

BRIEF BIO DATA OF SANJAY KUMAR JAIN

1. Name : **SANJAY KUMAR JAIN**
 2. Father's name : Sh Pyare Lal Jain
 3. Date of birth : Feb. 2, 1964
 4. Educational Qualification :



Examination/ Degree	Institute/University /Board	Subject/Specialization	Year of Passing	Division/ Marks in % OGPA
Secondary	Rajasthan Board of Secondary Education, Ajmer	Science Maths	June '79	75.66%, 1 st division with Distinction in Physics, Chemistry and Maths
Hr Secondary	Rajasthan Board of Secondary Education, Ajmer	Science Maths	June '80	79.50%, 1 st division with Distinction in Physics, Chemistry and Maths
B.E.	ML Sukhadia University, Udaipur	Agricultural Engineering	Mar. '86	3.27 out of 4.00, 1 st division
M. Tech.	IIT, Kharagpur	Post Harvest Engineering	Jan. '88	9.64 out of 10.00 1 st , topper of the M Tech batch
Ph D	MPUAT, Udaipur	Processing and Food Engineering	2007	Osmotic and Air Drying of Papaya cubes

5. Employment record:

Name of Employer	Post held	Experience in years	Nature of work
MPUAT, Udaipur (Previously Rajasthan Agricultural University, Bikaner)	Asstt. Professor (Ad hoc)	11 months	Research worked in Plasticulture Development Centre, CTAE, Udaipur
	Asstt. Professor (Selected)	9 months	
	Assistant Professor	5 years	Teaching undergraduate and post graduate classes
	Asstt Professor (Senior scale)	6 years	
	Assistant Professor (Selection Scale)	10 years	

6. Guiding Post Graduate Research No

1. Post Graduate level (ME):
 2. Graduate Level (BE):

7 as Major Advisor and 10 as Advisor
20 as Major Advisor and 15 as Co-Advisor

7. Subjects taught:

Class	II year B E (Ag)	II year B E (Ag)	III Year BE (Ag)	Final Year BE (Ag)
Undergraduate Level	Food Engineering	Instrumentation in Agro Processing Systems	Agricultural Processing and Structures	Dairy and Food Engineering

8. Research Projects

- Completed one National Agricultural Technology Project on House hold Food and Nutritional Security for Tribal, Hilly and Backward Areas (as Co-Principal Investigator).
- Worked as Team member in the Technical Interface Unit of Khadi and Village Industries Commission (TIU-KVIC), CTAE for Development of Microwave Dryer for Drying Spices.
- Exploring the Utility of Plastics in Handling, Packaging and Transportation of Custard Apples working as Associated Scientist with Dr S R Bhakar and Dr G P Sharma in All India Co-ordinated Research Project on Application of Plastics in Agriculture.

9. National level awards and scholarships:

1. Received the outstanding book award for year 2002-03 from Indian Society Agricultural Engineers for the book "**Fundamentals of Food Engineering**" authored by Dr. RC Verma and **S K Jain**.
2. Recipient of **GATE** (Graduate Aptitude Test in Engineering) scholarship for 18 months during M. Tech. studies (Highest scholarship awarded for Post Graduation Studies in Engineering in India).
3. **2nd Best Poster Paper (research)** award by the MPUAT for the paper "**Zero energy cool chamber: A study**" (in Hindi). Poster prepared jointly by Dr RC Verma and **S K Jain**.
4. Recipient of best research poster papers (two) with PG students and other faculty members of the Department in National Seminar on Value Addition of Horticultural Produces and Current Status of Small Scale Food Industries held at CTAE during February 18-19, 2010 sponsored by IICPT, Thanjavur.
 - a. Osmo microwave drying of onion slices prepared by Sandeep B Kalse, S K Jain, PS Champawat, P D Jawake
 - b. Development and quality evaluation of soyjambul fortified biscuits prepared by Megha Patil, S K Jain, G P Sharma, H K Jain.

