenas, M.

Quality Determination of tomato by using nondestructive fluorescence spectroscopy method.

Role: Supervisor

2014- Heidari, H.

Non-destructive determination of chicken meat quality by dielectric method.

Role: Joint supervisor

2014- Eshghian, M.J.

Assessing multi-pass drying of long- and short-grain rough rice varieties by fluidized bed method.

Role: Joint supervisor

2013- Mohammad Hashemi, H.

Non-destructive quality determination of tomato by laser-induced light backscattering imaging.

Role: Supervisor

2013- Moomkesh, S.

Nondestructive measurement of moisture and taste index of mandarin using Vis/NIR spectroscopy.

Role: Supervisor

2013- Poorkhak, B.

Application of forced impact method in non-destructive firmness measurement of kiwifruit.
Role: Joint supervisor

2013- Vaheb, M.
Non-destructive impact test for measuring plum firmness.
Role: Joint supervisor

2012- Bagheri, R.
Non-destructive moisture content determination of date fruit by dielectric method.
Role: Joint supervisor

2012- Mir Ahmadi, S.M.
Online weighing of kiwifruit by impact method.
Role: Joint supervisor

2012- Fathi, M.
Design, construction and evaluation of an indirect solar dryer with energy storage system.
Role: Joint supervisor

2012- Hatami, S.
Energy and exergy analysis of an indirect forced convective solar dryer (Case study of banana slices).
Role: Joint supervisor

2011- Heidari, A.R.
Design and development an online date fruit firmness measuring system based on nondestructive impact force.
Role: Joint supervisor

2014- Barge-gol, M.S.

Role: Advisor

2013- Oboodi, M.
Detection of mosaic symptoms in cucumber using image processing.
Role: Advisor

2013- Zarean, M.
Efficacy of microwave-assisted osmotic dehydration on glass transition temperature and quality attributes of strawberry.
Role: Advisor

2012- Zolfaghari, M.
Investigation of apple drying process using fluidized bed method in order to produce apple tea.
Role: Advisor

2011- Ghasemi, A.
Determination of rice glass transition temperature and study of drying and tempering effect on its fissuring by modeling intra-kernel moisture distribution.

Role: Advisor

2011- Habibirad, A.H.

Susceptibility of apple to bruising under impact loading.

Role: Advisor

Published Papers in Journals

1. **Mireei, S.A.**, M. Sadeghi, A. Heidari, A. Hemmat. 2015. On-line firmness sensing of dates using a non-destructive impact testing device. *Biosystems Engineering*. 129: 288-279.
2. Mehryar, E., M. Sadeghi, J. Razavi, **S.A. Mireei**. Modeling the glass transition temperature of Istamaran date powder. Accepted by *Journal of Food Process Engineering*.
3. Ghasemi, A., M. Sadeghi, **S.A. Mireei**. Effect of intermittent drying conditions on fissuring percentage and process duration of long and medium rough rice varieties. Accepted by *Journal of Crop Production and Processing*.
4. Bagheri, R., **S.A. Mireei**, M. Sadeghi, A. Masoumi, S. Moomkesh. Measurement of date palm fruit moisture content by non-destructive dielectric method. Accepted by *Iranian Journal of Biosystems Engineering*.
5. Mirahmadi, S.M., **S.A. Mireei**, M. Sadeghi, A. Hemmat. Online weighing of kiwifruit using impact method. Accepted by *Journal of Agricultural Machinery Engineering*.
6. **Mireei, S.A.**, S.S. Mohtasebi, M. Sadeghi. 2014. Comparison of linear and non-linear calibration models for non-destructive firmness determining of 'Mazafati' date fruit by NIR spectroscopy. *International Journal of Food Properties*. 17(6): 1199- 1210.
7. **Mireei, S.A.**, M. Sadeghi. 2013. Detecting bunch withering disorder in date fruit by near infrared spectroscopy. *Journal of Food Engineering*. 114: 397- 403.
8. Sadeghi, M. O. Mirzabeigi Kesbi, **S.A. Mireei**. 2013. Mass transfer characteristics during convective, microwave and combined microwave-convective drying of lemon slices. *Journal of the Science of Food and Agriculture*. 93(3): 471-478.
9. Tohidi, M., M. Sadeghi, S.R. Mousavi, **S.A. Mireei**. 2012. Artificial neural network modeling of process and product indices in deep bed drying of rough rice. *Turkish Journal of Agriculture and Forestry*. 36(6): 738-748.
10. **Mireei, S.A.**, S.S. Mohtasebi, M. Sadeghi, S. Rafiee. 2012. Comparison between reflectance, transmission and interactance modes of NIR spectroscopy in non-destructive moisture content determining of 'Mazafati' date fruit. *Iranian Journal of Biosystems Engineering*. 43(2): 133-141.
11. **Mireei, S.A.**, S.S. Mohtasebi, R. Massudi, S. Rafiee, A.S. Arabanian. 2010. Feasibility of a near infrared spectroscopy for analysis of date fruits. *Journal of International Agrophysics*. 24: 351-356.

