

Curriculum vitae

Name	Narpinder Singh		
Present position	Vice Chancellor, Professor and DST-JC Bose Fellow	Gender	M ☒ F ☐
Date of birth	19 th September, 1962		
Address	Graphic Era Deemed to be University, Dehradun-248002		
Mobile	+91 94647-77980	Email	narpinders@yahoo.com

1. Academic qualifications

Year	Degree	Subject	University/Institution
1989	Ph.D.	Food Technology	Punjab Agricultural University, Ludhiana
1984	M.Sc.	Food Technology	Punjab Agricultural University, Ludhiana
1982	B.Sc.	Agriculture (Elective in Food Science, Technology, Nutrition)	Punjab Agricultural University, Ludhiana

Awarded research fellowship in Engineering and Technology by UGC during Ph.D.

2. Academic/Research Experience/Employment (From Current to oldest):

Year(s)	University/Institution	Position held
02-01-2023 to till date	Graphic Era Deemed to be University, Dehradun, Uttarakhand (NIRF ranking 48 under universities category-2025)	Vice Chancellor
14-08-2000 to 31-12-2022	Department of Food Science & Technology, Guru Nanak Dev, University, Amritsar	Professor
07.04.1993 to 13.08.2000	Department of Food Science & Technology, Guru Nanak Dev University, Amritsar	Reader
29.03.1988 to 06.04.1993	Department of Food Science & Technology, Punjab Agricultural University, Ludhiana	Assistant Professor (Food Technology)
25.02.1985 to 14.11.1985	Department of Food Science & Technology, Punjab Agricultural University, Ludhiana	Research Fellow (ICAR project)

***NIRF Ranking (under university category) =48 (2025)**

3. Administrative Experience:

Position held	University/Institution	Tenure	Period
Vice Chancellor	Graphic Era Deemed to be University, Dehradun, Uttarakhand	02-01-2023 to till date	3 Years 1 Month
Head of Department	Department of Food Science & Technology, Guru Nanak Dev, University, Amritsar	02.07.2018 to 30-06-2021 30.08.2001 to 28.06.2004 06.06.1997 to 05.06.2000	8 Years 11 Months
Director of - Research	Guru Nanak Dev University, Amritsar	10-05-2017 to 03-06-2020	3 Years
Coordinator (UGC-SAP)	Guru Nanak Dev University, Amritsar	01.04.2012 to 31.03.2017	5 Years
Dean (Faculty of Applied Sciences)	Guru Nanak Dev University, Amritsar	01.07.2010 to 14.06.2012 17.08.2009 to 16.10.2009 04.08.2008 to 31.07.2009	3 Years 3 Months
Coordinator (University-Industry linkage program)	Guru Nanak Dev University, Amritsar	12.11.2008 to 31.03.2012	3 Years 4 Months
Coordinator	Centre for Advance Research in Food Sciences	12.04.2006 to 22.03.2007	11 Months
Total			26 Years 3 Months

4. Foreign Assignment

Sr. No.	Post/ Assignment	Organization/ University	Area of Assignment	From	To
1.	Visiting Professor	School of Food Science & Engineering, South China University of Technology, Guangzhou, Guangdong Province, China	Cereals and Pulse Processing	14.11.2018	21.11.2018
2.	The Royal Society Visiting Fellow	School of Chemical Sciences and Pharmacy, University of East Anglia Norwich, UK	Chemical Sciences and Pharmacy	13.11.2007	14.05.2008
3.	Visiting Professor	Department of Grain Science and Industry, Kansas, State University, USA	Grain Science and Industry.	14.08.2006	25.08.2006
4.	Visiting Professor	Dept. of Food and Human Health Sciences, Osaka City University, Japan	Food and Human Health Sciences	29.06.2004	27.04.2005
5.	Visiting Scientist	Institute of Food Research, Norwich, UK	Extrusion Processing	02.10.1995	02.10.1996

5. Professional Training undergone:

- Extrusion cooking course at Kansa State University, USA (2006).
- Texture analysis, Instron Training Centre, UK (1995).

Extrusion Cooking Technology, APV Bakers Proceeing Centre, UK (1995).

6. Referees

i	Dr. Vijay K. Juneja, Ph.D., Lead Scientist.USDA-Agricultural Research Service, Eastern Regional Research Center, 600 E. Mermaid Lane Wyndmoor, PA 19038, USA Email: Vijay.juneja@usda.gov
ii	Prof. Katsuyoshi Nishinari, Former Professor of Osaka City University, Japan, Presently Glyn O. Phillips Hydrocolloid Research Centre, School of Food and Biological Engineering, Hubei University of Technology, Nanli Road, Wuchang, Wuhan 430068.P.R. China Email: katsuyoshi.nishinari@gmail.com ;
iii	Prof. Digvir S. Jayas, President & Vice Chancellor, University of Lethbridge, 4401 University Drive W, Lethbridge, Alberta T1K 3M4, Canada Email: digvir.jayas@umanitoba.ca

7. Awards and Honors

- 1) **Fellow** The World Academy of Sciences (TWAS)-2026
- 2) **Fellow** Indian Chemical Society (ICS)-2024
- 3) **Fellow** of the Royal Society of Chemistry (RSC)- 2022
- 4) **Fellow** of the Punjab Academy of Science (PAS)- 2022.
- 5) **Fellow** of the Cereals and Grains Association (formerly American Association of Cereal Chemists, AACC)-2019.
- 6) India Research Excellence-Citation Award in Agricultural Sciences, Web of Science -2019.
- 7) **Fellow** of the National Academy of Sciences, India (NASI)-2011.
- 8) **Fellow** of the Indian National Science Academy (INSA)-2010.
- 9) **Fellow** of the National Academy of Agricultural Sciences (NAAS)-2005.
- 10) **Fellow** Association of Food Scientists and Technologist (AFSTI)-2012.
- 11) **Professor Priyadarshan Ray Memorial** Award 2023 by Indian Chemical Society for remarkable impact in the field of chemical sciences, engineering and to the chemical and allied industry over the years.
- 12) **Highly Cited researcher** in recognition of exceptional research performance demonstrated by production of multiple highly cited papers that rank in top 1%for the field and year in Agricultural Sciences by Clarivate-2023
- 13) Professor Krishna Sahai Bilgrami Memorial Medal by the Indian National Science Academy (INSA)-2021
- 14) **J. C. Bose National Fellowship** by Science and Engineering Research Board, Ministry of Science and Technology, Govt. of India for outstanding research performance – 2011-TILL DATE.
- 15) **The Rafi Ahmed Kidwai Award** by Indian Council of Agricultural Research for outstanding contribution in Natural Resource Management and Agricultural Engineering- 2010. This award carries a cash prize of **Rs. 5.00 lakh** in addition to the citation.
- 16) **Highly Cited researcher** in recognition of exceptional research performance demonstrated by production of multiple highly cited papers that rank in top 1%for the field and year in Agricultural Sciences by Clarivate-2022
- 17) **Highly Cited researcher** in recognition of exceptional research performance demonstrated by production of multiple highly cited papers that rank in top 1%for the field and year in Agricultural

- 18) **Award for Excellence** in Carbohydrate Research by Association of Carbohydrate Chemists & Technologists (India)-2016. This award carries a cash prize of **Rs. 30000** in addition to the citation.
- 19) **Best Paper Award** by Association of Food Scientists & Technologists (I) for the research paper entitled “Physicochemical and rheological properties of starch and flour from different durum wheat varieties and their relationships with noodle quality” in Journal of Food Science and Technology, 53 4, 2127-2138, 2016.
- 20) **Ramana Fellowship** by Department of Science and Technology, Ministry of Science & Technology, Govt. of India-**2007-2010**.
- 21) **Recognition Award** by National Academy of Agricultural Sciences (NAAS) for significant contribution in **Agricultural Engineering & Technology** for the Biennium-**2007-08**. This award carries a cash prize of **Rs. 50000** in addition to the citation.
- 22) **Laljee Godhoo Smarak Nidhi Award** by Association of Food Scientists & Technologists, India- **2005**.
- 23) **C.N.R. Rao Educational Foundation Award** by Guru Nanak Dev University for Excellence in Research-**2007**.
- 24) **Certificate of Appreciation** by Punjab Agricultural University, Ludhiana-**2012**.
- 25) **S. Bishan Singh Samundri Memorial Lecturership Award** by Guru Nanak Dev University, Amritsar-2012.
- 26) **Award of Honour** by Alumni Association, College of Agriculture, Punjab Agricultural University, Ludhiana-**2011**.
- 27) **Best Paper Award** by Association of Food Scientists & Technologists (I) for the research paper entitled “**Functional properties of normal, waxy and sugary corn starches**” published in J. Food Sci. & Tech. 44 (6), 565-571, **2007**.
- 28) **Pran Vohra Award** by Indian Science Congress Association- **1997-98**.
- 29) **Appreciation Certificate** from Punjab State Council for Science and Technology (**1990-93**).
- 30) **INSA Medal for Young Scientist** by Indian National Science Academy (**1993**).

8. International Ranking:

Ranked in 2% best scientist world ranking by Stanford university- 2021.

Ranked 13th position in the subject category Chemistry in India by research.com-2022 (world ranking=2128)

<https://research.com/scientists-rankings/chemistry/in>

<https://scholar.google.com/citations?user=Bjdv8gAAAAJ&hl=en>

Conferences research papers awards:

1. Best poster award for research paper entitled “Effects of different oils on quality and self life of muffins” by Amarbir Kaur, Amrit Pal Kaur and **Narpinder Singh** in 26th ICFOST organized by Association of Food Scientists & Technologists (I) at ICT, Hyderabad.
2. Best poster award for research paper entitled “Ultrasound assisted extraction of polyphenols and their distribution in whole mung bean, hull and cotyledon” by Barinderjit Singh, **Narpinder Singh**, Sheetal Thakur and Amritpal Kaur in 25th ICFOST organized by Association of Food Scientists & Technologists (I) at GNDU, Amritsar.

9. Other Honors/Professional Recognition

1. Membership of National Expert Committees

1. Member of the Advisory Committee for recommending Council of Scientific & Industrial Research (CSIR) Young Scientist Award for the year 2022
2. Faculty Management Committee (FMC) for sophisticated Analytical Instruments Facility (SAIF) at

- Shivaji University, Kohlhapur constituted by Department of Science and Technology, Ministry of Science and Technology, GOI 11-10-2021 to till date
3. **DBT-Expert Committee** for evaluation of projects supported in the areas of secondary agriculture, post-harvest technologies, bio-economy and bio-based energy, 2021.
 4. **Expert Group Meeting** of CSIR-Mission Mode Projects on Advancing Technological Leads for Assuring Safety of Food (ATLAS), 2020 to till date.
 5. **Member of FIST Subject Expert Committee** – Life Sciences, Department of Science and Technology (DST), Govt. Of India, 2019 to 2021.
 6. **Member of Review committee** for “Ramanujan Fellowship” of SERB (2018-2021).
 7. **Member of review committee** of Ramanujan Fellowship- Life Sciences, Department of Science and Technology (DST), Govt. Of India, 04.10.2019 to 03.10.2022.
 8. **Member of the Plant Science Research Committee of CSIR** (01.04.2019 to 31.03.2022).
 9. **Expert member of UGC Committee** to evaluate proposal for 12-B status of Harcourt Butler Technical University, Nawabganj, Kanpur-208002, UP.
 10. **Expert member of committee on CSIR Mission** on “Food and Consumer Safety Solutions (FOCUS)” 2019-2020
 11. **Expert member of Technology Awards Selection Committee** (TASC) for selection of “Technology Awards” of Council of Scientific and Industrial Research (CSIR), New Delhi-2018.
 12. **Member of Apex council** for the “Prime Minister Fellowship Scheme” for doctoral research, Science and Engineering Research Board (SERB), (2018-2019).
 13. **Member of Scientific Committee** of “Food Safety and Standard Authority of India” (FSSAI), Ministry of Health & Family Welfare, Govt. of India (2017-2019).
 14. **Member of Expert Committee** of Biotechnology Industry Research Assistance Council (BIRAC) for Secondary Agriculture/Food Processing Entrepreneurial Network (SAEN) in Punjab-2017-2020.
 15. **Member of Monitoring Committee** for CSIR mission on Food and Consumer Safety Solutions (FOCUS).
 16. **Expert of Dr. D.S. Kothari Postdoctoral Fellowship Scheme** of the University Grants Commission (2016 to to date).
 17. **Member Programme Advisory Committee** for the scheme- Scheduled Caste Sub Plan (SCSP), DST, Govt. of India (2016-till date).
 18. **Co-Chair of expert committee** on Technological Intervention for Addressing Societal Needs (TIASN) scheme, DST, Govt. of India (2016-2019).
 19. **Core Member of Expert Committee** Project Advisory Committee (Food Processing Program) SERB (2015-2019).
 20. **Member of Sectoral Monitoring Committees** of CSIR for reviewing the activities of the projects sanctioned under the thematic area of “Agri, Food & Nutrition” by the CSIR through 12th Five Year Plan projects-2016 to 2021.
 21. **Expert member of review committee** of UGC for assessment of the schemes of community colleges for effective implementation-2016.
 22. **Member of Expert Committee** for evaluation of proposals under the scheme of Special Assistance Programme (SAP) for fresh induction/review of existing departments-2014.
 23. **Member of Expert Committee**, Programme Advisory Committee on Plant Sciences of SERB (2012-2015).
 24. **Member of the Plant Science Research Committee** of CSIR (1.04.2011 to 31.03.2014).
 25. **Member of Expert Committee** under FAST TRACK Scheme for Young Scientists, DST, Govt. of India (2012-2015).
 26. **Member of Expert Committee** (Food Processing) SERB (2012-2015).
 27. **Expert member of Technical Scrutiny Committee** (TSC), ICAR, for the scheme for Setting up / up gradation of Food Testing Laboratories, 2012 to 2015.

28. **Member of expert committee** for evaluation of Major research projects of UGC, New Delhi, 2012.
29. **Member of Apex Committee** for the Task Force on “Biotechnology Approaches for Food and Nutritional Security” of Department of Biotechnology, Govt. of India (2009-2012).
30. **Member of Approval Committee** for the Task Force on “Biotechnology Approaches for Food and Nutritional Security” of Department of Biotechnology, Govt. of India (2009-2012).
31. **Member of Expert committee of UGC** for financial assistance to universities/colleges under the innovative programme, 2013.
32. **Member of Review Committee of SAP Programme**, Dept. of Food Technology & Biochemical Engineering, Jadavpur University Kolkata-2012.
33. **Member of the Plant Science Research Committee** of CSIR (1.4.2008 to 31.3.2011).
34. **Member of Quinquennial Review Team (QRT)**, ICAR, for AICRP on Post Harvest Technology (PHT), for the review period of 01.04.2007 to 31.03.2012.
35. **Expert member of Brainstorming Committee** on Health Foods and Secondary Agriculture, ICAR, 2011.
36. **Member of UGC Review Committee** for assessing CAS-SAP programme sanctioned to Jadavpur University, Kolkata.
37. **Expert member of NICHE area committee** for Biotechnology Vision 2025, 2011.
38. Expert member of NAAS Committee to review the X plan achievements of CIAE, Bhopal, 2006.

2. Research Council Membership of National institutes/universities

1. Member of **Research Council** of “CSIR-Central Food Technological Research Institute (CSIR-CFTRI), Mysuru”, (2018-2020).
2. Empowered Committee of CFTRI to assist in R & D programmes and to guide Scientists at CFTRI to take forward ambitious projects and intellectual utilization and improvements of business development (2018).
3. Member of Food Processing Education Council (FPEC) for **National Institute of Food Technology Entrepreneurship and Management (NIFTEM)**, Kundli, Ministry of Food Processing Industries, Govt. of India. (2014- 2017).
4. Member of Food Processing Education Council (FPEC) for **Institute of Crop Processing Technology (IICPT)**, Thanjavur, Ministry of Food Processing Industries, Govt. of India. (2014-2017).
5. Member of **Academic Council** of Central University of Punjab, Bathinda (2015-2018).
6. Member of **Academic Council** of Guru Nanak Dev University, Amritsar (06.06.1997-05.06.2000, 30.08.2001-28.06.2004, 2010-2012, 02.07.2018-2022).
7. Member of **Academic Council** of DAV University, Jalandhar (2014-2017).
8. Member of **Research Council** of “CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT), Palampur”, (2013-2016).
9. Member of **Research Council** of “National Dairy Research Institute (NDRI), Karnal”, (2010-2012).
10. Member **Research Advisory Committee (REC)** of National Dairy Research Institute (NDRI), Karnal, (01.01.2010 to 31.12.2012).
11. Member of **Common Core Advisory Committee** of Sri Guru Granth Sahib World University, Fatehgarh Sahib.
12. **Chairman, Board of Studies** of “Food Science and Technology, Guru Nanak Dev University, Amritsar”, (06.06.1997-05.06.2000, 30.08.2001-28.06.2004, 02.07.2018-till date).
13. **Chairman, Board of Studies** of “Food Technology, Punjab Technical University”, (2012-2014).
14. **Chairman, Board of Control** of “Department of Food Science and Technology, Guru Nanak Dev University, Amritsar”, (06.06.1997-05.06.2000, 30.08.2001-28.06.2004, 02.07.2018-till date).
15. **Co-Chair** of expert committee on Technological Intervention for Addressing Societal Needs (TIASN) scheme, Department of Science and Technology, Govt. of India from (2016-2019)

16. **Member Board of Studies**, Department of Food Science and Technology, Pondicherry University, Puducherry (2019-till date).
17. **Member Board of Studies**, Food Science and Technology, Guru Nanak Dev University, Amritsar (01.07.1994-30.06.2010, 01.07.2016-30.06.2018).
18. **Member Board of Studies** in Food Technology (undergraduate), Punjab Technical University, (2014-2016).
19. **Member Board of Studies** for the Centre for Applied Agriculture, Central University of Punjab, Bhatinda, (2016-2018).
20. **Member Board of Studies**, Biological and Chemical Sciences Cluster, Academy of Science and Innovation Research (AcSIR), CSIR, New Delhi (2017-till date).
21. **Member of School Board** in Life Sciences, Pondicherry University, Puducherry, (2019-till date).
22. **Member Board of Studies**, Member Board of studies in Food Technology, Kurukshetra University, Kurukshetra, (2011-2013).
23. **Member Board of Postgraduate studies** and Research in Food Processing and Technology, Guru Jambheshwar University, Hissar (1999-2000).
24. **Member of Board of studies** as Subject Expert in Food Science and Technology, Khalsa College, Amritsar, (2019-2022).

3. Membership of Sectional Committees of National Academies

1. Member of Sectional committee (Agricultural Sciences) of **Indian National Science Academy** (INSA), 2011-2014, 2022 -2024
2. Member of Sectional committee (Agricultural Engineering and Technology) of **National Academy of Agricultural Sciences** (NAAS), 2012-2015. 2023-2026.