10. Extra co-curricular activities:

1. Associated in TePP Outreach Centre, Udaipur of Technopreneur Promotion Programme with Dr V K Srivastava and Dr S M Mathur.
2. Compiled and edited undergraduate syllabus of the Agricultural Engineering with Dr Ravi Mathur and Dr. S S Sisodia.

3. Compiled and edited "Information Bulletin" of the College for last three years with Dr. Ravi Mathur and Dr. S S Sisodia.
4. Working as Treasurer of CTAE Alumni Society for last four years.
5. Working as Treasurer of ISAE (Rajasthan Chapter)
6. Working as Co-advisor of Engineering Students Association of CTAE for last 3 years and helped the ESA Advisor and ADSW, CTAE in smooth conducting of Cultural Weeks.
7. Under the banner of NATP, we have organized two cookery competitions in last two years in Department of Processing and Food Engineering, CTAE, Udaipur.
8. Under the banner of NATP, we have organized one debate competition for CTAE students and one quiz competition for students of Central School.
9. Worked as Member of Committee of Courses of the Department for last many years and presently working as Member of Board of Studies of Engineering faculty for last three years.
10. Working as Co-coordinator of NISAGENET (attended one training)
11. Associated with online submission of application form for renewal of approval of College to AICTE with Dr Mahesh Kothari
12. Member of Committee of Courses of Department of Renewable Energy Sources (attended one meeting)
13. Felicitator of website of the college
14. Associated in TePP Outreach Centre, Udaipur of Technopreneur Promotion Programme
15. Edited Souvenir of Alumni Society-2010 along with Dr G P Sharma and Dr A K Mehta

11. List of Publications:

Book:	1
Lab Manual:	2
Training Manual:	1 (in Hindi)
Booklets:	09 (in English) and 1 (in Hindi)
Book & Lecture notes edited:	2
Papers Published in Journals:	39
Papers Published in Proceedings:	25
Popular articles:	5 (in English) and (8 in Hindi)

PUBLICATION LIST

A. Book, Lab and Training Manual and Booklets Published

1. Singh P, Mathur, AN, Verma, RC and **Jain, SK** (2004) **Value Addition of Agricultural Produce** Proceedings of National Seminar on Value Addition of Agricultural Produce held at Udaipur Chamber of Commerce and Industries, Udaipur

and Published by Himanshu Publications, New Delhi. ISBN no. **61 7906 088-8** and pages **219**.

2. Verma, RC, **Jain, SK** and Singh, A(2004) **Nutrition: Let's nurture in a balanced way** published under NATP. Pages 54.
3. Verma, RC and **Jain, SK** (2002) **Fundamentals of Food Engineering**. Himanshu Publication, New Delhi. ISBN no **81-7906-010-1** and pages **272**.
4. Verma, RC and **Jain, SK** (1999) **Lab Manual of Food Engineering** for II Year BE (Ag).
5. **Jain S K** and Verma, RC (2000) **Lab Manual of Dairy and Food Engineering** for IV Year B E (Ag).
6. Verma, RC and **Jain, SK** (2002) A compendium of lecturer notes of ISTE sponsored Short Term Training Programme on **Information Technology in Context with Food Engineering** held at CTAE during June 10-23, 2002.
7. Verma, RC and **Jain, SK** (2003) **Traditional Post Harvest Practices of Coarse Cereals in Tribal Areas of Rajasthan** booklet published under NATP.
8. Verma, RC and **Jain, SK** (2002) **Food Uses of Soy bean** in Hindi booklet published under NATP.
9. Mathur, AN, Sharma, GP and **Jain, SK** (2002) A booklet on **Drying of Fruits and Vegetables**
10. Sharma, GP and **Jain, SK** (2002) A booklet on **Overview of Oil Milling Technology** has been developed.
11. Verma, RC, **Jain, SK** and Singh, A (2002) **Nutrition : Know about your foods A brief Visit to Food Gallery** booklet developed.
12. डॉ. राधा चरण वर्मा, ई. संजय कुमार जैन, डॉ. प्रताप सिंह, डॉ. ए. एन. माथुर (2004) खाद्य प्रसंस्करण तकनीकी द्वारा मूल्य वर्धन एवं गुणवत्ता वृद्धि
13. G P Sharma, **S K Jain**, RC Verma and S Bakal (2008) Project report on Development of Microwave Dryer for Drying Garlic Cloves. Technical Interface Unit-KVIC.
14. S R Bhakar, **S K Jain**, G P Sharma, S S Sisodia and P R Bhatnagar (2009) Pre and Post Harvest Management of Underutilized Forest Fruit Custard Apple: An Overview. Published in All India Coordinated Research Project on Application of Plastics in Agriculture.
15. Ankita Jain, Preeti sain, **S K Jain** and G P Sharma (2010) A report on Turmeric : At a Glance. booklet developed.

