

RESUME

Name: Kawaljit Singh Sandhu
Father's Name: M. S. Sandhu
Date of Birth: 17-11-1975
Nationality: Indian
Office Address: Dept. of Food Science and Technology,
Chaudhary Devi Lal University,
Sirsa-125 055, Haryana.
Phone: +91-9896268539 (M)
Fax : +91-1666-248123
e-mail : kawsandhu@rediffmail.com

Post held with pay scale: Assistant Professor & Incharge
Basic pay : Rs. 17,610/-
(AGP Rs. 7000/-)
Pay scale : Rs. 15,600-39,100/-

Educational Qualifications:

<i>Degree</i>	<i>Board/University</i>	<i>Year</i>	<i>Division</i>
Ph.D. (Food Technology)	Guru Nanak Dev University, Amritsar	April, 2006	-
Post Graduate Diploma in Management	IGNOU, New Delhi	June, 2002	1 st
M.Sc. (Food Technology)	Guru Nanak Dev University, Amritsar	April, 1999	1 st
Bachelor of Food Science and Technology (Hons.)	---do---	April, 1997	1 st

-National Eligibility Test (NET) for Lecturership (1999) conducted by ASRB (ICAR), New Delhi.

-Post Doctorate Fellowship: Korean Ministry of Education, South Korea.

-Ph.D. Thesis: Isolation and characterization of starch from corn hybrids.

Awards & Fellowships:

- *Young Scientist Award-2009* by Punjab Academy of Sciences.
- *Young Scientist Award-2008* by Association of Food Scientists and Technologists (India).
- *Award for Best paper* (Food Science)-2007 by Association of Food Scientists and Technologists (I) for research paper entitled "Functional properties of normal, waxy and sugary corn starches" published in Journal of Food Science and Technology 44(6), 565-571 (2007).
- *Award of Honor* for outstanding research achievement during Post Doctoral Research by Korea University, Seoul, South Korea.
- Awarded *Post Doctoral Research Fellowship* by Korean Ministry of Education, South Korea.
- Awarded Senior Research Fellowship by Council of Scientific and Industrial Research, New Delhi.
- Awarded Junior and Senior Research Fellowship by Guru Nanak Dev University, Amritsar.

Employment Records:

<i>Nature of Job & pay scale</i>	<i>From</i>	<i>To</i>	<i>University/industry</i>	<i>Major responsibilities</i>
-In-charge of Department (Rs 15,600-37,400)	9-3-11	To date	Chaudhary Devi Lal University, Sirsa	Administration
-Assistant Professor (Rs 15,600-37,400)	29-10-07	To date	Chaudhary Devi Lal University, Sirsa	Teaching & Research
-Post Doctoral Researcher (Korean Ministry of Education)	1-7-06	28-10-07	Korea University, Seoul, South Korea	Research
-Lecturer	5-7-05	28-4-06	Guru Nanak Dev University, Amritsar	Teaching & Research
-Senior Research Fellow (CSIR Fellowship)	8-9-04	4-7-05	Guru Nanak Dev University, Amritsar	Research
-Senior Research Fellow (G.N.D. University Fellowship)	1-3-03	7-9-04	Guru Nanak Dev University, Amritsar	Research
-Junior Research Fellow (G.N.D. University Fellowship)	26-2-01	28-2-03	Guru Nanak Dev University, Amritsar	Research
-Research and Development and Quality Control Chemist	20-5-99	25-2-01	Amritsar Beverages Ltd, Amritsar, Punjab	Quality control, production & research

Research Projects /Financial assistance received as Principal Investigator:

<i>S.No</i>	<i>Title of Project</i>	<i>Funding Agency</i>	<i>Amount (Rs)</i>	<i>Status</i>
1.	Biodegradable films prepared from various native and modified starches	University Grants Commission	13,23,294/-	Completed

List of Publications:**Total citations: 1323** (Source: Google Scholar)**h-index: 18****i10 index: 21**