12. **Mireei, S.A.**, S.S. Mohtasebi, R. Massudi, S. Rafiee, A.S. Arabanian, A. Berardinelli. 2010. Non-destructive measurement of moisture and soluble solids content of 'Mazafati' date fruit by NIR spectroscopy. *Australian Journal of Crop Science*, 4(3): 175-179.
13. **Mireei, S.A.**, S.S. Mohtasebi, R. Massudi, S. Rafiee, A.S. Arabanian. 2010. Using FT-NIR spectroscopy in nondestructive maturity determination of 'Shahani' Date Fruits. *Iranian Journal of Biosystems Engineering*. 41(2): 113-120.
14. **Mireei, S.A.**, S.S. Mohtasebi, M. Omid, R. Alimardani. 2008. Modeling, dynamic analysis and optimization of Budsan truck engine mount. *Journal of Applied Sciences*. 8(13): 2369-2377.
15. Omid M., S.S. Mohtasebi, **S.A. Mireei**, E. Mahmoodi. 2008. Fatigue analysis of connecting rod of U650 tractor in the finite element code ANSYS. *Journal of Applied Sciences*. 8(23): 4338-4345.

Papers Presented at National and International Scientific Assemblies

1. Abbasi, H., M. Nazeri, **S.A. Mireei**. Design and developing of a Lab VIEW-based LED-induced fluorescence spectroscopy system for non-destructive quality assessment of horticultural products. 2nd International Symposium on Optics and its Applications. 1-5 September, 2014, Yerevan-Ashtarak, Armenia.
2. Abbasi, H., M.A. Bani, M. Nazeri, **S.A. Mireei**. Application of Fluorescence Spectroscopy in the Freshness Control of Lettuce Leaf after Irradiation of Cold Atmospheric Pressure Plasma. 2nd Conference on Plasma Engineering and Plasma Physics. 22-23 May, 2014, Babolsar, Iran.
3. Hatami, S., M. Sadeghi, **S.A. Mireei**. Thin layer drying of banana slices using an indirect solar dryer under forced convection conditions. 3rd International Conference on Emerging Trends in Energy Conservation. March 11, 2014, Tehran, Iran.
4. Bagheri, R., S.A. Mireei, M. Sadeghi, A. Masoumi, S. Moomkesh. Measurement of dielectric properties of date palm fruit during maturity in order to introduce the moisture content estimating model. The 8th National Congress on Agr. Machinery Eng. (Biosystem) & Mechanization. 29-31 January 2014, Mashhad, Iran.
5. Safari Amiri, Z., **S.A. Mireei**, M. Sadeghi. Effect of processing method and variety on milling quality parameters of rice. The 8th National Congress on Agr. Machinery Eng. (Biosystem) & Mechanization. 29-31 January 2014, Mashhad, Iran.
6. Heidari, A., M. Sadeghi, **S.A. Mireei**, A. Hemmat. Date fruit firmness modeling using nondestructive impact test. The 8th National Congress on Agr. Machinery Eng. (Biosystem) & Mechanization. 29-31 January 2014, Mashhad, Iran.
7. **Mireei, S.A.**, S.S. Mohtasebi, M. Sadeghi and S. Rafiee. Determination of optimum mode for NIR spectra acquisition in nondestructive moisture content determination of

'Mazafati' date fruit. 20th National Food Science & Industrial Congress. 22-24 November 2011, Sharif University, Tehran, Iran.

8. **Mireei, S.A.**, S.S. Mohtasebi, M. Sadeghi and S. Rafiee. Non-destructive detection of bunch withering disease in 'Mazafati' date fruit. 20th National Food Science & Industrial Congress. 22-24 November 2011, Sharif University, Tehran, Iran.
9. **Mireei, S.A.**, S.S. Mohtasebi, R. Massudi, S. Rafiee, A.S. Arabanian and F.A. Silaghi. Application of near-infrared spectroscopy for the assessment of maturity stages of 'Mazafati' date Fruits. 5th CIGR Conference in Technology and Management to Ensure Sustainable Agriculture, Agro-Systems, Forestry and Safety, 17-19 June 2009, Reggio Calabria, Italy.
10. Omid M., E. Mahmoodi and **S.A. Mireei**. Fatigue analysis of connecting rod of Universal tractor in the finite element code ANSYS. 10th International Congress on Mechanization and Energy in Agriculture, 14-17 October 2008, Antalya, Turkey.