B. Research Paper Published in Journal

2. **Jain, S.K.** (1988) **Densified biomass fuel a new form of solid fuel for processing industries**. Beverage and Food World. Vol. 15(1): 41-42.
3. **Jain, S.K.**(1989). **Cash from trash**. Invention Intelligence Vol.24 (9): 415-417.
4. **Jain, S.K.** Bhatnagar, S. and Singh, J. (1989). **Plastic in dairy industries: prospectus and perspectives**. Beverage and Food World Vol.16(2): 16-18.

5. **Jain, S.K.** (1989) **Orthodox tea processing- A process technology still sapling.** Beverage and Food World Vol. 16(4): 53-54.
6. **Jain, S.K.,** Abhijit, R. and Shyam Lal (1990). **Development and performance evaluation of low cost solar dryer for perishable products.** Beverage and Food World. Vol. 17(4): 12-15.
7. **Jain, S.K.** (1991) **Appropriate solar applications for rural areas.** Invention Intelligence Vol. 23(3): 126-131.
8. Joshi, A., Rathore, J., Ali, Y. and **Jain, S.K.** (1991) **Economic analysis of ginger processing technology for rural area.** Beverage and Food World. Vol. 18(2).
9. **Jain, S.K.,** Bhatnagar, S., Abhijit, R. and Shyamlal (1991) **Development of tray type ultra violet stabilized plastic sheet covered solar cabinet dryer for rural areas.** Rural Technology Journal. Dec. 19-24.
10. **Jain, S.K.,** Bhatnagar, S., Garg, R. and Singh. J. (1992) **Evaluation of solar cookers using double glass cover and UV stabilized plastic sheet cover.** Beverage and Food World Vol. 19(2)a: 21-23.
11. **Jain, S.K.** (1992). **Appropriate post harvest technology for perishable foods of rural area of dry land.** Rural Technology Journal, June: 25-29.
12. **Jain, S.K.** (1992). **Plasticulture: A tool in feeding the millions.** Invention Intelligence. Vol. 28(4): 97-102.
13. **Jain, S.K.,** Charan, R., Thaya, A. and Goyal, A. (1993) **Specific heat of whole milk, mosami juice and pine apple Juice.** Beverage and Food World. Vol. 20(2):L 26-27.
14. Kotwaliwale, N., Sharma, G.P. and **Jain, S.K.** (1993) **Moisture sorption behaviour of weaning foods.** J. Food Sci. Technol. Vol. 30(4): 289-292.
15. Kotwaliwale, N., Sharma, G.P. and **Jain, S.K.** (1993) **Storage stability of commercially available weaning foods.** J. Food Sci. Technol. Vol. 30 (5): 331-334.
16. **Jain S K** (1993) **Densified biomass fuel: Cash from trash.** Active Conservation Techniques. Vol. 8 (2): 27-29.
17. Jain, R.K. and **Jain S.K.**(1999) **Process development for intermediate moisture food from Sapota.** Journal of Food Engineering. Vol 37 (3):323-330.
18. **Jain S K,** R C Verma and A N Mathur (2003) **Osmo-Convective Drying of Papaya.** Beverage and Food World. Vol 30(1):64-67.
19. **Jain S K** and R C Verma (2003) **Osmotic Dehydration: A New, Promising and Emerging Industry.** Beverage and Food World. Vol 30(5):30-34.
20. **Jain S K,** R C Verma and A N Mathur (2003) **Osmotic Dehydration of Papaya Cubes.** Horticultural Journal, BCKV, Mohanpur, West Bengal
21. **Jain S K,** R C Verma and A N Mathur (2003) **Studies of Osmotic Dehydration of Papaya Cubes.** Journal of Interacademica Vol. 8(2):221-229.
22. **Jain S K,** R C Verma L K Murdia and P K Dashora (2004) **Statistical Analysis for Mass Transport and Drying Characteristics of Osmotically Dehydrated Papaya Cubes followed by Air Drying.** Beverage and Food World. Vol. 31(12):34-39.
23. **Jain S K,** R C Verma and L K Murdia (2004) **Moisture Sorption Isotherm of Dehydrated Papaya Cubes.** Beverage and Food World. Vol. 31(12):45-46.