<i>S. No.</i>	<i>Publications</i>	<i>Impact factor</i>
1.	Kawaljit Singh Sandhu , Loveleen Sharma, and Maninder Kaur. Effect of granule size on physicochemical, morphological, thermal and pasting properties of native and 2-octenyl-1-ylsuccinylated potato starch prepared by dry heating under different pH conditions. <i>LWT-Food Science and Technology</i> , 61, 224-230 (2015).	2.468
2.	Maninder Kaur, Kawaljit Singh Sandhu , AmitPal. Gluten free biscuits prepared from buckwheat flour by incorporation of various hydrocolloids: physicochemical and sensory properties. <i>LWT-Food Science and Technology</i> , 62, 628-632 (2015).	2.468
3.	Maninder Kaur, Navneet Kaur, Mandeep Kaur, and Kawaljit Singh Sandhu . Some properties of rice grains, flour and starches: A comparison of organic and conventional modes of farming. <i>LWT-Food Science and Technology</i> , 61, 152-157 (2015).	2.468

4. Maninder Kaur, **Kawaljit Singh Sandhu**, RavinderPal Ahlawat, and Somesh Sharma. *in vitro* starch digestibility, pasting and textural properties of mung bean: effect of different processing methods. *Journal of Food Science and Technology*, 52, 1642-1648 (2015). 2.024
5. Maninder Kaur, **Kawaljit Singh Sandhu**, and Jasmeen Kaur. Pasting properties of tamarind (*Tamarindus indica*) flour in the presence of xanthan, carboxymethyl cellulose, and locust bean gum in comparison to rice and potato flour. *Journal of Food Science and Technology*, 50, 809-814 (2013). 2.024
6. Maninder Kaur, Pragati Kaushal and **Kawaljit Singh Sandhu**. Studies on functional and pasting properties of taro flour in comparison with a cereal, tuber and legume flour. *Journal of Food Science and Technology*, 50, 94-100 (2013). 2.024
7. Maninder Kaur, **Kawaljit Singh Sandhu**, Narpinder Singh, and Seung-Taik Lim. Effect of cultivar on amylose content, molecular structure, physicochemical properties and *in vitro* digestibility of starches from Indian mung bean (*Vigna radiata* L.). *Starch/Stärke*, 63, 709-716 (2011). 1.401
8. **Kawaljit Singh Sandhu**, Maninder Kaur and Mukesh. Studies on noodle quality of potato and rice starches and their blends in relation to their physicochemical, pasting and gel textural properties. *LWT-Food Science and Technology*, 43, 1289-1293 (2010). 2.468
9. Maninder Kaur and **Kawaljit Singh Sandhu**. *in vitro* digestibility, structural and functional properties of starch from pigeon pea (*Cajanus cajan*) cultivars grown in India. *Food Research International*, 43, 263-268 (2010). 3.259
10. Hyun-Na Kim, **Kawaljit Singh Sandhu**, Ju Hun Lee, Hyesook S Lim, and Seung-Taik Lim. Characterization of 2-octen-1-ylsuccinylated waxy rice amyloextrins prepared by dry heating. *Food Chemistry*, 119, 1189-1194 (2010). 3.259
11. Maninder Kaur, **Kawaljit Singh Sandhu** and Seung-Taik Lim. Microstructure, physicochemical properties and *in vitro* digestibility of starches from different Indian lentil (*Lens culinaris*) cultivars. *Carbohydrate Polymers*, 79, 349-355 (2010). 3.916
12. Maninder Kaur and **Kawaljit Singh Sandhu**. Functional, thermal and pasting characteristics of flours from different lentil (*Lens culinaris*) cultivars. *Journal of Food Science and Technology*, 47, 273-278 (2010). 2.024
13. **Kawaljit Singh Sandhu** and Seung-Taik Lim. Structural characteristics and *in vitro* digestibility of mango kernel starches (*Mangifera indica* L.). *Food Chemistry*, 107, 92-97 (2008). 3.259
14. **Kawaljit Singh Sandhu** and Seung-Taik Lim. Digestibility of legume starches as influenced by its physical and structural properties. *Carbohydrate Polymers*, 71, 245-252 (2008). 3.916
15. **Kawaljit Singh Sandhu**, Maninder Kaur, Narpinder Singh, and Seung-Taik Lim. A comparison of native and oxidized normal and waxy corn starches: Physicochemical, thermal, morphological and pasting properties. *LWT-Food Science and Technology*, 41, 1000-1010 (2008). 2.468
16. **Kawaljit Singh Sandhu**, Narpinder Singh and Seung-Taik Lim. A comparison of native and acid thinned normal and waxy corn starches: Physicochemical, thermal, morphological and pasting properties. *LWT-Food Science and Technology*, 40, 1527-1536 (2007). 2.468
17. **Kawaljit Singh Sandhu**, Narpinder Singh and Nachhattar Singh Malhi. Some properties of corn grains and their flours I. Physicochemical, functional and chapati making properties of flours. *Food Chemistry*, 101, 938-946 (2007). 3.259
18. **Kawaljit Singh Sandhu** and Narpinder Singh. Some properties of corn starches II. Physicochemical, gelatinization, retrogradation, pasting and gel textural properties. *Food Chemistry*, 101, 1516-1524 (2007). 3.259
19. Maninder Kaur, **Kawaljit Singh Sandhu** and Narpinder Singh. Comparative study of the functional, thermal and pasting properties of flours from different field pea and pigeon pea cultivars. *Food Chemistry*, 104, 259-267, (2007). 3.259