4. Editorial Membership of National and International Journals/Advisory Board

- i. **Guest Editor** for Special issue on “Smart Technologies and Policy for Sustainable Food Production Systems” of Clean Technologies and Environmental Policy (Springer)-2026
- ii. **Associate Editor**, Phytochemicals in Food and Medicine - IADNS – Wiley-2026
- iii. **Editorial Board** member, Food as Medicine, Scilight Press-2026
- iv. **Guest Editor** for Special issue on “Microplastics, Food Bioscience, and Health” of Food Bioscience, 2025 (Elsevier)
- v. **Guest Editor** of Special Issue Innovative Strategies for Sustainable Food Processing: Enhancing Quality, Reducing Waste, and Promoting Circular Economy of Food Chemistry: X, 2025 (Elsevier)
- vi. **Books Series Editor:** Cereals, Pulses and Oilseeds, 2025 (Springer Nature) <https://link.springer.com/series/16485/editors>
- vii. **Guest Editor** of Special issue: Metabolomics applications in food science, technology and nutrition, of **International Journal of Food Science and Technology**, 2023 (Wiley).
- viii. **Guest Editor** of Special Issue on “Proteins isolates and hydrolysates: structure-function relation, production, bio activities and applications for traditional and modern high nutritional value-added food products” of **International Journal of Food Science and Technology**, 2021.
- ix. **Associate Editor** of Frontier in Nutrition Section Food Chemistry since 2021 (IF=3.32).
- x. **Editor-in-Chief** of Journal of Food Science and Technology published by Springer, Germany, February, 2016 – May, 2019 (Impact Factor = 2.6).
- xi. **Editorial Board** member of International Journal of Food Science and Technology published by Institute of Food Science and Technology (Blackwell Publisher), 2004-to-date.
- xii. **Editorial Board member** of Food Research International, published by Elsevier Ltd, 2012-to 2014
- xiii. **Subject Editor**, Proceedings of the National Academy of Sciences, India Section B: Biological Sciences published by Springer from 2016-to-date.
- xiv. **Editorial Board** member of Dairy Foods International published by Dairy Technology Society of

- India, 2010-to date.
- xv. Editorial Board member of Journal of Food Science & Technology published by Association of Food Scientists & Technologists, 1999-2005.
 - xvi. **Editorial Board** member of —Indian Food Packer published by All India Food Processor's Association (2007 - 2009).
 - xvii. **Editorial Board** member of "Progress in Food Biopolymer Research" (Univ. of Sains, Penang, Malaysia. (2004 to 2007).
 - xviii. Expert for National Science Centre, Królewska 57, 30-081 Kraków, Poland.
 - xix. Examiner for Doctorate thesis evaluation of The University of Sydney, Australia.
 - xx. **Reviewer** of International Journal of Biological Macromolecules (Elsevier), Food Hydrocolloids (Elsevier), Journal of Agricultural and Food Chemistry (ACS), Food Chemistry (Elsevier), LWT-Food Science and Technology (Elsevier), Starch/Stärke (Wiley), Cereal Chemistry, Journal of Food Science.

5. Professional Affiliations:

(a) Memberships of Professional bodies

- i. Elected President of Association of Food Scientist and Technologists (India) (*AFSTI*), a professional body consisting of more than 3000 members from India and abroad (2016-2017).
- ii. Professional member of Central Executive Committee (CEC) of Association of Food Scientist and Technologists (India) (*AFSTI*) (2016 to 2019).
- iii. Professional life member of Association of Food Scientist and Technologists (India).
- iv. Vice President Association of Food Scientist and Technologists (India) (2011-2012).
- v. Professional member of American Association of Cereal Chemist (AACC), 1993-2007, 2012 to till date.
- vi. Professional member of Institute of Food Technology (IFT) (2015 to till date).
- vii. Profession member of American Chemical Society (2000-01).
- viii. Professional member of Society of Chemical Industry (SCI) (2006-07).
- ix. Secretary Association of Food Scientists and Technologists (Amritsar Chapter) from 1997-2002.
- x. President, Association of Food Scientists and Technologists (Amritsar Chapter) from 2002 to 2006.

(b) Memberships of different committees at GEU

- i. Chairman Executive Council since 2nd Jan, 2023 to todate
- ii. Chairman Academic Council since 2nd Jan, 2023 to todate
- iii. Chairman Finance Committee since 2nd Jan, 2023 to todate

(c) Memberships of different committees at GNDU

- i. **Member of Senate** of Guru Nanak Dev University, Amritsar during 2002-2003, 01.07.2020 to 30-06-2021.
- ii. **Member of Syndicate** of Guru Nanak Dev University, Amritsar during 01.01.2021 to 30-06-2021.
- iii. Co-ordinator DST-PURSE scheme from 10.05.2017 to 03.07.2020.
- iv. Co-ordinator, UPE scheme from 10.05.2017 to 03.07.2020.
- v. Member of building advisory, Investment, screening etc. Committees 10.05.2017 to 03.07.2020.
- vi. Member of Academic Council of Guru Nanak Dev University, Amritsar, 1997-2000, 2001-04, 2008-09, 2010-12 and 2018 to till date
- vii. Chairman, Research Degree Committee (RDC), Guru Nanak Dev University, 2010-12.
- viii. Chairman Foreign students advisory Committee, 2009-10.
- ix. Member of Planning Board of Guru Nanak Dev University, Amritsar during 2002-2003.
- x. Member Research Degree Board (RDB), Guru Nanak Dev University, 1997-2012.

(c) Development of course curriculum and infrastructure

- i. Developed proposal for starting M.Sc. (Food Technology) program at Mizoram University, Mizoram, 2018.

- ii. Developed course curriculum of M.Sc. (Food Science and Technology) program at Central University of Punjab, Bhatinda, 2016.
- iii. Developed course curriculum and started M.Sc. (Food Technology) program at Guru Nanak Dev University, Amritsar in 1993.
- iv. Developed many core courses of B.Tech (Food Technology) and Ph.D. program at Guru Nanak Dev University, Amritsar, 1995.
- v. Pre-Ph.D Programme in Food Technology at Guru Nanak Dev University, Amritsar, 2011.
- vi. Pre-Ph.D joint programme for Faculty of Science and Life Sciences, 2018.
- vii. Taught various courses at Guru Nanak Dev University, Amritsar, Punjab Agricultural University, Ludhiana and Punjabi University, Patiala.
- viii. Brought many infrastructure developments projects for the department from Ministry of Food Processing Industry and University Grant Commission, New Delhi.

9. Short courses/workshops/PAC meeting etc organized

1. Organised workshop on “Bio-Imaging for Food Quality Monitoring and Process Automation” financially supported by GIAN program of MHRD from 05 to 09th Jan 2018.
2. Organised PAC meeting on Civil and Mechanical Engineering at Guru Nanak Dev University Amritsar on 29-30 June 2017 sponsored by Department of Science and Technology, Ministry of Science and Technology.
3. Chairman, Organising committee of ICFoST XXV organized by Association of Food Science and Technology India from 10th to 13th November-2016 at GNDU, Amritsar.
4. Chairman, Organising Committee of XXIV- ICFoST, AFSTI, (18.12.2015-19.12.2015).
5. Organised a workshop on “Predictive Microbiology and Food Safety” financially supported by GIAN program of MHRD from 19 to 23rd September 2016.
6. 13th Meeting of The Programme Advisory Committee on Plant Sciences sponsored by Dept. Of Science and Technology, Ministry of Science and Technology, 2011.
7. Seminar on “Rheology-A new perspective in Food, Sugar and Pharmaceutical Research” sponsored by Thermo Fisher Scientific India Pvt. Ltd., 2010.
8. ANVESAN (North Zone), 2nd Student Research Convention, Association of Indian Universities, 2009.
9. Bakery Workshop in collaboration with The Netherlands Management Corporation Programme (NMCP) from Oct 29 to 8 Nov 2003.

10. Important MoUs formulated for academic collaborations:

Sr. No.	MoUs Formulated	Name of Agencies/Departments involved	Year of MoU
	National		
1	Development of protein isolates, hydrolysates and peptides for value addition to defatted bran (leading to award of Prime Minister Fellowship to Ajay Katal for pursuing Ph.D. under me).	Confederation of India Industry and AP Organics Limited.	2019
2	Germination of brown rice is a slow process. How to optimize in shortest possible time and extraction of tocopherol, tocotrienol, and oryzanol from rice bran (leading to award of Prime Minister Fellowship to Swasti Sharma for pursuing Ph.D. under me).	FICCI and Chaman Lal Setia Exports Ltd.	2019

3.	Development of technology for dry milling and classification of oats for obtaining protein rich fractions as Principal Investigator.	The General Mills, USA.	2016-2017
4.	Isolation, characterisation and utilization of arabinoxylans from wheat and rice.	Dr. M.P. Yadav, Sustainable Biofuels and Co-Products Research Unit, Eastern Regional Research Center, ARS, USDA, 600 East Mermaid Lane, Wyndmoor, PA 19038, USA.	2016-2020
5.	To conduct joint academic programmes and refresher courses for the staff, academicians and researchers.	Defence Electronics Application Laboratory (DEAL) under the aegis of the Defence Research and Development Organization (DRDO) and Graphic Era Deemed to be University (GEU)	2023
6.	To provide a framework for the proposed collaboration for pursuing quality research and building a new generation of highly skilled human resource.	GB Pant National Institute of Himalyan Environment, Kosi Katarmal, Almora	13-03-2023
7.	To develop co-operation and mutual understanding and excellence in practice-based education, research and knowledge exchange.	Usha Martin University, Ranchi - Purulia Road, Highway, Angara, Jharkhand	24.03.2023
8.	To strengthen research activities, supervision of research works, exchange of faculty and research scholars.	NIT Uttarakhand, Srinagar, Garhwal, Uttarakhand.	23.03.23
9.	Joint BSc Aeronautics program	Institute of Research Development and Training, Dehradun, Uttrakhand	10-06-2024
10.	Promoting copporation in community mobilization and capacity building towrds the achievement of sustainable development goals SDGs in uttrakhand and also setting up SDG youth enggement center (YEC)	Centre for public policy and good governance Uttarakhand	2024
11.	To collaboration in research, training, workshops, academic courses, etc. in solar energy	National Institute of Solar Energy (NISE)	30-09-2024
	International		
12.	Lumpsum Funding Aggreement for USD 25000	Bioversity International, Rome, Italy	01-12-2023
13.	To enhance and to develop academic and cultural exchange in the areas of education, research.	Sup' Biotech, Colloge of Biotechnology of Ionis Education Group, France.	31.05.2023
14.	The plans for cooperation are to be implemented through the activities like: Exchange of students, Exchange of academic and research staff members, Twinning Programs, Joint research projects and publications, Participation in conferences, symposiums, short courses and scientific, workshops, etc.	VILNIUS GEDIMAS TECHNICAL UNIVERSITY, LITHUANIA	5/2/2023
15.	To exchange written and published academic materials, educational information, and invite each other to take part in academic meetings organized by our two universities.	Namangan Engineering- construction institute. Islam Karimov street 12, Namangan,160103, Republic of Uzbekistan.	03.07.23

16	To work out collaborative programs and modalities for mainstreaming and scaling up of agro-biodiversity innovations with an objective to harness, use and conserve agro-biodiversity Central Himalayas.	Bioversity International, NASVC complex, DPS Marg, PUSA Campus, New Delhi	15.09.2023
17	To jointly work on policy	National Institute of solar energy, Autonomus Institute of the ministry of new and renewable energy, GOI, Gurugram, Haryana	30-09-2024
18	To collaborate on research and development, student training, internships, skill development, and the organization of seminars.	WIPRO	29-01-2025
19	GEU and Sannio agrees to work on Collaborative academic degree programs, Instructional and cultural programs, Exchange of students, Exchange of faculty and staff and Cooperative education	UNIVERSITY OF SANNIO, ITALY	4/21/2025
20	The plans for cooperation are to be implemented through the activities like: Exchange of students, Exchange of academic and research staff members, Twinning Programs, Joint research projects and publications, Participation in conferences, symposiums, short courses and scientific, workshops, etc.	MGIMO, RUSSIA	6/25/2024
21	Both universities agree to work toward the development of collaborath/e and combined degree programs at the undergraduate and graduate levels	UNIVERSITY OF PLYMOUTH, UNITED KINGDOM	4/15/2024
22	GEU and Yeshiva agrees to work on Collaborative academic degree programs, Instructional and cultural programs, Exchange of students, Exchange of faculty and staff and Cooperative education	YESHIVA UNIVERSITY, USA	4/29/2025
23	GEU and UB agree to work toward the development of collaborath/e and combined degree programs at the undergraduate and graduate levels	UNIVERSITY OF BUFFALO (SUNY), USA	4/3/2025

11. Experience of handling Research Projects

Research Projects undertaken/ongoing/Financial assistance received as Principal Investigator /Coordinator /Co-principal Investigator

Sr. No.	Client/ Organisation's name	Nature of project	Duration of project	Amount of grant (Rs./USD)
1.	MOFPI	Develop cost-effective techniques for producing protein rich fractions, extracting proteins and developing functional plant-based proteins products from legumes and millets as Principal Investigator (2024 to 2026)	2 Years	80 Lakh
2.	Bioversity International Via di San Domenico, Italy	Comprehensive analysis and comparative evaluation of the nutritional composition and metabolic profile of key food crops as Principal Investigator (2023 to 2024)	2 years	USD 25000
3.	DST, New Delhi	J.C. Bose Fellowship Grant as Principal Investigator (2021 to 2026)	5 years	95.00 lakh
4.	CSIR, New Delhi	Assessment of old and new varieties for genetic variability in quality traits and their relationships with pizza, extruded and baked products making (2021-2024)	3 years	16.92 lakh
5.	SANKALP	“Skill Gap Analysis” to be conducted in four districts of Punjab (Coordinator) 2021.	6 months	21.53 lakh
6.	BIRAC	Development of cattle and poultry feed: utilization of various by-products of food industry as Principal Investigator , 2021.	6 months	8.8 lakh
7.	BIRAC	Resolving issues and implementing improved technologies for “Murabha” manufacturing industry in Punjab as Co-Principal Investigator , 2021.	6 months	8.75 lakh
8.	BIRAC	Development and quality evaluation of papads prepared from cereals and underutilized crops as Co-Principal Investigator , 2021.	6 months	8.75 lakh
9.	Punjab Skill Development Mission	Impact assessment of skill development programmes in selected districts of Amritsar, Ludhiana, Patiala and Faridkot (Coordinator) 2020.	4 months	10.84 lakh
10.	CSIR, New Delhi	Effect of ozonation on physicochemical, structural and functional properties of grain and intermediate products of cereals and pulses as Principal Investigator (2018-2021) .	2018-2021	18 lakh
11.	MOFPI	Effect of parboiling and germination on composition, functional and processing characteristics of paddy rice cultivars as Principal Investigator .	2019-2022	73.08 lakh

12.	Punjab State Council for Science and Technology	Secondary Agricultural Entrepreneurial Network in Punjab as Principal Investigator.	2019	1.8 lakh
13.	Ministry of Rural Development	Post-project evaluation study of Sansad Adarsh Grant Yojana (SAGY) as Principal Investigator.	2018-2019	22.52 lakh
14.	DST, New Delhi	J.C. Bose Fellowship Grant as Principal Investigator.	2016-2020	68.0 lakh
15.	CSIR, New Delhi	Quality characterization and utilization of buckwheat in different food products as Co-Principal Investigator.	2016-2019	15 lakh
16.	DST, New Delhi	Chemical, rheological and processing quality of fractions produced by successive size reduction milling of different wheat varieties as Principal Investigator.	2013-2015	69.2 lakh
17.	UGC, New Delhi	Special Assistance Program as Coordinator.	2012-2017	75.0 lakh
18.	DST, New Delhi	Development and quality evaluation of gluten free products for celiac diseases patients as Co-Principal Investigator.	2013-2016	45.42 lakh
19.	UGC, New Delhi	Modification of Starches from different botanical sources as Principal Investigator.	2012-2015	11.97 lakh
20.	DST, New Delhi	Diversity in processing quality amongst corn genotypes grown in Indian Himalaya as Principal Investigator.	2012-2015	55.0 lakh
21.	DST, New Delhi	J.C. Bose Fellowship Grant as Principal Investigator	2011-2015	68.0 lakh
22.	DBT, New Delhi	Evaluation of genetic diversity in Kidney bean and Field pea germplasm for some important traits as Principal Investigator.	2011-2014	59.51 lakh
23.	CSIR, New Delhi	Functional and film forming properties of selected cereals and legume grain proteins as Principal Investigator.	2011-2014	19.0 lakh
24.	CSIR, New Delhi	Factors governing the quality of baked, extruded and indigenous products: role of wheat constituents and improving agents as Co-Principal Investigator.	2011-2014	19.0 lakh
25.	DSR-AICSIP, ICAR, New Delhi	Enhancing resistance to biotic stresses & to enhance product quality in Sorghum as Principal Investigator.	2009-2012	10 lakh
26.	DBT, New Delhi	Peptidyl Prolyl <i>Cis-Trans</i> Isomerases: Role in Storage Protein Deposition in Wheat Relevance to Industry as Co-Principal Investigator.	2008-2012	57.32 lakh
27.	DST, New Delhi	Isolation and characterization of starch and protein from different legumes as Principal Investigator.	2007-2010	31.69 lakh
28.	DST, New Delhi	Ramanna Fellowship as Principal Investigator.	2007-2011	34.80 lakh

29.	UGC, New Delhi	Production, characterization and modification of gluten proteins as Principal Investigator.	2007-2010	8.21 lakh
30.	ICAR, New Delhi	Isolation, characterization and utilization of starch from broken Indian rice as Principal Investigator.	2002-2005	12.38 lakh
31.	DST, New Delhi	Screening potato cultivars for novel properties as Principal Investigator.	2003-2006	19.57 lakh
32.	AICTE, New Delhi	Studies on the processing behaviour of Indian corn types as Principal Investigator.	2003-2006	8.5 lakh
33.	ICAR, New Delhi	Studies on the utilization of sunflower Meal as Principal Investigator.	1995-1998	6.72 lakh
34.	INSA, New Delhi	Studies on Utilization and prevention of crystal formation in honey as Principal Investigator.	1994-1997	1.50 lakh
Total (A)				Rs 1062.9 lakh

Infrastructure Development Grant (B)

1.	FIST Grant as Coordinator	DST	220 lakh	---
2.	Creation of infrastructure facilities as Head of Departmentd	MoFPI, New Delhi	49 lakh	Completed
Total (B)			Rs. 269 lakh (0.36 million USD)	

Grand Total (A and B) = Rs. 1062.9 + 269 = 1331.9 lakh = approximately 1.664 million USD (1 USD= INR 80).