24. **Jain S K**, R C Verma L K Murdia, P K Dashora and H K Jain (2006) **Osmotic Dehydration Kinetics of Papaya Cubes**. ADIT Journal of Engineering. Vol 3(1):72-76.
25. Murumkar, R P, **S K Jain**, P S Pilaskar and H K Jain (2006) **Some Studies on Fluid Bed Drying of White Button Mushroom**. ADIT Journal of Engineering. Vol 3(1):77-80.
26. Murumkar, R P, **S K Jain**, R C Verma and Anila Doshi (2006) **Studies on Osmo-Convective Drying of White Button Mushroom**. Mushroom Research –An International Journal. Vol 15(2):135-140.
27. **Jain S K**, H K Jain R C Verma and L K Murdia (2007) **Statistical Analysis of Osmotic Dehydration Process for Papaya Cubes**. Statistics and Applications. Vol 5(1&2):63-76.
28. Revaskar, V, G P Sharma, R C Verma, **S K Jain** and V K Chahar (2007) **Drying Behaviour and Energy Requirement for Dehydration of White Onion Slices**. International Journal of Food Engineering. Vol. 3(5): 1-16.
29. Murumkar, R P, **S K Jain**, P S Pilaskar and R C Verma (2007) **Osmo-fluid Bed Drying of White Button Mushroom**. Bioved –An International Bi-annual Journal of Life Science. Vol 18(1, 2):47-52.
30. Singh U, **S K Jain**, Anila Doshi H K Jain and V K Chahar (2008) **Effects of Pretreatments on Drying Characteristics of Button Mushroom**. International Journal of Food Engineering. Vol. 4(5): 1-14.
31. Sujata S. Mhatre, **S K Jain**, L K Murdia and H K Jain (2008) **Effect of Different Coagulation Temperatures on the Texture and Yield of Soy Paneer (Tofu)** International Journal of Food Engineering. Vol. 4(8): 1-16.
32. **Jain S K** and Sujata Mahtre (2009) **The Textural Properties of Soy paneer**. International Journal of Dairy Technology. Vol 64(4):584-591.
33. G P Sharma, **S K Jain**, R C Verma, V K Chahar and S Bakal, (2009) **An economic analysis of microwave drying of garlic cloves**. Indian Food Industry. May-June: 45-52.
34. **Jain SK**, RC Verma, GP Sharma and HK Jain (2010). **Studies on moisture sorption isotherms for osmotically dehydrated papaya cubes and verification of selected models**. *J Food Science Tech*.47(2): 343-346.
35. D. N. Sah, R.C.Purohit, Virendra Kumar, A.K.Shukla and **S.K. Jain** (2010) **Design, construction and evaluation of low pressure and low cost drip irrigation system**. International Agricultural Engineering Journal. Vol. 19(2):1-7.
36. Roopa Bai R.S., P.S. Pisalkar, **S.K. Jain** and R.P. Murumkar (2010) **Studies on viscosity of guava jam at different temperature and shear rate**. Green Farming. International Journal of Applied Agricultural and Horticultural Sciences. Volume 1 (6): Nov.-Dec. 2010: 662-663.
37. **Jain SK**, RC Verma, LK Murdia, H K Jain and GP Sharma(2011) **Optimization of process parameters for osmotic dehydration of papaya cubes**. *J Food Science Tech*.48(2):211-217.
38. N K Jain, Prashant Pilaskar and **S K Jain** (2011) **Osmo-convective drying of aloe-vera gel**, *J Food Science Tech* 48(2):183-189.