20. Su-Jin Lee, **Kawaljit Singh Sandhu**, and Seung-Taik Lim. Effect on of microwave irradiation on crystallinity and pasting viscosity of corn starches different in amylose content. *Food Science and Biotechnology*, 16, 832-835 (2007). 0.656
21. **Kawaljit Singh Sandhu**, Narpinder Singh and Seung-Taik Lim. Functional properties of normal, waxy and sugary corn starches. *Journal of Food Science and Technology*, 44, 565-571 (2007). 2.024
*The above paper has been awarded with the **Best Paper Award** for the year 2007 by Association of Food Scientists and Technologists (India).*
22. Maninder Kaur, Narpinder Singh and **Kawaljit Singh Sandhu**. Preparation and characterization of protein isolates from different lentil (*Lens culinaris*) cultivars. *Journal of Food Science and Technology*, 44 (3), 327-329 (2007). 2.024
23. Narpinder Singh, Lovedeep Kaur, **Kawaljit Singh Sandhu**, Jagdeep Kaur and Katsuyoshi Nishinari. Relationships between physicochemical, morphological, thermal, rheological properties of rice starches. *Food Hydrocolloids*, 20, 532-542 (2006). 4.280
24. **Kawaljit Singh Sandhu**, Narpinder Singh and Nachhattar Singh Malhi. Physicochemical and thermal properties of starches separated from corn produced from crosses of two germ pools. *Food Chemistry*, 89/4, 541-548 (2005). 3.259
25. **Kawaljit Singh Sandhu** and Narpinder Singh. Relationships between selected properties of starches from different corn lines. *International Journal of Food Properties*, 8, 1-11 (2005). 0.906
26. Narpinder Singh, Maninder Kaur and **Kawaljit Singh Sandhu**. Physicochemical and functional properties of freeze-dried and oven dried corn gluten meals. *Drying Technology*, 23/4, 975-988 (2005). 1.770
27. **Kawaljit Singh Sandhu**, Narpinder Singh and Maninder Kaur. Characteristics of the different corn types and their grain fractions: physicochemical, thermal, morphological, and rheological properties of starches. *Journal of Food Engineering*, 64/1, 119-127 (2004). 2.576
*The above paper has been listed in the **TOP25 Hottest Articles** - Downloaded during July-September, 2004 – within the Journal of Food Engineering.*
28. Narpinder Singh, **Kawaljit Singh Sandhu** and Maninder Kaur. Characterization of starches from Indian chickpea (*Cicer arietinum* L.) cultivars. *Journal of Food Engineering*, 63/4, 441-449 (2004). 2.576
29. Narpinder Singh, Maninder Kaur, **Kawaljit Singh Sandhu** and Navdeep Singh Sodhi. Physico-chemical, cooking and textural characteristics of some Indian Black gram varieties (*Phaseolus mungo* L.). *Journal of the Science of Food and Agriculture*, 84, 977-982 (2004). 1.879
30. Maninder Kaur, Narpinder Singh, **Kawaljit Singh Sandhu** and Harmeet Singh Guraya. Physico-chemical, morphological, thermal and rheological properties of starches separated from kernels of some Indian mango cultivars (*Mangifera indica* L.). *Food Chemistry*, 85, 131-140 (2004). 3.259
*The above paper was **Rapid Communication** in Food Chemistry.*
31. Narpinder Singh, Maninder Kaur, **Kawaljit Singh Sandhu** and Harmeet Singh Guraya. Physicochemical, thermal, morphological and pasting properties of starches from some Indian black gram (*Phaseolus mungo* L.) varieties. *Starch*, 56, 535-544 (2004). 1.401
32. Maninder Kaur, Narpinder Singh and **Kawaljit Singh Sandhu**. Relationship between selected properties of black gram seeds and their composition. *International Journal of Food Properties*, 7, 1-12 (2004). 0.906
33. J. Ahmed, U.S. Shivhare and **K.S. Sandhu**. Thermal degradation kinetics of carotenoids and visual color of papaya puree. *Journal of Food Science*, 67, 2692-2695 (2002). 1.791