12. Courses Taught: B. Tech (Food Technology), Msc (Food Technology) and Ph. D (Food Technology) (1993-2022)

Programme	Course Code	Name of Course
Ph.D (Food Technology)	FTL-902	Advanced Food Analysis
Ph.D (Food Technology)	FTL-905	Advanced Cereal, Pulse and Oilseeds Science and Technology
M.Sc (Food Technology)	FTL-502	Technology of Cereals, Legumes and Oil Seeds Processing- I
M.Sc (Food Technology)	FTP-571	Experiments in Cereals, Legumes and Oil Seeds Processing-II
M.Sc (Food Technology)	FTL-551	Technology of Cereals, Legumes and Oil Seeds-II
M.Sc (Food Technology)	FTP-571	Experiments in Cereals, Legumes and Oil Seeds Processing-II
M.Sc (Food Technology)	FTL-601	Technology of Malting and Brewing
M.Sc (Food Technology)	FTP-621	Experiments in Malting Technology
B.Tech (Food Technology)	FTL-203	Food Hygiene and Sanitation
B.Tech (Food Technology)	FTL-259	Cereals and Pulses Technology
B.Tech (Food Technology)	FTP-279	Experiments in Cereals and Pulses Technology
B.Tech (Food Technology)	FTP-323	Fats and Oil Technology (Lab)
B.Tech (Food Technology)	FTL-351	Food Regulation and Quality Control

13. Dissertations Supervised

(i) MSc = 70 (Completed)

(ii) B.Tech = 74 (completed)

MSc. and B.Tech (Food Technology) students from his laboratory are sought out by the industry and academia. Many graduates from his laboratory currently possess lead R & D positions in the different food industry including ITC, Nestle, PepsiCo, Cargill, GlaxoSmithKline, Mondelez, General Mills India Pvt. Ltd., Novozymes South Asia Private Limited, etc.

Ph.D. = 36 (Completed), 8 (Registered) Many of my Ph. D. scholars got the opportunity to work at Kansas State University, USA; Agri. and Agri. Food, Winnipeg, Canada; Korean University, Korea; Washington University, USA; USDA, USA; Institute of Agro-chemistry and Food Technology (IATA), Spain; Riddet Institute, New Zealand; Massey University, New Zealand and National Food Research Institute, Ibaraki, Japan.**List of Ph.D. Scholars guided**

S. No.	Name of Scholar	Title of doctorate thesis	Awarded/ Registered (Year)	Present position/awards
1.	Kulwinder Kaur	Optimization of functional properties of cereal based indigenous extruded and baked products using optional ingredients.	Awarded (1998)	Food Industry Consultant, Canada Award: NERCE, Canada
2.	Parminder Kaur Bath	Quality evaluation of honey from different sources and its utilization in some food products.	Awarded (1999)	Senior Dietetics Management position, USA Award: CSIR-Fellowship
3.	Hardeep Singh Gujral	Impact of cereal grain quality and process variables on baked and extruded products.	Awarded (2000)	Professor Awards: INSA Young Scientist Medal
4.	Jaspreet Singh	Development of corn and corn-potato based texturized and baked extruded products.	Awarded (2002)	Senior Research Officer Massey Institute of Food Science and Technology New Zealand
5.	Navdeep Singh Sodhi	Isolation, characterization, modification and utilization of starch from common varieties of coarse and fine rice.	Awarded (2004)	Professor Awards: JSPS, INSA Young Scientist Medal
6.	Lovedeep Kaur	Physico-chemical properties of potatoes in relation to thermal and functional properties of their starches.	Awarded (2004)	Senior Research Officer, New Zealand
7.	Balmeet Singh Gill	Isolation, characterization, modification and utilization of starch and gluten from selected varieties of bread and durum wheats.	Awarded (2004)	Professor
8.	Maninder Kaur	Isolation and characterization of starches and proteins from different legume varieties.	Awarded (2005)	Professor Award: AFSTI Young Scientist award
9.	Kawaljeet Singh Sandhu	Isolation and characterization of starch from corn hybrids.	Awarded (2005)	Professor Award: CSIR-Fellowship
10.	Vani Aggarwal (as co-supervisor)	Morphological, thermal and biochemical properties of starch from different cultivars of <i>Phaseolus mungo</i> L. and <i>Pisum sativum</i> L.	Awarded (2008)	Assistant Professor
11.	Amrit Pal Kaur	Composition and properties of flour, starches, and products from tubers of different potato cultivars.	Awarded (2008)	Professor Awards: NAAS Associate, PSCS-Young Scientist ICAR-Fellowship
12.	Sandeep Singh Oshan	Physico-chemical and functional properties of starch and proteins in different wheat varieties in relation to bulgar quality.	Awarded (2010)	Assistant Professor
13.	Seeratpreet Kaur	Isolation, characterization, modification & interaction of pectin from citrus waste & starch from kidney bean germplasm.	Awarded (2012)	Assistant Professor Awarded CSIR-Fellowship
14.	Shubhpreet Kaur	Studies on functional properties and utilization of leaves and grains of amaranthus.	Awarded (2014)	Assistant Professor Awarded CSIR-Fellowship

15.	Khetan Shevkani	Characterization and utilization of proteins from kidney bean, field pea and amaranth grains.	Awarded (2015)	Assistant Professor Awarded CSIR-Fellowship
16.	Shagun Sharma	Production and utilization of resistant starch from different legumes.	Awarded (2015)	Assistant Professor Awarded DST-INSPIRE Fellowship
17.	Atinder Ghumman (as Co-supervisor)	Characterization of pulse protein for noval protein characteristics.	Awarded (2016)	Assistant Professor PURSE-Fellowship
18.	Naincy Parmar	Biochemical characterization of normal and harder to cook grains of kidney bean, field pea and chickpea.	Awarded (2016)	UPE-Fellowship
19.	Jatinder pal Singh (as Co-supervisor)	Evaluation and utilization of polyphenolic compounds and dietary fiber from selected fruits and vegetables.	Awarded (2016)	Assistant Professor UPE-Fellowship
20.	Barinderjit Singh	Diversity in bioactive compounds among different pulses	Awarded (2017)	Assistant Professor
21.	Sheetal Thakur (as Co-supervisor)	Corn: Evaluation of biochemical and processing behaviour.	Awarded (2017)	Associate Professor
22.	Mehak Katyal	Physicochemical, rheological and processing quality of flour and their fractions milled from different wheat varieties	Awarded (2018)	Assistant Professor Award: UGC-BSR-fellowship
23.	Priyanka Paul	Effect of germination and parboiling on physicochemical, starch and protein characteristics of brown and milled rice from different cultivars	Awarded (2019)	Assistant Professor Awarded UGC-BSR-Fellowship DST-Project-fellow
24.	Parmeet Viridi	Quality evaluation of different traditional and improved varieties of rice: physicochemical, pasting, textural, starch and protein characteristics	Awarded (2019)	Assistant Professor DST-Project-Fellow
25.	Ritika Bajaj	Structural, thermal, morphological and in-vitro digestibility studies of modified starches from different botanical sources	Awarded (2019)	UPE-Fellowship Awarded Best oral presentation in 25 th ICFOST 2016 at Amritsar
26.	Shalini Trehan	Evaluation of composition and processing quality of traditional and improved corn varieties	Awarded (2019)	Food Technologist & Quality Assurance Manager Awarded:UGC-BSR-Fellowship
27.	Rubinder Singh Sandhu (as Co-supervisor)	Effect of different additives and potential for value addition in extruded cereal products	Awarded (2019)	Assistant Professor
28.	Kirpal Singh (as Co-supervisor)	Effect of environment age and sex on muscle protein of different fish species	Awarded (2020)	INSPIRE-Fellowship
29.	Seerat Bhinder	Quality characterization and utilization of quinoa and buckwheat in different food products	Awarded (2021)	INSPIRE-Fellowship

30.	Swasti Sharma	Effect of pretreatments on composition and functional properties of parboiled and germinated rice of different varieties.	Awarded (2024)	Assistant Professor Awarded Prime Minister Fellowship
31.	Ajay Katal	Development of protein isolate, hydrolysates and peptides for value addition to defatted rice bran.	Awarded (2024)	Awarded Prime Minister Fellowship
32.	Arun Kumar	Development of Various products utilizing cereals and selected medicinal plants with enhanced nutraceutical properties.	Awarded (2024)	Assistant Professor
33.	Amarbir Kaur (as Co-supervisor)	Effect of processing and storage on physicochemical and stability characteristics of different vegetable oils and their blends.	Awarded (2024)	UGC-BSR-Fellowship Awarded best poster award in 26 th ICFOST, 2017 at Hyderabad
34.	Tamanna Awasthi	Studies on malting potential of wheat and amaranth varieties.	Awarded (2024)	Assistant Professor
35.	Sidhant Banura	Evaluation of malting behavior and novel products development from non-thermal treated pulses.	Awarded (2024)	Assistant Professor
36.	Aishwary Dubey	Evaluation of Physicochemical and Texturization Properties of Proteins from Cereals and Pulses and their Applications in Various Food Products	Awarded (2025)	Project Fellow
37.	Riya Barthwal	Impact of milling, pre-treatments and processing on the quality attributes and metabolomics profile of wheat varieties	Registered (2023)	Assistant Professor
38.	Akanksha Negi	Effect of pre-treatments and processing techniques on metabolomic profiling and quality characteristics of different legumes	Registered (2023)	Assistant Professor
39.	Sonal Aggarwal	Metabolomic profile differences between raw and processed pigmented and non-pigmented rice	Registered (2023)	Assistant Professor
40.	Aroma Joshi	Quality characterization and fractionation of millets ki for the development and utilization of composite flour in food applications	Registered (2024)	Assistant Professor
41.	Ishika Jain	Quality characterization and fractionation of pseudocereals for the development of composite flours in food applications	Registered (2024)	Assistant Professor
42.	Tanya Kunwar	A comprehensive evaluation of potatoes: Metabolite profiling, structural properties, and food product development	Registered (2024)	Research scholar
43.	Sneha Pandey	Characterization and functional modification of gluten in indian wheat varieties for application in baked products and plant-based meat analogues	Registered (2025)	Assistant Professor

44.	Kamaldeep Kaur	Evaluation of physicochemical, metabolomic profiling, functional, and product-making properties of two Basmati rice varieties grown under organic and conventional cultivation conditions	Registered (2025)	Food Safety Officer
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14. Ph.D thesis evaluated from India and abroad

Examinership (Ph.D. thesis) etc.	International	1
	National	27

S. No.	University/ Institute (International Level)	No. of Thesis
1.	The University of Sydney, Australia	1
Total		1

S. No.	University/ Institute (National Level)	No. of Thesis
1.	University of Kerala, Kerala	2
2.	Homi Bhabha National Institute, Mumbai	1
3.	National Botanical Research Institute, Lucknow	1
4.	Dr. Y.S. Parmar University of Horticulture and Forestry, Solan, H.P.	1
5.	CSIR-CFTRI, Mysore	2
6.	CSIR-CISO, Chandigarh	1
7.	Guru Jambheshwar University of Science and Technology, Hisar	5
8.	Indian Institute of Chemical Technology, Mumbai	3
9.	CSIR-Institute of Himalayan Bioresource Technology, Palampur	3
10.	Jadavpur University, Kolkata	1
11.	CCS Haryana Agricultural University, Hisar	1
12.	Tezpur University, Assam	1
13.	CSKHPKV, Palampur	1
14.	Pondicherry University	2
15.	University of Kashmir, Srinagar	2
16.	DAYALBAGH EDUCATIONAL INSTITUTE, DAYALBAGH, AGRA-282005	1
Total		28

14. Patents and machine designed

(a) Patents

(i) Ajay Kumar and **Narpinder Singh**, Method of Removal of Aflatoxin B₂, G₁, G₂ and Reduction of Aflatoxin B₁ in Rice Bran under the intellectual property of India. (Application Number: 202111042034 A, Publication Date: 01/10/2021)

- (ii) **Narpinder Singh** and Arun Kumar A composition and method for enriching the baked products (Application Number: 202311055155, Publication Date: 15/09/2023)
- (iii) **Narpinder Singh** and Swati A Method of Parboiling Paddy By Using Ultrasonic And Ozone Treatments, (Application Number: 202311090104, Publication Date: 09/02/2024).
- (iv) **Narpinder Singh** and Amritpal Kaur, A process for producing maize starch with enhanced stability and reduced retrogradation (application No. 202411077598 A, Publication Date: 25/10/2024
- (v) Ayushi Negi, samrity Riyal, Bhawna Bisht, Vinod Kumar, Sanjay Kumar, **Narpinder singh**, Algal based fish feed composition and method thereof (Application No.202411073830 A, Publication Date: 18/10/2024).
- (vi) **Narpinder Singh**, Ritika Bajaj, Amritpal Kaur, A composition and method for preparation of low-fat mayonnaise with enhanced whiteness. (application No. 202411103822, Publication Date: 17/01/2025)
- (vii) **Narpinder Singh** and Ajay Kumar “A process for extraction and purification of Gama-Oryzanol from physically refined rice bran oil” (application No. 202511006487, Publication Date: 14/02/2025)
- (viii) **Narpinder Singh**, Arun Kumar and RSS Kaler, A process for extending the shelf life of apple and carrot peels for cattle and poultry feed, (Application Number: 202511032921, Publication Date: 25/04/2025)

(b) Machines designed

- i. Narendra Gariya. **Narpinder Singh**, A dough hardening unit for dry nuts topping machine Design filed at the Indian Design Registry Kolkata bearing Design Application No. 432884-001. Design Published, Journal No. 1/2025 Dated 03/01/2025
- ii. Narendra Gariya. **Narpinder Singh**, A sprinkling unit for dry nuts topping machine design filed at the Indian Design Registry Kolkata bearing Design Application No. 434959-001.
- iii. Narendra Gariya. **Narpinder Singh**, Semi-Automatic Plant Protein-Based Patty Maker, Indian Design Application No. 453963-001 filed dated 02/04/2025
- iv. Narendra Gariya. **Narpinder Singh**, Semi-Automatic Plant-Based Chaap Production Machine, Indian Design Application No. 453964-001 filed dated 02/04/2025
- v. Narendra Gariya. **Narpinder Singh**, Semi-Automatic Gluten Separator for Plant Protein Chaap, Indian Design Application No. 453965-001 filed dated 02/04/2025

15. List of Publications (*as corresponding author)

- (i) **Publications:** Research Papers=334, Review Papers=56, Editorials = 04, Technical/Popular articles = 4, Newspapers articles = 12 (**Total =409**)
- (ii) **Books/Books chapters/Books reviews:** Books= 2 (1, RSC; 1, Springer), Book chapters =26 (25 International, 1 National), Book reviews= 8] (**Total = 36**)

Total (I + ii) = 445

[Scopus citations = > 25,000; h-index =86]

[Google scholar citations = >37000; H-index =100]

[Cumulative Impact factor = >2000]

[i10 index 310]

<https://scholar.google.com/citations?user=Bjdvh8gAAAAJ&hl=en>

Research papers						
Sr. No.	Date/ Year	Author, Title	Name of Journal	Refereed Journal or Not	Number of Citations (SCOPUS)	Impact Factor
1.	2026	Kamaldeep Kaur, Sonal Aggarwal, Deepika Kathuria, Narpinder Singh* Metabolomic profiling, functional, and sensory properties of papads made from two types of rice grown in different conditions	<i>Journal of Agriculture and Food Research</i>	Referred		6.2
2.	2025	Rishika Agarwal, Parth Kapur, Prabh Deep Singh and Narpinder Singh . Latency-aware and energy-efficient fog computing framework for IoT-based smart irrigation control in precision agriculture.	<i>Journal of Ambient Intelligence and Humanized Computing</i> , 1-24	Referred		4.1
3.	2025	Aynadis Tamene, Desta Dugassa Fufa, Tilahun Bekele, Geremew Bultosa, Arun Kumar, Narpinder Singh . Value-addition to composite soft bread wheat cookies using avocado seed and finger millet flours: assessing the nutritional, techno-functional, and sensory properties.	<i>Measurement: Food</i> , 100262	Referred		3.6
4.	2025	Seerat Bhinder and Narpinder Singh . Nutritional, Phytochemical, and Functional Characterization of Chenopodium album and Chenopodium quinoa Flours.	<i>Journal of Food Composition and Analysis</i> , 108544	Referred	148	4.6
5.	2025	Ankita Kumari, Abdul Rahaman, Ibrahim Khalifa, Muhammad Adil Farooq, Xin-An Zeng, Narpinder Singh , Shan He. Effect of vortex fluidic device and its combined treatment with ultrasonication on the conformational changes of soy protein isolate.	<i>Ultrasonics Sonochemistry</i> , 107647	Referred	122	9.7
6.	2025	Arun Kumar, Narpinder Singh , Robin Joshi. Enhancing Brassica microgreen production: Exploring metabolomic variations across growing conditions using targeted and non-targeted analysis.	<i>Food Chemistry: X</i> , 103125	Referred	31	8.2
7.	2025	Amandeep Kaur, Raj Sukhwinder Singh Kaler, Amardeep Singh Viridi, Narpinder Singh . Effect of	<i>Cereal Chemistry</i>	Refereed		2.5

		milling on the functional properties of rice bran protein isolates of long-grain cultivars and टर्हटि Utilization in Gluten-Free Muffins Production				
8.	2025	Arun Kumar, Swasti Mudgal, Ishika Jain, & Narpinder Singh* . Impact of lipids removal on the color, cooking characteristics, textural properties, and UHPLC-QToF-IMS-based metabolites of Indian brown rice using supercritical carbon dioxide.	<i>Cereal Chemistry</i> , 102(1), 53-63.	Refereed	2	2.5
9.	2025	Tamanna Awasthi, Narpinder Singh , Katsuyoshi Nishinari Ultrasonic assisted enhancement of Malt Characteristics in Amaranth: A Study on Physicochemical, Amino Acids, Sugar Profile, Rheological, and Muffin making	<i>Cereal Chemistry</i>	Refereed	6	2.5
10.	2025	Mehak Katyal, Narpinder Singh , Deepik Kathuria Protein characterization and amino acid profiles of various wheat varieties and their effect on pasting properties of starch	<i>Starch/Starke</i>	Refereed	3	2.7
11.	2024	Aishwary Dubey, Arun Kmar, and Narpinder Singh Influence of Wheat Gluten-Soy Protein Blends and Moisture on High-Moisture Extruded Meat Analogues for Burger Patties	<i>Journal of Food Science</i> , 89(12), 8836-8856	Refereed		3.2
12.	2024	Arun Kumar & Narpinder Singh* . Comparing gluten-free eggless muffins' viscoelastic, rheological, and textural properties after combining seven plant-based protein isolates with wheat, corn, and rice starches.	<i>International Journal of Food Science and Technology</i> , 59(12), 9096-9107.	Refereed	3	3.3
13.	2024	Tamanna Awasthi & Narpinder Singh* . Exploring the potential of germination and ozone treatment to improve the nutritional profile and functional properties of amaranth grains.	<i>International Journal of Food Science and Technology</i> , 59(11), 8393-8407.	Refereed	1	3.3
14.	2024	Ajay Kumar & Narpinder Singh* . Assessing the influence of extrusion processing on functional properties and phytochemical profiles in diverse rice bran varieties.	<i>Cereal Chemistry</i> , 101(6), 1224-1237.	Refereed	4	2.5
15.	2024	Arun Kumar, & Narpinder Singh* . Comprehensive analysis of targeted phenolic, sugar, and amino acid variation in 10-day-old wheatgrass in response to temperature and photoperiod.	<i>International Journal of Food Science and Technology</i> , 59(10), 7029-7039.	Refereed	1	3.3
16.	2024	Arun Kumar, Narpinder Singh* , & Robin Joshi. Comprehensive characterization of bioactive peptides in rice bran protein hydrolysates: A multi-platform approach for metabolomic profiling, identification, and molecular docking analysis.	<i>Cereal Chemistry</i> , 101(5), 1000-1019.	Refereed	1	2.5
17.	2024	Aishwary Dubey, Abdul Mateen, and Narpinder Singh* , Exploring Textural, Solubility, and Rheological Characteristics of High-Moisture Extruded Meat Analogues: Effects of Wheat Gluten and Rice Protein Incorporation in Pea Protein Isolate and Feed Moisture Levels, 59(8), 5560–5575	<i>International Journal of Food Science and Technology</i>	Refereed	7	3.3
18.	2024	Swasti Mudgal and Narpinder Singh* Effect of parboiling treatment times on the physio-chemical, cooking, textural, and pasting properties, amino acid, phenolic, and sugar profile of germinated paddy rice from different rice varieties	<i>Journal of Food Science</i> , 89(6), 3208–3229	Refereed	6	3.2
19.	2024	Arun Kumar, Narpinder Singh* , Unravelling the metabolomic pool of Ocimum microgreens under diverse growing conditions through targeted compound analysis and non-targeted UHPLC-QToF-IMS based approach	<i>Food Bioscience</i>	Refereed	6	5.9