39. Mehta B.K., **S.K. Jain**, G. P. Sharma, A.Doshi1, H.K.Jain (2011) **Cultivation of button mushroom and its processing: an techno-economic feasibility**. International Journal of Advanced Biotechnology and Research. Vol 2, Issue 1, 2011, pp 201-207.
40. Patil Megha, **S.K. Jain**, G.P.Sharma, H.K.Jain (2011) **Textural studies of soy-jambul seed fortifies biscuits**. Food Science Research Journal (An International Refereed Research Journal) Vol. 2(1) :26-30.

C. Research Paper Published in Proceeding/ Compendium/Lecture notes

1. **Jain, S.K.**, Bhole, NG and Khankari, KK (1989) **Effect of paper and pulb industry black liquor on briquetting characteristics of rice husk**. Proceedings of annual convention of ISAE, Jan 5-7:98.
2. **Jain, S.K.** and Gupta, AP (1989). **Minimum cost transportation model for wheat distribution system in Rajasthan**. Proceedings of National symposium on Handling, Marketing, transportation and storage of food grains in India held at PAU, Ludhiana Oct. 19-20:163-167.
3. Bhatnagar, S. and **Jain, SK** (1989) **An overview on use of plastics in solar energy appliances for processing of agricultural products**. Proceedings of annual convention of SESI Dec. 1-3: 37-39.
4. **Jain, S.K.**, Bhole, NG and Khankari, KK (1990) **Effect of sodium silicate on briquetting characteristics of rice husk**. Proceedings of annual convention of ISAE 156-165.
5. Singh, J., Singh, AK, **Jain, SK**, Garg, R.and Mathur I.N. (1990). **Micro sprinkler performance evaluation and constraints for its adoption**. Proceedings of XI International congress on the use of plastics in agriculture, New Delhi Feb. 26- March 2: B. 79-B. 87.
6. Verma, R.C. and **Jain, SK**. (1999) Food processing at a glance. Souvenir of the state level convention of Agricultural Engineers held at CTAE, Udaipur on 10-11 July, 1999.
7. **Jain, S.K.**, Champawat, PS., Gaur, FR and Dwivedi, S (1993) **Drying characteristics of onion slices**. Conference on Post Harvest Preservation and Processing of fruits and vegetables held at I.I.T., Kharagpur Dec. 7-8:14
8. **Jain, S.K.**, and Verma, R.C. (1999) **Dehydration and rehydration characteristics of Mint**. Annual Convention of ISAE, held at HAU, Hissar.
9. **Jain, S.K.**, and Verma, RC (2002) **Value Addition of Horticultural Produce through Osmo-Solar Drying**. Proceedings of Seminar on Value Added Products: Opportunities for Agro-Industrial Units: 229-236.
10. **Jain, S.K** (2002) **Information Technology in Context with Food Engineering**. Lecture notes of ISTE/AICTE summer school on Information Technology in Context with Food Engineering during June, 10-23, 2002. PP :1-5.
11. Verma, R.C. and **Jain, S.K** (2002) **Soybean: A better substitute for Protein** Lecture notes of ISTE/AICTE summer school on Information Technology in Context with Food Engineering during June, 10-23, 2002. PP: 43-51
12. **Jain, S.K** and Verma R C(2002) **Grain Storage at a Glance** Lecture notes of ISTE/AICTE summer school on Information Technology in Context with Food Engineering during June, 10-23, 2002. PP: 128-137.