Review paper:

34. Narpinder Singh, **Kawaljit Singh Sandhu** and Maninder Kaur. Physicochemical properties including granular morphology, amylose content, swelling and solubility, thermal and pasting
-

properties of starches from normal, waxy, high amylose and sugary corn. *Progress in Food Biopolymer Research* [e-journal] 1, 44-54 (2005).

Book chapter:

1. Starch: its functional, in vitro digestibility, modification and application. Maninder Kaur and Kawaljit Singh Sandhu. *Biotechnology: prospectus and applications*. Editors, Salar RK et al., Springer-Verlag.

Ph.D. thesis Supervising:

1. Anil Kumar Characterization of native and modified starches from Indian pearl millet cultivars
2. Vikas Kumar Development and characterization of starch nanoparticles from different botanical sources and their applications in drug delivery
3. Rahul Thory Characterization of bioactive compounds and starch from different Indian rice cultivars
4. Sneh Punia Characterization of bioactive compounds, starch and proteins of wheat and barley cultivars
5. Sanju Bala Characterization of bioactive compounds, gums, and proteins from seeds of different fenugreek (*Trigonella foenum-graecum*) cultivars

Paper Presentation/Invited talks in National/International conference: 5

Poster Presentation in National/International Conference: 9

Conferences/Workshops/Training Courses Organized/Attended: 25

Academic Membership:

- Life member of Punjab Science Congress, India.
- Full member of Association of Food Scientists and Technologists (AFSTI), Mysore, India.
- Life member of Association of Microbiologists of India.
- Member of Korean Society of Food Science and Technology, South Korea.

Professional Membership:

- Member Academic Council, CDLU, Sirsa.

Orientation/Refresher course attended:

- Attended General Orientation Course from 25-2-2009 to 24-3-2009 held at Academic Staff College, Guru Nanak Dev University, Amritsar.
- Attended Refresher Course in the subject of Bio Sciences from 18-2-2011 to 10-3-2011 held at Academic Staff College, Guru Nanak Dev University, Amritsar.

Job Responsibilities: Teaching and Research.

Teaching Experience:

- Teaching various courses in the subject of Food Science and Technology to postgraduate (M.Sc.) students at Chaudhary Devi Lal University, Sirsa.
- Taught various courses in the subject of Food Science and Technology to undergraduate (B.Tech) and postgraduate (M.Sc.) students at Guru Nanak Dev University, Amritsar.

Research Experience:

- Supervising 5 Ph.D. students in the Department of Food Science and Technology at Chaudhary Devi Lal University, Sirsa, Haryana.
- Supervised (48) and supervising (4) research projects of M.Sc. students (Food Science & Technology) at Chaudhary Devi Lal University, Sirsa, Haryana.
- Supervised research projects of B.Tech and M.Sc. students (Food Technology) at Guru Nanak Dev University, Amritsar, Punjab.

References: Available upon request.

Date:

(Kawaljit Singh Sandhu)