20.	2024	Manish Malik, Devyani Tomar, Narpinder Singh , & BS Khatkar. Optimization of salt ready-mix for instant fried noodles production using response surface methodology.	Nutrition & Food Science, 54(4), 690-702.	Refereed	6	1.83
21.	2024	Katsuyoshi Nishinari, Sayaka Ishihara, Makoto Nakamura, Takahiro Funami, Chengxin Zhu, Ke Zhang, Nan Yang, Chaiwut Gamonpilas, Yapeng Fang, Hatsue Moritaka, Marie-Agnès Peyron, Yoko Nitta, Makoto Takemasa, Aaron Goh Suk Meng, Narpinder Singh Rheology of bolus as a wet granular matter – Influence of saliva on rheology of polysaccharide gel beads	<i>Food Hydrocolloids</i>	Refereed	2	12.4
22.	2024	Amandeep Kaur, Raj Sukhwinder Singh Kaler, Amardeep Singh Virdi, Narpinder Singh , Effect of degree of milling on protein and functional properties of protein isolates from bran of long-grain indica rice cultivars and their utilization for the preparation of gluten-free muffin	<i>Cereal Chemistry</i>	Refereed		2.5
23.	2024	Narpinder Singh , Aishwary Dubey, Mehak Katyal, Anju Mahendru Singh, Arvind Kumar Ahlawate, Deepika Kathuria Diversity in physicochemical, pasting and rheological properties of various old and new wheat lines for the preparation of chappati and water balls	<i>International Journal of Food Science and Technology</i>	Refereed	1	3.3
24.	2024	Arun Kumar and Narpinder Singh , Nutritional and Phytochemical Variation in Trigonella, Ocimum, and Brassica Microgreens Under Diverse Growing Condition	<i>Journal of The Science of Food and Agriculture, Reporters</i>	Refereed		3.5
25.	2024	Arun Kumar and Narpinder Singh Comprehensive Analysis of targeted Phenolic, Sugar, and Amino Acid Variation in 10-Day-Old Wheatgrass in Response to Temperature and Photoperiod	<i>International Journal of Food Science and Technology</i>	Refereed	-	3.3
26.	2024	Ajay Kumar, Narpinder Singh Comparing gluten-free eggless muffins' viscoelastic, rheological, and textural properties after combining seven plant-based protein isolates with wheat, corn, and rice starches	<i>International Journal of Food Science and Technology</i>	Refereed	-	3.3
27.	2024	Swasti Mudgal and Narpinder Singh* Impact of ultrasonication on the physicochemical, pasting, amino acid, mineral, phenolic, and sugar profile of germinated brown rice from various varieties"	<i>Journal of Food Science and Technology</i>	Refereed	13	3.3
28.	2024	Amandeep Kaur, RSS Kaler, Amandeep Singh Virdi, Narpinder Singh .Effect of degree of milling on protein and functional properties of protein isolates from bran of long-grain indica rice cultivars and their utilization for the preparation of gluten-free muffin	<i>Cereal Chemistry</i>	Refereed		2.5
29.	2024	Ajay Kumar, Narpinder Singh* , Robin Joshi. Comprehensive Characterization of Bioactive Peptides in Rice Bran Protein Hydrolysates: A Multi-Platform Approach for Metabolomic Profiling, Identification, and Molecular Docking Analysis, 101(5), 1000–1019	<i>Cereal Chemistry</i>	Refereed	11	2.5
30.	2024	Khetan Shevkani, Narpinder Singh , Navpreet Kaur, Naoto Isono and Takahiro Noda Characterization of Starch Properties in Diverse Pea Accessions: Structural, Morphological, Thermal, Pasting and Retrogradation Analysis	<i>Starch/Starke</i>	Refereed	6	2.7
31.	2024	Swasti Mudgal and Narpinder Singh* Physicochemical, Functional, Pasting, and Amino Acid Compositions of Milled Rice, and Extrusion	<i>Cereal Chemistry</i>	Refereed	3	2.5

		Behavior of Milled Rice from Basmati and Non-Basmati Varieties, 101(5), 1055–1070				
32.	2023	Ajay Kumar, Narpinder Singh* , Robin Joshi Evaluation of Antioxidant and ACE Inhibitory Peptides in Rice Bran Protein Hydrolysate using Non-targeted UHPLC-QTOF-IMS Profiling, MALDI-TOF-TOF-MS/MS, and Molecular Docking Study"	<i>International Journal of Food Science and Technology</i>	Refereed	2	3.3
33.	2023	Arun Kumar, Narpinder Singh* , Robin Joshi, Deciphering the metabolic signatures of Trigonella microgreens as a function of photoperiod and temperature using targeted compound analysis and non-targeted UHPLC-QTOF-IMS based approach	<i>Food Research International</i>	Refereed	5	8.0
34.	2023	Rajesh Kumar, Narpinder Singh , Bhupendar Singh Khatkar Effects of A-and B-type starch granules on composition, structural, thermal, morphological, and pasting properties of starches from diverse wheat varieties	<i>Food Bioengineering</i>	Refereed	23	5.3
35.	2023	Ajay Kumar, Robin Joshi, Tamanna Awasthi, Narpinder Singh* , Insights on the non-targeted metabolomic profile, rheological, functional and structural characteristics of rice bran and pulse protein isolates	<i>International Journal of Food Science and Technology</i>	Refereed	9	3.3
36.	2023	Bhawna Bisht, Krishna Kumar Jaiswal, Afreen Parveen, Sanjay Kumar, Monu Verma, Hyunook Kim, Mikhail S. Vlaskin, Narpinder Singh and Vinod Kumar. A phyco-nanobionics biohybrid system for increased carotenoid accumulation in C. sorokiniana UUIND6.	<i>Journal of Materials Chemistry B</i>	Refereed	10	7.0
37.	2023	Ritika Bajaj, Shalini Trehan, Narpinder Singh* , Amritpal Kaur, Vimmi Passi. Properties of iron fortified starches and their chapatti making potential	<i>Starch/Starke</i>	Refereed	2	2.7
38.	2023	Arun Kumar, Narpinder Singh* , Embracing nutritional, physical, pasting, textural, sensory and phenolic profile of functional muffins prepared by partial incorporation of lyophilized wheatgrass, fenugreek and basil microgreens juice powder. 104(7), 4286-4295	<i>Journal of The Science of Food and Agriculture</i>	Refereed	10	3.5
39.	2023	Narpinder Singha* , Mehak Katyal , Amardeep Singh Viridi, Johar Singh Saini, Anju Mahendru Singh, Arvind Kumar Ahlawat, Insights into the particle size, protein form, pasting and dough rheological properties of 2 flour obtained from wheat grown at high and low altitude	<i>International Journal of Food Science and Technology</i>	Refereed	4	3.3
40.	2023	Sidhant Banura, Narpinder Singh* , Effect of ultrasonication on physicochemical, amino-acids, sugar profile, antioxidant, 2 pasting, and dynamic rheological properties of malted mung beans and lentils	<i>International Journal of Food Science and Technology</i>	Refereed	-	3.3
41.	2023	Arun Kumar, Narpinder Singh* , Robin Joshi Insights into the growth parameters, mineral composition, protein and UHPLC-QTOF- 2 LC/MS based non-targeted metabolomic fingerprints of wheatgrass as a function of photoperiod and temperature	<i>International Journal of Food Science and Technology</i>	Refereed	19	3.3
42.	2023	Arun Kumar, Narpinder Singh^a , Amritpal Kaur, Robin Joshi, Sneak-peek into the chlorophyll content, antioxidant activity, targeted and non-targeted UHPLC-QTOF LC/MS metabolomic fingerprints of	<i>Food Bioscience</i>	Refereed	24	5.9

		pulse microgreens grown under different photoperiod regimes				
43.	2023	Arun Kumar, Narpinder Singh* , Amritpal Kaur, R.S.S Kaler, Sukhraj Kaur, Impact of pink rock salt and <i>Lactobacillus</i> spp. on physico-chemical, microbiological properties, phenolic profile and sugar level of apple peel	<i>International Journal of Food Science and Technology</i>	Refereed	8	3.3
44.	2023	Jaskaran Singh, Narpinder Singh , Fouda, Mostafa M. Fouda, Luca Saba, Jasjit S Suri Attention-Enabled Ensemble Deep Learning Models and Their Validation for Depression Detection: A Domain Adoption Paradigm	<i>Diagnostics</i>	Refereed	25	3.6
45.	2022	Swasti Mudgal, Narpinder Singh* Diversity in phenolics, amino acids, rheology and noodles glycemic response of brown rice from non-basmati and basmati rice.	<i>Food Research International</i>	Refereed	16	8.1
46.	2022	Khetan Shevkani, Ravneet Kaur, Narpinder Singh , Dinhle Hlanze, Colour, composition, digestibility, functionality and pasting properties of diverse kidney beans (<i>Phaseolus vulgaris</i>) flours	<i>Current Research in Food Science</i> 5, pp. 619-628	Refereed	24	7
47.	2022	Priyanka Pal, Parmeet Kaur, Narpinder Singh* , Amritpal Kaur, Naoyoshi Inouchi, and Yuka Kubota. Morphological, Thermal, and Rheological Properties of Starch from Brown Rice and Germinated Brown Rice from Different Cultivars.	<i>Starch/Starke</i>	Refereed	5	2.7
48.	2022	Tamanna Awasthi, Narpinder Singh* , Amardeep S. Virdi, Anju M. Singh, Arvind K. Ahlawat Effect of solvents and supercritical-CO2 extraction of lipids on physico-chemical, functional, pasting and rheological properties of hard, medium hard and soft wheat varieties	<i>International Journal of Food Science and Technology</i>	Refereed	7	3.3
49.	2022	Amrinder Singh, Shubham Thakura, Amardeep Singh Virdi, Narpinder Singh* , Rasdeep Kour, Satwinderjeet Kaur, Subheet Kumar Jain; Novel methylcellulose based thermosensitive in situ nano liposomes of docetaxel for improved pharmacokinetics and pharmacodynamics with reduced toxicity	<i>Materials today Communications</i>	Refereed	8	3.662
50.	2022	Parmeet Kaur, Narpinder Singh* , Priyanka Pal, Amritpal Kaur. Functional, amino acid composition and protein profiling of protein isolates from different pigmented, nonpigmented and improved rice varieties and their effects on starch thermal and dynamic rheological behaviour.	<i>International Journal of Food Science and Technology</i>	Refereed	3	3.3
51.	2022	Mehak Katyal, Narpinder Singh* , Simarjit Kaur. Physicochemical, Thermal, and Pasting Properties of Starch Separated from Various Timely Sown and Delayed Sown (Heat Stressed) Wheat of Different Wheat Lines/Variety	<i>Starch/Starke</i>	Refereed	5	2.3
52.	2022	Priyanka Pal, Parmeet Kaur, Narpinder Singh , Amritpal Kaur, Naoyoshi Inouchi, Yuka Kubota. Morphological, Thermal, and Rheological Properties of Starch from Brown Rice and Germinated Brown Rice from Different Cultivars	<i>Starch/Starke</i>	Refereed	0	2.7
53.	2022	Ndinchout, Alvine Sandrinea, Chattopadhyay, Debapriyab, Ascension, Nyegue Maximiliennea,	<i>Foods and Raw Materials</i>	Refereed	8	1.3

		Varinder Kaur, Narpinder Singh , Paul, Moundipa Fewoua, Muffins fortified with Dacryodes macrophylla L. fruit: quality and sensory evaluation				
54.	2021	Seerat Bhinder, Supriya Kumari, Balwinder Singh, Amritpal Kaur, Narpinder Singh . Impact of germination on phenolic composition, antioxidant properties, antinutritional factors, mineral content and Maillard reaction products of malted quinoa flour.	<i>Food Chemistry</i> 346,128915	Refereed	129	9.8
55.	2021	Kanchan Suri, Balwinder Singh, Amritpal Kaur, Narpinder Singh . Influence of dry air and infrared pre-treatments on oxidative stability, Maillard reaction products and other chemical properties of linseed (<i>Linum usitatissimum</i> L.) oil	<i>Journal of Food Science and Technology</i>	Refreed	32	3.3
56.	2021	Nisha Chaudhary, Amardeep Singh Viridi, Priya Dangi, Bhupendar Singh Khatkar, Ashok Kumar Mohanty, Narpinder Singh Protein, Thermal and Functional Properties of α -, γ - and ω -gliadins of wheat and their effect on bread making characteristics	<i>Food Hydrocolloids</i> 59, 366-376	Refereed	38	12.4
57.	2021	Amarbir Kaur, Balwinder Singh, Amritpal Kaur, Madhav P. Yadav, Narpinder Singh Impact of intermittent frying on chemical properties, fatty acid composition, and oxidative stability of 10 different vegetable oil blends	<i>Journal of Food Processing and Preservation</i>	Refereed	28	2.5
58.	2021	Mehak Katyal, Narpinder Singh* , Simarjit Kaur. Physicochemical, thermal and pasting properties of starch separated from various timely sown and delayed sown (heat stressed) wheat of different wheat lines/variety	<i>Starch/Starke</i>	Refereed	0	2.7
59.	2021	Manpreet Kaur, Balwinder Singh, Amritpal Kaur, Narpinder Singh Proximate, mineral, amino acid composition, phenolic profile, antioxidant and functional properties of oilseed cakes	<i>International Journal of Food Science and Technology (accepted)</i>	In Press	28	3.3
60.	2022	Mehak Katyal, Narpinder Singh* , Pooja Tiwari, R.S.S Kaler. Quality evaluation of different fractions of wheat flour obtained after air classification and stone grinding.	<i>Journal of Food Measurement and Characterization</i> ,	Refreed	1	3.4
61.	2021	Seerat Bhinder, Narpinder Singh* , Amritpal Kaur. Impact of germination on nutraceutical, functional and gluten free muffin making properties of Tartary buckwheat (<i>Fagopyrum tataricum</i>)	<i>Food Hydrocolloids</i>	Refereed	55	12.4
62.	2021	Ritika Bajaj, Narpinder Singh* , Atinder Ghumman, Amritpal Kaur and H. N. Mishra Effect of high-pressure treatment on structural, functional and in-vitro digestibility of starches from tubers, cereals and beans.	<i>Starch/Starke</i> ,	Refereed	38	2.7
63.	2021	Amandeep Kaur, Amardeep Singh Viridi, Narpinder Singh , Amandeep Singh, Raj Sukhwinder Singh Kaler. Effect of degree of milling and defatting on proximate composition, functional and texture characteristics of gluten-free muffin of bran of long-grain indica rice cultivars.	<i>Food Chemistry</i> 345,128861	Refereed	17	8.5
64.	2021	Sakshi Sharma, Narpinder Singh* , Mehak Katyal, Arvind Kumar Ahlawat, Anju Mahendru Singh. Comparison of effect of using hard and soft wheat on the high molecular weight glutenin subunits profile and the quality of produced cookies.	<i>Journal of Food Science and Technology</i>	Refereed	15	3.3