13. **Jain, S.K** (2002) **Information Requirement for Setting a Fruit and Vegetable Processing Industry** Lecture notes of ISTE/AICTE summer school on Information Technology in Context with Food Engineering during June, 10-23, 2002. PP:138-143.
14. **Jain, S.K** (2002) **Post-Production Technologies of Foods** ISTE/AICTE summer school on Information Technology in Context with Food Engineering during June, 10-23, 2002. PP:118-123.
15. **Jain S K** and Verma R C (2002) **Tips for setting a Fruit and Vegetable Processing Industry** Lecture notes of ISTE/AICTE summer school on Post Harvest Technology and Current status of Food Industries during June, 24-July 5, 2002: PP 80-88.
16. **Post Harvest Technology of Maize: Industrial Utilization** Lecture notes of ISTE/AICTE summer school on Information Technology in Context with Food Engineering during June, 10-23, 2002
17. **Jain S K** and Verma R C (2002) **New trends in Post Harvest technology of Fruits and Vegetables: Osmotic dehydration** Lecture notes of ISTE/AICTE summer school Post Harvest Technology and Current status of Food Industries during June, 24-July 5, 2002: PP: 106-122.
18. **Jain, S.K** and R C Verma (2002) **Osmotic dehydration technology for fruits and vegetables.** Lecture notes of ISTE/AICTE summer school on Information Technology in Context with Food Engineering during June, 10-23, 2002. PP: 43-51.
19. **Jain, S.K** (2002) **Grain Storage at a Glance** Lecture notes of ISTE/AICTE summer school on Post Harvest Technology and Current status of Food Industries during June, 24-July 5, 2002: PP 88-106.
20. **Jain, S.K.,** Verma, R.C. and M M Ghate (2003) **An Overview on Osmotic Dehydration Applications in Food Industries.** Annual Convention of ISAE, held at CTAE, Udaipur during Jan 29-31, 2003:149.
21. Saxena, S, **Jain S K** and Verma RC (2003) **Effect of pretreatment on drying characteristics of tomato slices.** Annual Convention of ISAE, held at CTAE, Udaipur during Jan 29-31, 2003:131.
22. Sharma, A, **Jain S K,** Verma R C and Amit Kumar (2003) **Development of process technology for storage of green bengal gram.** Annual Convention of ISAE, held at CTAE, Udaipur during Jan 29-31, 2003:159.
23. **Jain S K,** R C Verma and G P Sharma (2010) Techno-economical feasibility of osmo-convective drying of horticultural produces. Proceedings of National Food Processing Technology Seminar held at A D Patel Institute of Technology, Anand during July 8-10, 2010, pp 34-41.
24. **Jain S K,** (2010) Osmotic dehydration of horticultural produces. Delivered lecture in Training on Post Harvest Technology in Horticultural Crops held at DEE.
25. G P Sharma, **Jain S K,** R C Verma and (2010) Application of electromagnetic waves in food processing: An innovative technology. Proceedings of National Food Processing Technology Seminar held at A D Patel Institute of Technology, Anand during July 8-10, 2010, pp 28-31.

D. Popular articles published in English

1. **Jain; S.K.,** Bhatnagar, S. and Singh, J. (1989) **Using plastics in agriculture.** Farmer's Journal Vol. 9(9): 34-37.

2. **Jain, S.K.** and Singh, J. (1990). **Plasticulture can boost agri-productivity.** Farmer's Journal Vol. 10(1): 4-6,15.
3. **Jain, S.K.** (1991) **Plasticulture for higher farm growth.** Rajasthan Patrika May, 21:4.
4. **Jain, S.K.**(1991). **Biomass: Cash from trash.** Rajasthan Patrika July 30:4.
5. **Jain,, S.K.** (1993) **Exploitation of solar energy.** Rajasthan Patrika, Oct. 10:4.
6. **Jain, S.K.** (1993) **Viable applications for solar energy.** Rajasthan Patrika. Dec. 15:4.1993