65.	2021	Amardeep Singh Virdi, Narpinder Singh , Kirat Khushwinder Bains, Amritpal Kaur. Effect of photoperiod and growth media on yield and antioxidant properties of wheatgrass juice of Indian wheat varieties	<i>Journal of Food Science and Technology</i>	Refereed	17	2.701
66.	2021`	Amrinder Singh, Shubham Thakur, Narpinder Singh , Satwinderjeet Kaur, and Subheet Kumar Jain. Novel Gellan Gum-Based In Situ Nanovesicle Formulation of Docetaxel for Its Localized Delivery Using Depot Formation	AAPS PharmSciTech	Refereed	14	3.3
67.	2021	Khetan Shevkani, Narpinder Singh , Naoto Isono, Takahiro Noda Structural and functional properties of amaranth starches from residue obtained during protein extraction.	<i>Journal of Food Measurement and Characterization</i>	Refereed	8	3.4
68.	2021	Khetan Shevkani, Manmeet Kaur, Narpinder Singh . Composition, pasting, functional, and microstructural properties of flours from different split dehulled pulses (dhals)	<i>Journal of Food Processing and Preservation</i>	Refereed	17	2.609
69.	2020	Shalini Trehan, Narpinder Singh , Amritpal Kaur. Diversity and relationship among grain, flour and starch characteristics of Indian Himalayan colored corn accessions.	<i>Journal of Food Science and Technology</i> 2020, 57, 3801–3813	Refereed	10	3.3
70.	2020	Amarbir Kaur, Balwinder Singh, Amritpal Kaur, Narpinder Singh . Changes in chemical properties and oxidative stability of refined vegetable oils during short-term deep-frying cycles.	<i>Journal of Food Processing and Preservation</i>	Refereed	37	2.609
71.	2020	Atinder Ghumman; Swasti Mudgal; Narpinder Singh* , Brajesh Ranjan; Amritpal Kaur; Jai C Rana, Physicochemical, functional and structural characteristics of grains, flour and protein isolates of Indian quinoa lines.	<i>Food Research International</i> , 140,109982	Refereed	43	8.0
72.	2020	Mohammed Saba Rahim. Ankita Mishra, Mehak Katyal, Sheetal Thakur, Monica Sharma, Pankaj Kumar, Afsana Parveen, Vandana Jaiswal, Narpinder Singh , Vinay Kumar, Raj Kumar Gupta, Himanshu Sharma, Joy Roy. Marker-trait association identified candidate starch biosynthesis pathway genes for starch and amylose–lipid complex gelatinization in wheat (<i>Triticum aestivum</i> L.)	<i>Euphytica</i>	Refereed	12	1.9
73.	2020	Nancydeep Kaur, Balwinder Singh, Amritpal Kaur, Madhav P Yadav, Narpinder Singh , Arvind K Ahlawat, Anju Mahendru-Singh. Effect of growing conditions on proximate, mineral, amino acid, phenolic composition and antioxidant properties of wheatgrass from different wheat (<i>Triticum aestivum</i> L.) varieties.	<i>Food Chemistry</i> , 341,128201	Refereed	67	9.8
74.	2021	Narpinder Singh* , Amardeep S Virdi, Mehak Katyal, AmritPal Kaur, Deepinder Kaur, Arvind K Ahlawat, Anju M singh, Ram K Sharma, Evaluation of heat stress through delayed sowing on physicochemical and functional characteristics of grains, whole meals and flours of India wheat.	<i>Food Chemistry</i> , 344,128725	Refereed	28	9.8
75.	2020	Amritpal Kaur, Balwinder Singh, Madhav P. Yadav, Seerat Bhinder and Narpinder Singh . Isolation of arabinoxylan and cellulose-rich arabinoxylan from wheat bran of different varieties and their functionalities.	<i>Food Hydrocolloids</i> 112,106287	Refereed	66	12.4
76.	2020	Kanchan Suri, Balwinder Singh, Amritpal Kaur, Madhav P Yadav, Narpinder Singh . Influence of	<i>Food Chemistry</i> , 344,126974	Refereed	218	8.5

		microwave roasting on chemical composition, oxidative stability and fatty acid composition of flaxseed (<i>Linum usitatissimum</i> L.) oil				
77.	2020	S Bhinder, A Kaur, B Singh, MP Yadav, Narpinder Singh . Proximate composition, amino acid profile, pasting and process characteristics of flour from different Tartary buckwheat varieties.	<i>Food Research International</i> , 120	Refereed	96	8.1
78.	2020	Supriya Kumari, Seerat Bhinder, Balwinder Singh, Amritpal Kaur and Narpinder Singh . Effect of buckwheat incorporation on batter fermentation, rheology, phenolic, amino acid composition and textural properties of idli.	<i>LWT-Food Science and Technology</i> , 122	Refereed	23	6
79.	2020	Mehak Katyal, Narpinder Singh* , Amardeep Singh Viridi, Amritpal Kaur, Arvind Kumar Ahlawat, Anju Mahendru Singh, Ritika Bajaj. Comparative analysis of native and defatted flour from hard, extraordinarily soft, and medium-hard wheat varieties for protein solvation, pasting, mixing, and dough rheological behavior.	<i>Journal of Food Science</i> , 85, 65-76	Refereed	14	3.4
80.	2019	Atinder Ghumman, Narpinder Singh* , Amritpal Kaur. Influence of sprouting on phenolic composition and starch characteristics of lentil and horse gram.	<i>International Journal of Food Science and Technology</i> , 55, 1744-1753	Refereed	5	3.3
81.	2019	AS Viridi, Narpinder Singh* , P Pal, P Kaur, A Kaur. Evaluation of head and broken rice of long grain Indica rice cultivars: Evidence for the role of starch and protein composition to head rice recovery.	<i>Food Research International</i> , 126, 108675	Refereed	17	8.0
82.	2019	Harmanpreet Singh, Jasvinder Singh, Shashank K. Singh, Narpinder Singh , Surinder Paul, Harminder Singh Sohal, Umesh Gupta & Subheet Kumar Jain. Vitamin E TPGS based palatable, oxidatively and physically stable emulsion of microalgae DHA oil for infants, children and food fortification	<i>Journal of Dispersion Science and Technology</i>	Refereed	12	2.2
83.	2019	Suri, K., Singh, B., Kaur, A., Narpinder Singh . Impact of roasting and extraction methods on chemical properties, oxidative stability and Maillard reaction products of peanut oils.	<i>Journal of Food Science and Technology</i> 56, 2436-2445	Refereed	111	3.1
84.	2019	H. Singh, S. Nathani, N. Singh, P. Roy, S. Paul, H.S. Sohal, S.K. Jain. Development and characterization of Solid-SNEDDS formulation of DHA using hydrophilic carrier with improved shelf life, oxidative stability and therapeutic activity	<i>Journal of Drug Delivery Science and Technology</i>	Refereed	31	3.1
85.	2019	Kirpal Singh, Narpinder Singh* , Arvinder Kaur, Amardeep Singh Viridi, Owias Iqbal Dar, Sunil Sharma. Functional properties and dynamic rheology of protein isolates extracted from male and female common carp (<i>Cyprinus carpio</i>) muscle subjected to pH-shifting method.	<i>Journal of Food Processing and Preservation</i> 43, e14181	Refereed	9	2.5
86.	2019	Amritpal Kaur, Madhav P. Yadav, Balwinder Singh, Seerat Bhinder, Stefanie Simon and Narpinder Singh . Isolation and characterization of arabinoxylans from wheat bran and study of their contribution to wheat flour dough rheology.	<i>Carbohydrate polymer</i> 221, 166-173	Refereed	76	12.5
87.	2019	Divya Mandial, Poonam Khullar, Vikas Gupta, Harsh Kumar, Narpinder Singh , Gurinder Kaur Ahluwalia, and Mandeep Singh Bakshi. Role of Gluten in Surface Chemistry: Nanometallic Bioconjugation of Hard, Medium, and Soft Wheat Protein.	<i>Journal of Agricultural and Food Chemistry</i> 67, 7886-7897	Refereed	7	6.1

88.	2019	Upasana Yadav, Narpinder Singh , Shalini Arora, Bindvi Arora. Physicochemical, pasting, and thermal properties of starches isolated from different adzuki bean (<i>Vigna angularis</i>) cultivars.	<i>Journal of Food Processing and Preservation</i> 43, e14163	Refereed	10	2.5
89.	2019	Kanchan Suri, Balwinder Singh, Amritpal Kaur, Madhav P. Yadav, Narpinder Singh . Impact of infrared and dry air roasting on the oxidative stability, fatty acid composition, Maillard reaction products and other chemical properties of black cumin (<i>Nigella sativa</i> L.) seed oil.	<i>Food Chemistry</i> 537-547	Refereed	140	9.8
90.	2019	Amarbir Kaur, Balwinder Singh, Amritpal Kaur, Narpinder Singh . Chemical, thermal, rheological and FTIR studies of vegetable oils and their effect on eggless muffin characteristics.	<i>Journal of Food Processing and Preservation</i> 43, e13978	Refereed	47	2.5
91.	2019	Narpinder Singh* , Hardeep Singh Gujral, Mehak Katyal, Bharati Sharma. Relationship of Mixolab characteristics with protein, pasting, dynamic and empirical rheological characteristics of flours from Indian wheat varieties with diverse grain hardness.	<i>Journal of Food Science and Technology</i> , 56, 2679-2686	Refereed	23	3.1
92.	2019	Rubinder Singh Sandhu, Narpinder Singh* , RSS Kaler, Baljit Singh. Optimization of process parameters for preparation of rice extrudates from short and long Indica rice cultivars milled to varying degree of milling.	<i>Journal of Food Science and Technology</i> , 56, 2467-2479	Refereed	7	3.1
93.	2019	Atinder Ghumman, Narpinder Singh , Amritpal Kaur, Jai Chand Rana. Diversity in protein secondary structure, molecular weight, mineral and amino acid composition of lentil and horse gram germplasm.	<i>Journal of Food Science and Technology</i> , 56, 1601-1612	Refereed	18	3.1
94.	2019	Khetan Shevkani, Narpinder Singh , Bhaskar Rattan, Jatinder Pal Singh, Amritpal Kaur, Baljit Singh. Effect of chickpea and spinach on extrusion behavior of corn grit.	<i>Journal of Food Science and Technology</i> , 56, 2257-2266	Refereed	28	3.1
95.	2019	Mehak Katyal, Narpinder Singh* , Amardeep S Virdi, Amritpal Kaur, Nidhi Chopra, Shivam Agarwal, Joy K Roy. Effect of debranning on grains and meal characteristics of different Indian and exotic wheat varieties.	<i>Food Research International</i> , 123, 327-339	Refereed	10	8.0
96.	2019	Ritika Bajaj, Narpinder Singh* , Amritpal Kaur. Properties of octenyl succinic anhydride (OSA) modified starches and their application in low fat mayonnaise.	<i>International Journal of Biological Macromolecules</i> , 131, 147-157	Refereed	106	8.2
97.	2019	Jatinder Pal Singh, Amritpal Kaur*, Balwinder Singh, Narpinder Singh , Baljit Singh. Physicochemical evaluation of corn extrudates containing varying buckwheat flour levels prepared at various extrusion temperatures.	<i>Journal of Food Science and Technology</i> , 56, 2205-2212	Refereed	42	3.1
98.	2019	Mehak Katyal, Amritpal Kaur, Narpinder Singh . Evaluation of pasting and dough rheological properties of composite flours made from flour varied in gluten strength.	<i>Journal of Food Science and Technology</i> , 2700-2711	Refereed	12	3.1
99.	2019	Mehak Katyal, Narpinder Singh* , Harmeet Singh. Effects of incorporation of groundnut oil and hydrogenated fat on pasting and dough rheological properties of flours from wheat varieties.	<i>Journal of Food Science and Technology</i> , 56, 1056-1065	Refereed	11	3.3
100.	2019	Seerat Bhinder, Balwinder Singh, Amritpal Kaur, Narpinder Singh , Manpreet Kaur, Supriya Kumari and Madhav P. Yadav. Effect of infrared roasting on antioxidant activity, phenolic composition and	<i>Food Chemistry</i> , 2019, 285, 240-251	Refereed	117	9.8

		maillard reaction products of Tartary buckwheat varieties.				
101.	2019	Mehak Katyal, Narpinder Singh* , Nidhi Chopra, Amritpal Kaur. Hard, medium-hard and extraordinarily soft wheat varieties: Comparison and relationship between various starch properties.	<i>International Journal of Biological Macromolecules</i> , 123, 1143-1149	Refereed	40	8.2
102.	2019	Ritika Bajaj, Narpinder Singh* , Amritpal Kaur. Effect of native and gelatinized starches from various sources on sponge cake making characteristics of wheat flour.	<i>Journal of Food Science and Technology</i> , 56, 1046-1055	Refereed	18	3.1
103.	2018	Rajpreet Kaur, Poonam Khullar, Aabroo Mahal, Anita Gupta, Narpinder Singh , Gurinder Kaur Ahluwalia, Mandeep Singh Bakshi. Keto-Enol Tautomerism of Temperature and pH Sensitive Hydrated Curcumin Nanoparticles: Their Role as Nanoreactors and Compatibility with Blood Cells.	<i>Journal of Agricultural and Food Chemistry</i> , 66, 11974 -11980	Refereed	27	6.1
104.	2018	Divya Mandial, Poonam Khullar, Aabroo Mahal, Harsh Kumar, Narpinder Singh , Gurinder Kaur Ahluwalia, Mandeep Singh Bakshi. Applications of rice protein in nanomaterials synthesis, nanocolloids of rice protein, and bioapplicability.	<i>International Journal of Biological Macromolecules</i> , 120, 394-404	Refereed	21	8.2
105.	2018	Mehak Katyal, Amardeep Singh Viridi, Narpinder Singh* , Nidhi Chopra, Amritpal Kaur, Arvind Kumar Ahlawat, Anju Mahendru Singh. Fractionation and grain hardness effect on protein profiling, pasting and rheological properties of flours from medium-hard and extraordinarily soft wheat varieties.	<i>Journal of Food Science and Technology</i> , 55, 4661-4674	Refereed		3.1
106.	2018	Rubinder Singh Sandhu, Narpinder Singh* , R.S.S. Kaler, Amritpal Kaur, Khetan Shevkani. Effect of degree of milling on physicochemical, structural, pasting and cooking properties of short and long grain Indica rice cultivars.	<i>Food Chemistry</i> , 2018, 260, 231-238	Refereed	91	9.8
107.	2018	Parmeet Kaur, Narpinder Singh* , Priyanka Pal, Amritpal Kaur. Variation in composition, protein and pasting characteristics of different pigmented and non pigmented rice (Oryza sativa L.) grown in Indian Himalayan region.	<i>Journal of Food Science and Technology</i> , 55, 3809-3820	Refereed	32	3.3
108.	2018	Parmeet Kaur, Narpinder Singh* , Priyanka Pal, Amritpal Kaur. Traditional and improved paddy varieties: Composition, protein, pasting, and gluten-free 30hapatti making properties.	<i>Cereal Chemistry</i> , 95, 666-678	Refereed	10	2.5
109.	2018	Priyanka Pal, Narpinder Singh* , Parmeet Kaur, Amritpal Kaur. Effect of parboiling on phenolic, protein, and pasting properties of rice from different paddy varieties.	<i>Journal of Food Science</i> , 83, 2761-2771	Refereed	35	3.1
110.	2018	Ritika Bajaj, Narpinder Singh* , Amritpal Kaur, Naoyoshi Inouchi. Structural, morphological, functional and digestibility properties of starches from cereals, tubers and legumes: a comparative study.	<i>Journal of Food Science and Technology</i> , 55, 3799-3808	Refereed	111	3.1
111.	2018	Shalini Trehana, Narpinder Singh* , Amritpal Kaur. Characteristics of white, yellow, purple corn accessions: phenolic profile, textural, rheological properties and muffin making potential.	<i>Journal of Food Science & Technology</i> , 55, 2334-2343	Refereed	46	3.3
112.	2018	Narpinder Singh , Mehak Katyal, Amardeep Singh Viridi, Amritpal Kaur, Annu Goyal, Arvind Kumar Ahlawat, Anju Mahendru Singh. Effect of grain hardness, fractionation and cultivars on protein, pasting and dough rheological properties of different wheat flours.	<i>International Journal of Food Science & Technology</i> , 53, 2077-2087	Refereed	13	3.1

113.	2018	Harmanpreet Singh, Chateshwar Kumar, Narpinder Singh , Surinder Paul, Subheet Kumar Jain. Nanoencapsulation of Docosahexanoic acid (DHA) using combination of food grade polymeric wall materials and its application for improvement in bioavailability and oxidative stability.	<i>Food & Function</i> , 9, 1-16	Refereed	39	5.4
114.	2018	Mehak Katyal, Amardeep Singh Viridi, Narpinder Singh* , Amritpal Kaur, J. C. Rana, Jyoti Kumari. Diversity in protein profiling, pasting, empirical and dynamic dough rheological properties of meal from different durum wheat accessions.	<i>Journal of Food Science and Technology</i> , 55, 1256-1269	Refereed	11	3.3
115.	2018	Upasana Yadav, Narpinder Singh , Amritpal Kaur, Sheetal Thakur. Physico-chemical, hydration, cooking, textural and pasting properties of different adzuki bean (<i>Vigna angularis</i>) accessions.	<i>Journal of Food Science and Technology</i> . 55, 802-810	Refereed	40	3.3
116.	2018	Narpinder Singh* , Amritpal Kaur, Khetan Shevkani, Rajrathnam Ezekiel, Prabhjot Kaur, Naoto Isono, Takahiro Noda. Structural, morphological, thermal, and pasting properties of starches from diverse Indian potato cultivars.	<i>Starch/Starke</i> , 70, 3-4 cccb	Refereed	37	2.7
117.	2017	Mehak Katyal, Narpinder Singh* , Amardeep Singh Viridi, Amritpal Kaur, Nidhi Chopra, Arvind Kumar Ahlawat, Anju Mahendru Singh. Extraordinarily soft, medium-hard and hard Indian wheat varieties: Composition, protein profile, dough and baking properties.	<i>Food Research International</i> , 100, 306-317	Refereed	42	8.0
118.	2017	Sheetal Thakur, Narpinder Singh* , Amritpal Kaur. Characteristics of normal and waxy corn: Physicochemical, protein secondary structure, dough rheology and chapatti making properties.	<i>Journal of Food Science and Technology</i> , 54, 3285-3296	Refereed	15	3.3
119.	2017	Naincy Parmar, Narpinder Singh* , Amritpal Kaur, Amardeep Singh Viridi, and Khetan Shevkani. Protein and microstructure evaluation of harder-to-cook and easy-to-cook grains from different kidney bean accessions.	<i>LWT-Food Science and Technology</i> , 79, 487-495	Refereed	35	6
120.	2017	Atinder Ghumman, Narpinder Singh* , Amritpal Kaur. Chemical, nutritional and phenolic composition of wheatgrass and pulse shoots.	<i>International Journal of Food Science and Technology</i> , 52, 2191-2200	Refereed	56	3.3
121.	2017	Naincy Parmar, Narpinder Singh* , Amritpal Kaur, Sheetal Thakur. Comparison of color, anti-nutritional factors, minerals, phenolic profile and protein digestibility between hard-to-cook and easy-to-cook grains from different kidney bean (<i>Phaseolus vulgaris</i>) accessions.	<i>Journal of Food Science and Technology</i> , 54, 1023-1034	Refereed	68	3.3
122.	2017	Sheetal Thakur, Narpinder Singh* , Amritpal Kaur, Baljit Singh. Effect of extrusion on physicochemical properties, digestibility, and phenolic profiles of grit fractions obtained from dry milling of normal and waxy corn.	<i>Journal of Food Science</i> , 82, 1101-1109	Refereed	44	3.3
123.	2017	Narpinder Singh* , Navneet Kaur, Mehak Katyal, Amritpal Kaur, Khetan Shevkani. Characteristics of starch separated from coarse and fine flour fractions obtained from hard, medium-hard, and soft Indian wheat cultivars.	<i>Starch/Starke</i> , 69, 1-2	Refereed	11	2.7
124.	2017	Mehak Katyal, Narpinder Singh , Nidhi Chopra, Amritpal Kaur. Modeling flour and dough quality of Indian wheat varieties.	<i>Journal of Food Processing and Preservation</i> , 41(4)-e13074	Refereed	0	2.5

125.	2017	Barinderjit Singh, Narpinder Singh* , Sheetal Thakur, Amritpal Kaur. Ultrasound assisted extraction of polyphenols and their distribution in whole mung bean, hull and cotyledon.	<i>Journal of Food Science and Technology</i> , 54, 921–932	Refereed	68	3.3
126.	2016	Atinder Ghumman, Amritpal Kaur, Narpinder Singh* , Baljit Singh. Effect of feed moisture and extrusion temperature on protein digestibility and extrusion behaviour of lentil and horsegram.	<i>LWT – Food Science and Technology</i> , 70, 349–357	Refereed	63	6.6
127.	2016	Priyanka Pal, Narpinder Singh* , Parmeet Kaur, Amritpal Kaur, Amardeep Singh Viridi, Naincy Parmar. Comparison of composition, protein, pasting, and phenolic compounds of brown rice and germinated brown rice from different cultivars.	<i>Cereal Chemistry</i> , 93, 584-592	Refereed	53	2.5
128.	2016	Shagun Sharma, Narpinder Singh* , Mehak Katyal. Effect of gelatinized-retrograded and extruded starches on characteristics of cookies, muffins and noodles.	<i>Journal of Food Science and Technology</i> , 53, 2482-2491	Refereed	25	3.1
129.	2016	Amritpal Kaur, Atinder Ghumman, Narpinder Singh* , Amardeep Singh Viridi, Seeratpreet Kaur, Gurbir Singh Riar, Gulshan Mahajan. Effect of different doses of nitrogen on protein profiling, pasting and quality attributes of rice from different cultivars.	<i>Journal of Food Science and Technology</i> , 53, 2452-2462	Refereed	17	3.1
130.	2016	Naincy Parmar, Narpinder Singh* , Amritpal Kaur, Amardeep Singh Viridi, Sheetal Thakur. Effect of canning on color, protein and phenolic profile of grains from kidney bean, field pea and chickpea.	<i>Food Research International</i> , 89, 526-532	Refereed	47	8.0
131.	2016	Jatinder Pal Singh, Amritpal Kaur, Khetan Shevkani, Narpinder Singh* . Composition, bioactive compounds and antioxidant activity of common Indian fruits and vegetables.	<i>Journal of Food Science and Technology</i> , 53, 4056–4066	Refereed	140	3.3
132.	2016	Parmeet Kaur, Priyanka Pal, Amardeep Singh Viridi, Amritpal Kaur, Narpinder Singh* , and Gulshan Mahajan. Protein and starch characteristics of milled rice from different cultivars affected by transplantation date.	<i>Journal of Food Science and Technology</i> , 53, 3186-3196	Refereed	31	3.3
133.	2016	Atinder Ghumman, Amritpal Kaur, Narpinder Singh* . Functionality and digestibility of albumins and globulins from lentil and horse gram and their effect on starch rheology.	<i>Food Hydrocolloids</i> , 61, 843-850	Refereed	94	12.4
134.	2016	Priyanka Pal, Parmeet Kaur, Narpinder Singh* , Amrit Pal Kaur, N. N. Misra, Brijesh Kumar Tiwari, Patrick Joseph Cullen, Amardeep Singh Viridi. Effect of nonthermal plasma on physico-chemical, amino acid composition, pasting and protein characteristics of short and long grain rice flour.	<i>Food Research International</i> , 81, 50-57	Refereed	133	8.0
135.	2016	Jatinder Pal Singh, Amritpal Kaur, Khetan Shevkani, Narpinder Singh , Baljit Singh. Physicochemical characterisation of corn extrudates prepared with varying levels of beetroot (<i>Beta vulgaris</i>) at different extrusion temperatures.	<i>International Journal of Food Science and Technology</i> , 51, 911-919	Refereed	67	3.3
136.	2016	Jatinder Pal Singh, Amritpal Kaur, Narpinder Singh* . Development of eggless gluten-free rice muffins utilizing black carrot dietary fibre concentrate and xanthan gum.	<i>Journal of Food Science and Technology</i> , 53, 1269-1278	Refereed	129	3.3
137.	2016	Narpinder Singh* , Amritpal Kaur, Mehak Katyal, Seerat Bhinder, Arvind Kumar Ahlawat, Anju Mahendru Singh. Diversity in quality traits amongst	<i>Food Chemistry</i> , 194, 316-324	Refereed	61	8.5

		Indian wheat varieties II: Paste, dough and muffin making properties.				
138.	2016	Mehak Katyal, Amardeep Singh Viridi, Amritpal Kaur, Narpinder Singh* , Seeratpreet Kaur, Arvind Kumar Ahlawat, Anju Mahendru Singh. Diversity in quality traits amongst Indian wheat varieties I: Flour and protein characteristics.	<i>Food Chemistry</i> , 194, 337-344.	Refereed	70	8.5
139.	2016	Atinder Ghumman, Amritpal Kaur and Narpinder Singh* . Impact of germination on flour, protein and starch characteristics of lentil (<i>Lens 33hapatti</i>) and horsegram (<i>Macrotyloma uniflorum</i> L.) lines.	<i>LWT- Food Science and Technology</i> , 65, 137-144	Refereed	94	6.6
140.	2016	Jatinder Pal Singh, Amritpal Kaur, Narpinder Singh* , Lovedeep Nim, Khetan Shevkani, Harpreet Kaur, Daljit Singh Arora. In vitro antioxidant and antimicrobial properties of jambolan (<i>Syzygium cumini</i>) fruit polyphenols.	<i>LWT- Food Science and Technology</i> , 65, 1025-1030	Refereed	173	6.6
141.	2016	Amritpal Kaur, Khetan Shevkani, Mehak Katyal, Narpinder Singh , Arvind Kumar Ahlawat, Anju Mahendru Singh. Physicochemical and rheological properties of starch and flour from different durum wheat varieties and their relationships with noodle quality.	<i>Journal of Food Science and Technology</i> , 53, 2127-2138	Refereed	98	3.1
142.	2015	Shagun Sharma, Narpinder Singh* , Amardeep Singh Viridi, Jai Chand Rana. Himalayan kidney bean germplasm: Grain-flour characteristics, structural-functional properties and in-vitro digestibility of starches.	<i>Food Research International</i> , 77, 498-505.	Refereed	28	8.0
143.	2015	Khetan Shevkani, Narpinder Singh* , Amritpal Kaur, Jai Chand Rana. Structural and functional characterization of kidney bean and field pea protein isolates: A comparative study.	<i>Food Hydrocolloids</i> , 43, 679-689	Refereed	642	12.4
144.	2015	Amritpal Kaur, Khetan Shevkani, Narpinder Singh* , Parul Sharma, Seeratpreet Kaur. Effect of guar gum and xanthan gum on pasting and noodle-making properties of potato, corn and mung bean starches.	<i>Journal of Food Science and Technology</i> , 52, 8113-8121	Refereed	135	3.3
145.	2015	Amritpal Kaur, Khetan Shevkani, Mehak Katyal, Narpinder Singh* , Arvind Kumar Ahlawat, Anju Mahendru Singh. Relationship of various flour properties with noodle making characteristics among durum wheat varieties.	<i>Food Chemistry</i> , 188, 517-526	Refereed	76	8.5
146.	2015	Khetan Shevkani, Amritpal Kaur, Shresth Kumar, Narpinder Singh* . Cowpea protein isolates: Functional properties and application in gluten-free rice muffins.	<i>LWT- Food Science and Technology</i> , 63, 927-933	Refereed	192	6.6
147.	2015	Sheetal Thakur, Amritpal Kaur, Narpinder Singh* , Amardeep Singh Viridi. Successive Reduction Dry Milling of Normal and Waxy Corn: Grain, Grit, and Flour Properties.	<i>Journal of Food Science</i> 80, C1144-C1155	Refereed	18	3.4
148.	2015	Shagun Sharma, Narpinder Singh* , Baljit Singh. Effect of extrusion on morphology, structural, functional properties and <i>in vitro</i> digestibility of corn, field pea and kidney bean starches.	<i>Starch/Starke</i> , 67, 721-728	Refereed	75	2.7
149.	2015	Shagun Sharma, Narpinder Singh* , Amardeep Singh Viridi, Jai Chand Rana. Quality traits analysis and protein profiling of field pea (<i>Pisum sativum</i>) germplasm from Himalayan region.	<i>Food Chemistry</i> , 172, 528-536	Refereed	11	9.8
150.	2015	N. N. Misra, Seeratpreet Kaur, Brijesh K Tiwari, Amritpal Kaur, Narpinder Singh , P.J. Cullen.	<i>Food Hydrocolloids</i> , 44, 115-121	Refereed	317	12.4

		Atmospheric pressure cold plasma (ACP) treatment of wheat flour.				
151.	2014	Naincy Parmar, Amardeep Singh Viridi, Narpinder Singh* , Amritpal Kaur, Ritika Bajaj, Jai Chand Rana, Lalit Agrawal, Chandra Shekhar Nautiyal. Evaluation of physicochemical, textural, mineral and protein characteristics of kidney bean grown at Himalayan region.	<i>Food Research International</i> , 66, 45-57	Refereed	23	8.0
152.	2015	Khetan Shevkani, Narpinder Singh* . Relationship between protein characteristics and film-forming properties of kidney bean, field pea and amaranth protein isolates.	<i>International Journal of Food Science and Technology</i> , 50, 1033-1043	Refereed	65	3.3
153.	2015	Jatinder Pal Singh, Amritpal Kaur, Khetan Shevkani, Narpinder Singh . Influence of jambolan (<i>Syzygium cumini</i>) and xanthan gum incorporation on the physicochemical, antioxidant and sensory properties of gluten-free eggless rice muffins.	<i>International Journal of Food Science and Technology</i> , 50, 1190-1197	Refereed	134	3.3
154.	2015	Amritpal Kaur, Seeratpreet Kaur, Mrinal Singh, Narpinder Singh* , Khetan Shevkani, Baljit Singh. Effect of banana flour, screw speed and temperature on extrusion behaviour of corn extrudates.	<i>Journal of Food Science and Technology</i> , 52, 4276-4285	Refereed	52	3.1
155.	2014	Khetan Shevkani, Narpinder Singh* , Amritpal Kaur, Jai Chand Rana. Physicochemical, Pasting, and Functional Properties of Amaranth Seed Flours: Effects of Lipids Removal.	<i>Journal of Food Science</i> , 79, C1271-C1277	Refereed	80	3.1
156.	2014	Amritpal Kaur, Narpinder Singh* , Seeratpreet Kaur, Arvind Kumar Ahlawat, Anju Mahendru Singh. Relationships of flour solvent retention capacity, secondary structure and rheological properties with the cookie making characteristics of wheat cultivars.	<i>Food Chemistry</i> , 158, 48-55	Refereed	88	9.8
157.	2014	Khetan Shevkani, Amritpal Kaur, Gurtejbir Singh, Baljeet Singh, Narpinder Singh* . Composition, Rheological and Extrusion Behaviour of Fractions Produced by Three Successive Reduction Dry Milling of Corn.	<i>Food and Bioprocess Technology</i> , 7, 1414-1421	Refereed	37	5.6
158.	2014	Khetan Shevkani, Narpinder Singh* . Influence of kidney bean, field pea and amaranth protein isolates on the characteristics of starch-based gluten-free muffins.	<i>International Journal of Food Science and Technology</i> , 49, 2237-2244	Refereed	158	3.3
159.	2014	Narpinder Singh* , Khetan Shevkani, Amritpal Kaur, Sheetal Thakur, Naincy Parmar, Amardeep Singh Viridi. Characteristics of starch obtained at different stages of purification during commercial wet milling of maize.	<i>Starch/Stärke</i> , 66, 668-677	Refereed	74	2.7
160.	2014	Narpinder Singh* , Priyanka Paul, Amardeep Singh Viridi, Parmeet Kaur, Gulshan Mahajan. Influence of early and delayed transplantation of paddy on physicochemical, pasting, cooking, textural, and protein characteristics of milled rice.	<i>Cereal Chemistry</i> , 91, 389-397	Refereed	42	2.5
161.	2014	Narpinder Singh* , Shubhpreet Kaur, Amritpal Kaur, Naoto Isono, Yuya Ichihashi, Takahiro Noda, Jai Chand Rana. Structural, thermal, and rheological properties of <i>Amaranthus hypochondriacus</i> and <i>Amaranthus caudatus</i> starches.	<i>Starch/Stärke</i> , 66, 457-467	Refereed	38	2.7
162.	2014	Khetan Shevkani, Narpinder Singh* , Jai Chand Rana, Amritpal Kaur. Relationship between physicochemical and functional properties of amaranth (<i>Amaranthus hypochondriacus</i>) protein isolates.	<i>International Journal of Food Science and Technology</i> , 49, 541-550	Refereed	115	3.3

163.	2013	Amritpal Kaur, Parmeet Kaur, Narpinder Singh* , Amardeep Singh Viridi, Prabhjeet Singh, Jai Chand Rana. Grains, starch and protein characteristics of rice bean (<i>Vigna umbellata</i>) grown in Indian Himalaya regions.	<i>Food Research International</i> , 102-110	Refereed	37	8.0
164.	2013	Sandeep Singh, Narpinder Singh* . Relationship of polymeric proteins and empirical dough rheology with dynamic rheology of dough and gluten from different wheat varieties.	<i>Food Hydrocolloids</i> , 33, 342-348	Refereed	133	12.4
165.	2013	Amritpal Kaur, Narpinder Singh* , Arvind Kumar Ahlawat, Seeratpreet Kaur, Anju Mahendru Singh, Harshita Chauhan, Gyanendra Pratap Singh. Diversity in grain, flour, dough and gluten properties amongst Indian wheat cultivars varying in high molecular weight subunits (HMW-GS).	<i>Food Research International</i> , 53, 63-72	Refereed	85	8.0
166.	2013	Aabroo Mahal, Poonam Khullar, Harsh Kumar, Gurinder Kaur, Narpinder Singh , Masoud Jelokhani-Niaraki, and Mandeep Singh Bakshi. Green chemistry of zein protein toward the synthesis of bioconjugated nanoparticles: Understanding unfolding, fusogenic 35hapatiti35, and hemolysis.	<i>ACS Sustainable Chemistry and Engineering</i> , 1, 627-639	Refereed	73	8.4
167.	2013	Seeratpreet Kaur, Narpinder Singh* , Amritpal Kaur, Navdeep Singh Sodhi. Effect of shearing on functional properties of starches isolated from Indian kidney beans.	<i>Starch/Starke</i> , 65, 808-813	Refereed	17	2.7
168.	2013	Harpreet Kaur, Tarlok Singh Banipal, Sourbh Thakur, Mandeep Singh Bakshi, Gurinder Kaur, Narpinder Singh . Novel biodegradable films with extraordinary tensile strength and flexibility provided by nanoparticles.	<i>ACS Sustainable Chemistry and Engineering</i> , 1, 127-136	Refereed	34	8.4
169.	2012	Narpinder Singh* , Seeratpreet Kaur, Jai Chand Rana, Yoshiko Nakaura, Naoyoshi Inouchi. Isoamylase debranched fractions and granule size in starches from kidney bean germplasm: Distribution and relationship with functional properties.	<i>Food Research International</i> , 47, 174-181	Refereed	22	8.0
170.	2012	Narpinder Singh* , Seeratpreet Kaur, Naoto Isono, Yuya Ichihashi, Takahiro Noda, Amritpal Kaur, Jai Chand Rana. Diversity in characteristics of starch amongst rice bean (<i>Vigna umbellata</i>) germplasm: Amylopectin structure, granules size distribution, thermal and rheology.	<i>Food Research International</i> , 46, 194-200	Refereed	16	8.0
171.	2012	Harinder Singh, Navdeep Singh Sodhi, Narpinder Singh . Structure and functional properties of acetylated sorghum starch.	<i>International Journal of Food Properties</i> , 15, 312-325	Refereed	48	3.9
172.	2011	Khetan Shevkani, Narpinder Singh* , Sandeep Singh, Arvind Kumar Ahlawat, Anju Mahendru Singh. Relationship between physicochemical and rheological properties of starches from Indian wheat lines.	<i>International Journal of Food Science and Technology</i> , 46, 2584-2590	Refereed	56	3.3
173.	2011	Maninder Kaur, Kawaljit Singh Sandhu, Narpinder Singh , Seung-Taite Lim. Amylose content, molecular structure, physicochemical properties and in vitro digestibility of starches from different mung bean (<i>Vigna radiata</i> L.) cultivars.	<i>Starch/Starke</i> , 63, 709-716	Refereed	41	2.7
174.	2011	Harinder Singh, Yung Ho Chang, Jheng-Hua Lin, Navdeep Singh, Narpinder Singh . Influence of heat-moisture treatment and annealing on functional properties of sorghum starch.	<i>Food Research International</i> , 44, 2949- 2954	Refereed	110	8.0

175.	2011	Tanima Dutta, Harsimran Kaur, Sandeep Singh, Akanksha Mishra, Jayant K Tripathy, Narpinder Singh , Ashwani Pareek, Prabhjeet Singh. Developmental changes in storage proteins and peptidyl prolyl cis-trans isomerase activity in grains of different wheat cultivars.	<i>Food Chemistry</i> , 128, 450-457	Refereed	10	9.8
176.	2011	Harinder Singh, Yung-Ho Chang, Navdeep Singh Sodhi, Narpinder Singh . Influence of prior acid treatment on physicochemical and structural properties of acetylated sorghum starch.	<i>Starch/Starke</i> , 63, 291-301	Refereed	29	2.7
177.	2011	Narpinder Singh* Nisha Pal, Gulshan Mahajan, Sandeep Singh, Khetan Shevkani. Rice grain and starch properties: Effects of nitrogen fertilizer application.	<i>Carbohydrate Polymers</i> , 86, 219-225	Refereed	126	12.5
178.	2011	Sandeep Singh, Narpinder Singh* , Finley MacRitchie. Relationship of polymeric proteins with pasting, gel dynamic- and dough empirical-rheology in different Indian wheat varieties.	<i>Food Hydrocolloids</i> 25, 19-24	Refereed	95	12.4
179.	2011	Sandeep Singh, Narpinder Singh* , R. Ezekiel, Amritpal Kaur. Effects of gamma-irradiation on the morphological, structural, thermal and rheological properties of potato starches.	<i>Carbohydrate Polymers</i> , 2011, 83, 1521-1528	Refereed	122	12.5
180.	2011	Mandeep S Bakshi, Harpreet Kaur, Poonam Khullar, Tarlok S Banipal, Gurinder Kaur, Narpinder Singh . Protein Films of Bovine Serum Albumen Conjugated Gold Nanoparticles: A Synthetic Route from Bioconjugated Nanoparticles to Biodegradable Protein Films.	<i>Journal of Physical Chemistry C</i> , 2011, 115, 2982-2992, ACS publication.	Refereed	36	3.7
181.	2010	Sandeep Singh, Narpinder Singh* , Naoto Isono, Takahiro Noda. Relationship of granule size distribution and amylopectin structure with pasting, thermal, and retrogradation properties in wheat starch.	<i>Journal of Agricultural and Food Chemistry</i> , 2010, 58, 1180-1188	Refereed	314	6.1
182.	2010	Narpinder Singh , Dominique M R Georget, Peter S Belton, Susan A Barker. Physical properties of zein films containing salicylic acid and acetyl salicylic acid.	<i>Journal of Cereal Science</i> , 2010, 52, 282-287	Refereed	37	3.7
183.	2010	Mandeep Singh Bakshi, Harpreet Kaur, Tarlok Singh Banipal, Narpinder Singh , Gurinder Kaur. Biomineralization of gold nanoparticles by lysozyme and cytochrome c and their applications in protein film formation.	<i>Langmuir</i> , 2010, 26, 13535-13544	Refereed	58	3.9
184.	2010	Rajarithnam Ezekiel, Gauri Rana, Narpinder Singh , Satinder Singh. Physico-chemical and pasting properties of starch from stored potato tubers.	<i>Journal of Food Science and Technology</i> , 2010, 47, 195-201	Refereed	18	3.1
185.	2010	Sandeep Singh, Narpinder Singh* . Effect of debranning on the physico-chemical, cooking, pasting and textural properties of common and durum wheat varieties.	<i>Food Research International</i> , 2010, 43, 2277-2283	Refereed	41	8.1
186.	2010	Shubhpreet Kaur, Narpinder Singh* , Jai Chand Rana. <i>Amaranthus hypochondriacus</i> and <i>Amaranthus caudatus</i> germplasm: Characteristics of plants, grain and flours.	<i>Food Chemistry</i> , 2010, 123, 1227-1234	Refereed	56	9.8
187.	2010	Narpinder Singh* , Shubhpreet Kaur, Naoto Isono, Takahiro Noda. Genotypic diversity in physico-chemical, pasting and gel textural properties of chickpea (<i>Cicer arietinum</i> L.).	<i>Food Chemistry</i> , 2010, 122, 65-73	Refereed	34	9.8
188.	2010	Narpinder Singh* , Navpreet Kaur, Jai Chand Rana, Shyam Kumar Sharma. Diversity in seed and flour	<i>Food Chemistry</i> , 2010, 122, 518-525	Refereed	52	9.8

		properties in field pea (<i>Pisum sativum</i>) germplasm.				
189.	2010	Harinder Singh, Navdeep Singh Sodhi, Narpinder Singh . Characterisation of starches separated from sorghum cultivars grown in India.	<i>Food Chemistry</i> , 2010, 119, 95-100	Refereed	68	9.8
190.	2009	Seeratpreet Kaur, Narpinder Singh* , Navdeep Singh Sodhi, Jai Chand Rana. Diversity in properties of seed and flour of kidney bean germplasm.	<i>Food Chemistry</i> , 2009, 117, 282-289	Refereed	49	9.8
191.	2009	Narpinder Singh* , Sandeep Singh, Naoto Isono, Takahiro Noda, Anju Mahendru Singh. Diversity in amylopectin structure, thermal and pasting properties of starches from wheat varieties/lines.	<i>International Journal of Biological Macromolecules</i> , 2009, 45, 298-304	Refereed	81	8.5
192.	2009	Narpinder Singh* , Peter S. Belton, Dominique M R Georget. The effects of iodine on kidney bean starch: Films and pasting properties.	<i>International Journal of Biological Macromolecules</i> , 2009, 45, 116-119	Refereed	22	8.5
193.	2009	Narpinder Singh* , Dominique Georget, Peter Belton, Susan Barker. Zein-iodine complex studied by FTIR spectroscopy and dielectric and dynamic rheometry in films and precipitates.	<i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 4334-4341	Refereed	39	6.1
194.	2009	Amrit Pal Kaur, Narpinder Singh* , Rajarathnam Ezekiel, Navdeep Singh Sodhi. Properties of starches separated from potatoes stored under different conditions.	<i>Food Chemistry</i> , 2009, 114, 1396-1404	Refereed	70	9.8
195.	2009	Harinder Singh, Navdeep Singh Sodhi, Narpinder Singh . Structure and functional properties of acid thinned sorghum starch.	<i>International Journal of Food Properties</i> , 2009, 12, 713-725	Refereed	90	3.9
196.	2009	Narpinder Singh* , Richa Bedi, Rhythm Garg, Mukti Garg, Jghmohan Singh. Physico-chemical, thermal and pasting properties of fractions obtained during three successive reduction milling of different corn types.	<i>Food Chemistry</i> , 113, 71-77	Refereed	17	9.8
197.	2009	Normell Jhoe E de Mesa, Sajid Alavi, Narpinder Singh , Yong-Chen Shi, Hulya Dogan, Yijun Sang. Soy protein-fortified expanded extrudates: Baseline study using normal corn starch.	<i>Journal of Food Engineering</i> , 90, 262-270	Refereed	118	5.8
198.	2008	Amritpal Kaur, Narpinder Singh* , Rajarathnam Ezekiel. Quality parameters of potato chips from different potato cultivars: Effect of prior storage and frying temperatures.	<i>International Journal of Food Properties</i> , 11, 1-12	Refereed	21	3.9
199.	2008	Narpinder Singh* , Yoshiko Nakaura, Naoyoshi Inouchi, Katsuyoshi Nishinari. Structure and viscoelastic properties of starches separated from different legumes.	<i>Starch/Starke</i> , 60, 349-357	Refereed	66	2.7
200.	2008	Sandeep Singh, Gurpreet Singh, Prabhjeet Singh, Narpinder Singh* . Effect of water stress at different stages of grain development on the characteristics of starch and protein of different wheat varieties.	<i>Food Chemistry</i> , 2008, 108, 130-139	Refereed	114	9.8
201.	2008	Narpinder Singh* , Naoto Isono, Sathaporn Srichuwong, Takahiro Noda, Katsuyoshi Nishinari. Structural, thermal and viscoelastic properties of potato starches.	<i>Food Hydrocolloids</i> , 22, 979-988	Refereed	77	12.4
202.	2008	Kawaljit Singh Sandhu, Maninder Kaur, Narpinder Singh , Seung-Taik Lim. A comparison of native and oxidized normal and waxy corn starches: Physicochemical, thermal, morphological and pasting properties.	<i>LWT-Food Science and Technology</i> , 2008, 41, 1000-1010	Refereed	201	6.6
203.	2008	Vani Aggarwal, Narpinder Singh* , Sukhdev Singh Kamboj. Preparation and characterization of acid	<i>Journal of Food Science and</i>	Refereed	1	3.3

		modified starch from mung and pea cultivars.	<i>Technology</i> , 45, 143-147			
204.	2007	Kawaljit Singh Sandhu, Narpinder Singh* , Seung-Taik Lim. Functional properties of normal, waxy and sugary corn starches.	<i>Journal of Food Science and Technology</i> , 44, 565-571	Refereed	19	3.3
205.	2007	Navdeep Singh Sodhi, Narpinder Singh* . Characteristics of acid-modified starches prepared from selected rice cultivars of India.	<i>Journal of Food Science and Technology</i> , 44, 572-578	Refereed	6	3.3
206.	2007	Rajarathnam Ezekiel, Gauri Rana, Narpinder Singh* , Sandeep Singh. Physicochemical, thermal and pasting properties of starch separated from γ -irradiated and stored potatoes.	<i>Food Chemistry</i> , 2007, 105, 1420-1429	Refereed	82	9.8
207.	2007	Maninder Kaur, Narpinder Singh . Relationships between various functional, thermal and pasting properties of flours from different Indian black gram (<i>Phaseolus mungo</i> L.) cultivars.	<i>Journal of the Science of Food and Agriculture</i> , 2007, 87, 974-984	Refereed	39	3.5
208.	2007	Maninder Kaur, Narpinder Singh* . Characterization of protein isolates from different Indian chickpea (<i>Cicer arietinum</i> L.) cultivars.	<i>Food Chemistry</i> , 2007, 102, 366-374	Refereed	304	9.8
209.	2007	Maninder Kaur, Narpinder Singh* . A comparison between the properties of seed, starch, flour and protein separated from chemically hardened and normal kidney beans.	<i>Journal of the Science of Food and Agriculture</i> , 2007, 87, 729-737	Refereed	18	3.5
210.	2007	Kawaljit Singh Sandhu, Narpinder Singh , Seung-Taik Lim. A comparison of native and acid thinned normal and waxy corn starches: Physicochemical, thermal, morphological and pasting properties.	<i>LWT – Food Science and Technology</i> , 2007, 40, 1527-1536	Refereed	152	6.6
211.	2007	Maninder Kaur, Kawaljit Singh Sandhu, Narpinder Singh . Comparative study of the functional, thermal and pasting properties of flours from different field pea (<i>Pisum sativum</i> L.) and pigeon pea (<i>Cajanus cajan</i> L.) cultivars.	<i>Food Chemistry</i> , 2007, 104, 259-267	Refereed	164	9.8
212.	2007	Narpinder Singh* , Yoshiko Nakaura, Naoyoshi Inouchi, Katsuyoshi Nishinari. Fine structure, thermal and viscoelastic properties of starches separated from <i>Indica</i> rice cultivars.	<i>Starch-Starke</i> , 2007, 59, 10-20	Refereed	85	2.3
213.	2007	Lovedeep Kaur, Jaspreet Singh, Narpinder Singh , Rajaranganathan Ezekiel. Textural and pasting properties of potatoes (<i>Solanum tuberosum</i> L.) as affected by storage temperature.	<i>Journal of the Science of Food and Agriculture</i> , 2007, 87, 520-526	Refereed	27	3.5
214.	2007	Kawaljit Singh Sandhu, Narpinder Singh* , Nachhattar Singh Malhi. Some properties of corn grains and their flours I: Physicochemical, functional and chapatti-making properties of flours.	<i>Food Chemistry</i> , 2007, 101, 938-946	Refereed	154	9.8
215.	2007	Kawaljit Singh Sandhu, Narpinder Singh* . Some properties of corn starches II: Physicochemical, gelatinization, retrogradation, pasting and gel textural properties.	<i>Food Chemistry</i> , 2007, 101, 1499-1507	Refereed	560	9.8
216.	2007	Amritpal Kaur, Narpinder Singh* , Rajrathnam Ezekiel, Harmeet Singh Guraya. Physicochemical, thermal and pasting properties of starches separated from different potato cultivars grown at different locations.	<i>Food Chemistry</i> , 2007, 101, 643-651	Refereed	153	9.8
217.	2007	Baljit Singh, K.S. Sekhon, Narpinder Singh . Effects of moisture, temperature and level of pea grits on extrusion behaviour and product characteristics of rice.	<i>Food Chemistry</i> , 2007, 100, 198-202	Refereed	158	9.8

218.	2007	Amritpal Kaur, Narpinder Singh* . Effect of guar gum coating on moisture content, oil uptake and textural properties of fried (French fries) potato from different cultivars.	<i>Journal of Food Science and Technology</i> , 2007, 44, 115-117	Refereed	2	3.3
219.	2007	Balasubramanian S, Narpinder Singh . Effect of extrusion process variables and legumes on corn extrudates behaviour.	<i>Journal of Food Science and Technology</i>	Refereed	3	3.3
220.	2007	Maninder Kaur, Narpinder Singh , Kamaljeet Singh Sandhu. Preparation and characterization of protein isolates from different lentil (<i>Lens culinaris</i>) cultivars.	<i>Journal of Food Science and Technology</i> , 2007, 44, 327-329	Refereed	10	3.3
221.	2006	Maninder Kaur, Narpinder Singh* . Relationships between selected properties of seeds, flours, and starches from different chickpea cultivars.	<i>International Journal of Food Properties</i> , 2006, 9, 597-608	Refereed	43	3.9
222.	2006	Navdeep Singh Sodhi, Narpinder Singh , Komal. Osmotic dehydration kinetics of carrots.	<i>Journal of Food Science and Technology</i> , 2006, 43, 374-376	Refereed	12	3.3
223.	2006	Lovedeep Kaur, Jaspreet Singh, Narpinder Singh . Effect of cross-linking on some properties of potato (<i>Solanum tuberosum</i> L.) starches.	<i>Journal of the Science of Food and Agriculture</i> , 2006, 85, 1945-1954	Refereed	166	3.5
224.	2006	Narpinder Singh* , Navdeep Singh Sodhi, Vani Bhambari, Harinder Singh. Effect of acetic anhydride on physico-chemical, thermal, retrogradation and pasting properties of rice starches differing in crystallinity.	<i>Journal of Food Science and Technology</i> , 2006, 43, 594-598	Refereed	4	3.3
225.	2006	Narpinder Singh* , Naoyoshi Inouchi, Katsuyoshi Nishinari. Structural, thermal and viscoelastic characteristics of starches separated from normal, sugary and waxy maize.	<i>Food Hydrocolloids</i> , 2006, 20, 923-935	Refereed	150	12.4
226.	2006	Balmeet Singh, Narpinder Singh* . Physico-chemical, water and oil absorption and thermal properties of gluten isolated from different Indian wheat cultivars.	<i>Journal of Food Science and Technology</i> , 2006, 43, 251-255	Refereed	17	3.3
227.	2006	Narpinder Singh* , Lovedeep Kaur, Kawaljeet Singh Sandhu, Jagdeep Kaur, Katsuyoshi Nishinari. Relationships between physicochemical, morphological, thermal, rheological properties of rice starches.	<i>Food Hydrocolloids</i> 2006, 20, 532-542	Refereed	268	12.4
228.	2006	M.S. Bakshi, N Kaur, R. K. Mahajan, J Singh, Narpinder Singh . Estimation of degree of counterion binding and related parameters of monomeric and dimeric cationic surfactants from cloud point measurements by using triblock polymer as probe.	<i>Colloid and Polymer Science</i> , 2006, 284, 879-885	Refereed	10	2.4
229.	2006	S. Balasubramanian, Narpinder Singh , S. M. Ilyas, O. D. Wanjari. Effect of selected decorticated legumes protein on rheology of maize extrudate pastes.	<i>Journal of Food Science and Technology</i> , 2006, 43, 522-525	Refereed	8	3.3
230.	2006	Narpinder Singh* , Deepika Dhanoa, Navdeep Singh Sodhi. Physico-chemical and textural properties of apples from different cultivars.	<i>Journal of Food Science and Technology</i> , 2006, 43, 127-129	Refereed	1	3.3
231.	2005	Lovedeep Kaur, Jaspreet Singh, Narpinder Singh . Effect of glycerol monostearate on the physico-chemical, thermal, rheological and noodle making properties of corn and potato starches.	<i>Food Hydrocolloids</i> , 2005, 839-849	Refereed	117	12.4

232.	2005	Narpinder Singh , Naoyoshi Inouchi, Katsuyoshi. Morphological, structural, thermal, and rheological characteristics of starches separated from apples of different cultivars.	<i>Journal of Agriculture and Food Chemistry</i> , 2005, 53, 10193-10199	Refereed	20	6.2
233.	2005	Baljit Singh, H.P.S. Nagi, K.S.Sekhon and Narpinder Singh . Studies on the functional characteristics of flour/starch from wrinkled peas (<i>pisum sativum</i>)	<i>International Journal of Food Properties</i> , 2005, 8, 35-48	Refereed	17	3.9
234.	2005	Balmeet Singh Gill, Narpinder Singh , Navdeep Singh Sodhi. Studies on physico-chemical, textural and functional properties of wheat flour from different Indian cultivars.	<i>Journal of Food Science and Technology</i> , 2005, 43, 56-64	Refereed	4	3.3
235.	2005	Narpinder Singh* , Seerat Preet Kaur, Lovedeep Kaur, Navdeep Singh Sodhi. Physico-chemical, rheological and chapati making properties of flours from some Indian potato cultivars.	<i>Journal of Food Science and Technology</i> , 2005, 42, 344-348	Refereed	6	3.3
236.	2005	Narpinder Singh* , Lovedeep Kaur, Rajarathnam Ezekiel, Harmeet Singh Guraya. Microstructural, cooking and textural characteristics of potato (<i>Solanum tuberosum</i> L) tubers in relation to physicochemical and functional properties of their flours.	<i>Journal the Science of Food and Agriculture</i> , 2005, 85, 1275-1284	Refereed	98	3.5
237.	2005	Maninder Kaur, Narpinder Singh* . Studies on functional, thermal and pasting properties of flours from different chickpea (<i>Cicer arietinum</i> L.) cultivars.	<i>Food Chemistry</i> , 2005, 91, 403-411	Refereed	372	9.8
238.	2005	Navdeep Singh Sodhi, Narpinder Singh* . Characteristics of acetylated starches prepared using starches separated from different rice cultivars.	<i>Journal of Food Engineering</i> , 2005, 70, 117-127	Refereed	181	5.8
239.	2005	S. S. Bedi, Kirti Jindal, Narpinder Singh . Elastic behavior of syrups.	<i>Journal of Food Engineering</i> , 2005, 70, 183-188	Refereed	4	5.8
240.	2005	Maninder Kaur, Narpinder Singh* , Navdeep Singh Sodhi. Physicochemical, cooking, textural and roasting characteristics of chickpea (<i>Cicer arietinum</i> L.) cultivars.	<i>Journal of Food Engineering</i> , 2005, 69, 511-517	Refereed	119	5.8
241.	2005	Kawaljit Singh Sandhu, Narpinder Singh* , N. S. Malhi. Physicochemical and thermal properties of starches separated from corn produced from crosses of two germ pools.	<i>Food Chemistry</i> , 2005, 89, 541-548	Refereed	77	9.8
242.	2005	B. Singh, H.P.S. Nagi, K.S. Sekhon, N. Singh . Studies on the functional characteristics of flour/starch from wrinkled peas (<i>pisum sativum</i>)	<i>International Journal of Food Properties</i>	Refereed	15	3.9
243.	2005	Narpinder Singh* , Maninder Kaur, Kawaljit Singh Sandhu. Physicochemical and functional properties of freeze-dried and oven dried corn gluten meals.	<i>Drying Technology</i> , 2005, 23, 975-988	Refereed	50	3.3
244.	2005	Narpinder Singh* , Lovedeep Kaur, Navdeep Singh Sodhi, Kashmira Singh Sekhon. Physicochemical, cooking and textural properties of milled rice from different Indian rice cultivars.	<i>Food Chemistry</i> , 2005, 89, 253-259	Refereed	270	9.8
245.	2005	Kawaljit Singh Sandhu, Narpinder Singh . Relationships between selected properties of starches from different corn lines.	<i>International Journal of Food Properties</i> , 2005, 8, 481-491	Refereed	47	3.9
246.	2004	Jaspreet Singh, Lovedeep Kaur, Narpinder Singh . Effect of acetylation on some properties of corn and potato starches.	<i>Starch-Starke</i> , 2004, 56, 586-601	Refereed	152	2.7
247.	2004	Narpinder Singh* , Maninder Kaur, Kanwaljit Singh Sandhu, Harmeet Singh Guraya. Physicochemical, thermal, morphological and pasting properties of starches from some Indian black gram (<i>Phaseolus mungo</i> L.) cultivars.	<i>Starch-Starke</i> , 2004, 56, 535-544	Refereed	87	2.7

248.	2004	Narpinder Singh* , Lovedeep Kaur. Morphological, thermal, rheological and retrogradation properties of potato starch fractions varying in granule size.	<i>Journal of the Science of Food and Agriculture</i> , 2004, 84, 1241-1252	Refereed	229	3.5
249.	2004	Maninder Kaur, Narpinder Singh* , Kawaljit Singh Sandhu, Harmeet Singh Guraya. Physicochemical, morphological, thermal and rheological properties of starches separated from kernels of some Indian mango cultivars (<i>Mangifera indica</i> L.).	<i>Food Chemistry</i> , 2004, 85, 131-140	Refereed	166	9.8
250.	2004	Narpinder Singh* , Lovedeep Kaur, Jaspreet Singh. Relationships between various physicochemical, thermal and rheological properties of starches separated from different potato cultivars.	<i>Journal of the Science of Food and Agriculture</i> , 2004, 84, 714-720	Refereed	34	3.5
251.	2004	Maninder Kaur, Narpinder Singh* , K. S. Sandhu. Relationships between selected properties of black gram Seeds and their composition.	<i>International Journal of Food Properties</i> , 2004, 7, 541-552	Refereed	7	3.9
252.	2004	Kawaljit Singh Sandhu, Narpinder Singh* , Maninder Kaur. Characteristics of the different corn types and their grain fractions: Physicochemical, thermal, morphological, and rheological properties of starches.	<i>Journal of Food Engineering</i> , 2004, 64, 119-127	Refereed	177	5.5
253.	2004	Balmeet Singh Gill, N S Sodhi, Narpinder Singh , Maninder Singh, Davinder Singh. Effects of °Brix, sodium alginate and drying temperature on colour, texture and sensory properties of 'Dushehari' mango leather.	<i>Journal of Food Science and Technology</i> , 2004, 41, 373-378	Refereed	11	3.3
254.	2004	Vani Aggarwal, Narpinder Singh* , Sukhdev Singh Kamboj. Some properties of seeds and starches separated from mung (<i>Phaseolus mungo</i>) cultivars.	<i>Journal of Food Science and Technology</i> , 2004, 41, 341-343	Refereed	3	3.3
255.	2004	Narpinder Singh* , Kawaljit Singh Sandhu, Maninder Kaur. Characterization of starches separated from Indian chickpea (<i>Cicer arietinum</i> L.) cultivars.	<i>Journal of Food Engineering</i> , 2004, 63, 441-449	Refereed	221	5.8
256.	2004	Maninder Kaur, Narpinder Singh* . Effect of ammonium bicarbonate on extrusion behaviour of rice and corn grits.	<i>Journal of Food Science and Technology</i> , 2004, 41, 223-225	Refereed	0	3.3
257.	2004	Narpinder Singh* , Maninder Kaur, Kawaljit Singh Sandhu, Navdeep Singh Sodhi. Physicochemical, cooking and textural characteristics of some Indian black gram (<i>Phaseolus mungo</i> L.) varieties.	<i>Journal of Science of Food and Agriculture</i> , 2004, 84, 977-982	Refereed	28	3.5
258.	2004	B. S. Chadha, G. Harmeet, M. Mandeep, HS. Saini, Narpinder Singh . Phytase production by the thermophilic fungus <i>Rhizomucor pusillus</i> .	<i>World Journal of Microbiology & Biotechnology</i> , 2004, 20, 105-109	Refereed	98	3.5
259.	2004	Balmeet Singh Gill, Narpinder Singh* , S. K. Saxena. The impact of starch properties on noodle making properties of Indian wheat flours.	<i>International Journal of Food Properties</i> , 2004, 7, 59-74	Refereed	18	3.9
260.	2004	Vani Agarwal, Narpinder Singh* , Sukhdev Singh Kamboj. Some properties of seeds and starches separated from different Indian pea cultivars.	<i>Food Chemistry</i> , 2004, 85, 585-590	Refereed	3	9.8
261.	2004	Lovedeep Kaur, Narpinder Singh* , Jaspreet Singh. Factors influencing the properties of hydroxypropylated potato starches.	<i>Carbohydrate Polymers</i> , 2004, 55, 211-223	Refereed	186	12.5
262.	2004	Jaspreet Singh, Narpinder Singh* . Effect of process variables and sodium alginate on extrusion behavior of nixtamalized corn grit.	<i>International Journal of Food Properties</i> , 2004, 7, 329-340	Refereed	15	3.9
263.	2004	Narpinder Singh* , Deepika Chawla, Jaspreet Singh. Influence of acetic anhydride on physicochemical,	<i>Food Chemistry</i> , 2004, 86, 601-608	Refereed	242	9.8

		morphological and thermal properties of corn and potato starch.				
264.	2003	Navdeep Singh Sodhi, Narpinder Singh* , Munish Arora, Jaspreet Singh. Changes in physico-chemical, thermal, cooking and textural properties of rice during aging.	<i>Journal of Food Processing and Preservation</i> , 2003, 27, 387-400	Refereed	71	2.6
265.	2003	Jaspreet Singh, Narpinder Singh* , T. R. Sharma, S. K. Saxena. Physicochemical, rheological and cookie making properties of corn and potato flours.	<i>Food Chemistry</i> , 2003, 83, 387-393	Refereed	112	9.8
266.	2003	Narpinder Singh* , N.S. Sodhi, Manmeet Kaur, S.K. Saxena. Physico-chemical, morphological, thermal, cooking and textural properties of chalky and translucent rice kernels.	<i>Food Chemistry</i> , 2003, 82, 433-439	Refereed	125	9.8
267.	2003	Navdeep Singh Sodhi, Narpinder Singh* . Morphological, thermal and rheological properties of starches separated from rice cultivars grown in India.	<i>Food Chemistry</i> , 2003, 80, 99-108	Refereed	237	9.8
268.	2003	Narpinder Singh* , Inderpreet Kaur Bajaj, R. P. Singh, Hardeep Singh Gujral. Effect of different additives on mixograph and bread making properties of Indian wheat flour.	<i>Journal of Food Engineering</i> , 2003, 56, 89-95	Refereed	18	5.8
269.	2002	Narpinder Singh* , Jaspreet Singh, Navdeep Singh Sodhi. Morphological, thermal, rheological and noodle-making properties of potato and corn starch.	<i>Journal of the Science of Food and Agriculture</i> , 2002, 82, 1376-1383	Refereed	97	3.5
270.	2002	M. S. Bakshi, S. Sachar, N. Mahajan, I. Kaur, G. Kaur, Narpinder Singh , P. Sehgal, H. Doe. Mixed-micelle formation by strongly interacting surfactant binary mixtures: effect of head-group modification.	<i>Colloid and Polymer Science</i> , 2002, 280, 990-1000	Refereed	63	2.4
271.	2003	Jaspreet Singh, Narpinder Singh* . Studies on the morphological and rheological properties of granular cold water soluble corn and potato starches.	<i>Food Hydrocolloids</i> , 2002, 17, 63-72	Refereed	193	12.4
272.	2002	Narpinder Singh* , Shaveta Gupta, Navdeep Singh Sodhi, R. P. Singh. Effect of additives on dough and cookie making properties of flour.	<i>International Journal of Food Properties</i> , 2002, 5, 547-562	Refereed	6	3.9
273.	2002	Hardeep Singh Gujral, Amrit Kaur, Narpinder Singh , Navdeep Singh Sodhi. Effect of liquid whole egg, fat and textured soy protein on the textural and cooking properties of raw and baked patties from goat meat.	<i>Journal of Food Engineering</i> , 2002, 53, 377-385	Refereed	111	5.8
274.	2002	Lovedeep Kaur, Narpinder Singh* , Navdeep Singh Sodhi, Hardeep Singh Gujral. Some properties of potatoes and their starches I. Cooking, textural and rheological properties of potatoes.	<i>Food Chemistry</i> , 2002, 79, 177-181	Refereed	91	9.8
275.	2002	Lovedeep Kaur, Narpinder Singh* , Navdeep Singh Sodhi. Some properties of potatoes and their starches. II. Morphological, thermal and rheological properties of starches.	<i>Food Chemistry</i> , 2002, 79, 183-192.	Refereed	207	9.8
276.	2002	Rubinder Kaur, B. S. Chadha, Narpinder Singh , H. S. Saini, S. Singh. Amylase hyperproduction by deregulated mutants of the thermophilic fungus <i>Thermomyces lanuginosus</i> .	<i>Journal of Industrial Microbiology and Biotechnology</i> , 2002, 29, 70-74	Refereed	25	3.2
277.	2002	Hardeep Singh Gujral, Abhishek Sharma, Narpinder Singh . Effect of hydrocolloids, storage temperature, and duration on the consistency of tomato ketchup.	<i>International Journal of Food Properties</i> , 2002, 5, 179-191	Refereed	57	3.9
278.	2002	Jaspreet Singh, Narpinder Singh* , S. K. Sexana. Effect of fatty acids on the rheological properties of corn and potato starch.	<i>Journal of Food Engineering</i> , 2002, 52, 9-16	Refereed	98	5.5

279.	2002	Hardeep Singh Gujral, Jaswant Singh, Navdeep Singh Sodhi, Narpinder Singh . Effect of milling variables on the degree of milling of unparboiled and parboiled rice.	<i>International Journal of Food Properties</i> , 2002, 5, 193-204	Refereed	33	3.9
280.	2002	Hardeep Singh Gujral, Narpinder Singh* . Extrusion behaviour and product characteristics of brown and milled rice grits.	<i>International Journal of Food Properties</i> , 2002, 5, 307-316	Refereed	36	3.9
281.	2002	Kulwinder Kaur, Narpinder Singh* , Hardeep Singh. Studies on the effect of skim milk powder, sprouted wheat flour, and pH on rheological and baking properties of flour.	<i>International Journal of Food Properties</i> , 2002, 5, 13-24	Refereed	8	3.9
282.	2002	Narpinder Singh* , Hardeep Singh Gujral, Jaspreet Singh. Effect of baking ingredients and mixing duration on dough development, gas release and bread making properties.	<i>Journal of Food Quality</i> , 2002, 25, 305-315	Refereed	8	2.9
283.	2001	Jaspreet Singh, Narpinder Singh* . Studies on the morphological, thermal and rheological properties of starch separated from some Indian potato cultivars.	<i>Food Chemistry</i> , 2001, 75, 67-77	Refereed	256	9.8
284.	2001	Hardeep Singh Gujral, Narpinder Singh* , Baljit Singh. Extrusion behaviour of grits from flint and sweet corn.	<i>Food Chemistry</i> , 2001, 74, 303-308	Refereed	36	9.8
285.	2001	Hardeep Singh, Narpinder Singh* , Lakhwinder Kaur, S. K. Saxena. Effect of sprouting conditions on functional and dynamic rheological properties of wheat.	<i>Journal of Food Engineering</i> , 2001, 47, 23-29	Refereed	40	5.8
286.	2001	Hardeep Singh, Priyanka Sharma, Narpinder Singh , Dalbir Singh. Effect of hydrocolloids on the rheology of tamarind sauce.	<i>Journal of Food Science and Technology</i> , 2001, 38, 314-318	Refereed	6	3.3
287.	2001	Hardeep Singh, Narpinder Singh* . Relationship between parboiling, degree of milling, ash distribution and conductivity in rice.	<i>Journal of Food Science and Technology</i> , 2001, 38, 629-631	Refereed	2	3.3
288.	2001	Hardeep Singh, Narpinder Singh* . Relationship between debranning, ash distribution pattern, and conductivity in maize.	<i>International Journal of Food Properties</i> , 2001, 4, 261-269	Refereed	3	3.9
289.	2001	Parminder Kaur Bath, Narpinder Singh* . Effect of microwave heating on hydroxymethylfurfural formation and browning in <i>Helianthus annuus</i> and <i>Eucalyptus lanceolatus</i> honey.	<i>Journal of Food Science and Technology</i> , 2001, 38, 366-368	Refereed	13	3.3
290.	2000	Lakhwinder Kaur, Narpinder Singh* , Kulwinder Kaur, Baljit Singh. Effect of mustard oil and process variables on extrusion behaviour of rice grits.	<i>Journal of Food Science and Technology</i> , 2000, 37, 656-660	Refereed	-	3.3
291.	2000	Narpinder Singh* , Sanjeev Sharma, Baljit Singh. Effect of sodium bicarbonate and glycerol monostearate addition on the extrusion behaviour of maize grits.	<i>Journal of Food Engineering</i> , 2000, 46, 61-66	Refereed	23	5.8
292.	2000	Kulwinder Kaur, Narpinder Singh* . Amylose-lipid complex formation during cooking of rice flour.	<i>Food Chemistry</i> , 2000, 71, 511-517	Refereed	195	9.8
293.	2000	A. S. Bawa, Narpinder Singh . Effect of incorporating extruded wheat flour on the quality of goat meat sausages.	<i>Journal of Scientific and Industrial Research</i> , 2000, 59, 241-245	Refereed	-	1.3
294.	2000	Narpinder Singh* , Kulwinder Kaur, Hardeep Singh, Harmit Singh. Effect of starch-lipids inclusion complex formation on functional properties of flour in tandoori roti.	<i>Food Chemistry</i> , 2000, 69, 129-133	Refereed	17	9.8

295.	2000	Parminder Kaur Bath, Narpinder Singh* . Chemical changes in <i>Helianthus annuus</i> and <i>Eucalyptus lanceolatus</i> honey during storage.	<i>Journal of Food Quality</i> , 2000, 23, 443-451	Refereed	14	2.9
296.	2000	Kulwinder Kaur, Narpinder Singh* , Hardeep Singh. The effect of extruded flour and fermentation time on some quality parameters of idli.	<i>Journal of Food Quality</i> , 2000, 23, 15-25	Refereed	4	2.9
297.	2000	Narpinder Singh* , Hardeep Singh, Kulwinder Kaur, Mandeep Singh Bakshi. Relationship between the degree of milling, ash distribution pattern and conductivity in brown rice.	<i>Food Chemistry</i> , 2000, 69, 147-151	Refereed	67	9.8
298.	1999	Hardeep Singh, Narpinder Singh* . Effect of additives on dough development, gaseous release and bread making properties.	<i>Food Research International</i> , 1999, 32, 691-697	Refereed	39	8.0
299.	1999	Jaspreet Singh, Narpinder Singh* . Effects of different ingredients and microwave power on popping characteristics of popcorn.	<i>Journal of Food Engineering</i> , 1999, 42, 161-165	Refereed	37	5.8
300.	1999	Parminder Kaur Bath, Narpinder Singh* . A comparison between <i>Helianthus annuus</i> and <i>Eucalyptus lanceolatus</i> honey.	<i>Food Chemistry</i> , 1999, 67, 389-397	Refereed	86	9.8
301.	1999	Kulwinder Kaur, Narpinder Singh* . Effect of acetic acid and CMC on rheological and baking properties of flour.	<i>Journal of Food Quality</i> , 1999, 22, 317-327	Refereed	10	2.9
302.	1999	Narpinder Singh* , Randir Singh, Kulwinder Kaur, Harmit Singh. Studies of the physico-chemical properties and polyphenoloxidase activity in seeds from hybrid sunflower (<i>Helianthus annuus</i>) varieties grown in India	<i>Food Chemistry</i> , 1999, 66, 241-247	Refereed	23	9.8
303.	1999	Kulwinder Kaur, Narpinder Singh* , Baljit Singh, K. S. Sekhon. Effect of hydrocolloids and process variables on the extrusion behaviour of rice grits.	<i>Journal of Food Science and Technology</i> , 1999, 36, 127-132	Refereed	8	3.3
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316.	1996	Narpinder Singh* , Usha Bajwa, K. S. Sekhon. Pasting and papad quality of rice, wheat and mung flour blends.	<i>Journal of Food Science and Technology</i> , 1996, 33, 224-228	Refereed	4	3.3
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Book Chapters (International)

1.	Deepika Kathuria, and Narpinder Singh , Metabolomics Advances in Understanding Phenolic Compound Variability in Cereals and Their Nutritional Impacts Advances in Food and Nutrition Research, 2025.		
2.	Sonal Aggarwal, Akanksha Negi, Riya Barthwal, Deepika Kathuria, and Narpinder Singh Mitigating Drought Stress in Various Grain Crops: Strategies for Alleviation, In N. Singh, S. A. Babu (eds.), Climate Crisis and Sustainable Solutions, published by Springer, 2024		

3.	Arun Kumar, Swasti Mudgal, and Narpinder Singh . Assessing the Global Impacts of Climate Change on Food and Nutritional Security: Essential Strategies for Mitigation, In N. Singh, S. A. Babu (eds.), Climate Crisis and Sustainable Solutions, published by Springer, 2024		1
4.	Rachan Karmakar, Anita Rajor, Krishnendu Kundu, Narpinder Singh , Rajesh Kumar, Pavan Gangwar, Savita, Vrince Vimal, Bhaskerpratap Chaudhary, Sanjoy Gorai, Pradeep Kumar, Pratibha Naithani, Suman Naithani, Rachna Sharma, Neeraj Kumar, Sourish Bhattacharya, and Aoujasva Veer Vikram Singh, Effects of Algal Biodiesel–Petro-diesel Blends in Emission from IC Engine, In N. Singh, S. A. Babu (eds.), Climate Crisis and Sustainable Solutions, published by Springer, 2024		
5.	Narpinder Singh , Parmeet Kaur, Mehak Katyal, Amritpal Kaur Chapter 13 - Implications of physicochemical properties of proteins in food industry applications. In Future Proteins Sources, Processing, Applications and the Bioeconomy 2023, Pages 261-284.		2
6.	Narpinder Singh , Maman Paul, Swasti Mudgal, Amritpal Kaur Chapter 18 - Nutritional properties of proteins from different sources and their role in sports performance. In Future Proteins Sources, Processing, Applications and the Bioeconomy 2023, Pages 391-407.		3
7.	Narpinder Singh , Parmeet Kaur, and Mehak Katyal. Challenges and Strategies for Utilization of Pulse Proteins. In: Ferranti, P. (Ed.), Sustainable Food Science: A Comprehensive Approach, vol. 2. Elsevier, pp. 184–191		1
8.	Amardeep Singh Viridi and Narpinder Singh . Functional Cereals for Gluten Intolerance in “Functional Cereals and Cereal Foods Properties, Functionality and Applications”, Edited by Sneh Punia Bangar, Anil Kumar Siroha, 2022, pp. 81-112, Publisher Springer		
9.	Anamika Tripathi, V. Iswarya, Narpinder Singh , Ashish Rawson. Processing, Quality and Nutraceutical Applications. Chapter 4 – in “Chemistry of pulses—micronutrients” Pulse Foods (Second Edition), Edited by Brijesh K. Tiwari, Aoife Gowen and Brian McKenna, 2021, pp. 61-86, Publisher Academic Press.		5
10.	Narpinder Singh . Processing, Quality and Nutraceutical Applications. Chapter 5– in “Functional and physicochemical properties of pulse starch” Pulse Foods (Second Edition), Edited by Brijesh K. Tiwari, Aoife Gowen and Brian McKenna, 2021, pp. 87-112, Publisher Academic Press.		26
11.	Anamika Tripathi, V. Iswarya, Ashish Rawson, Narpinder Singh , B. Dave Oomah, Ankit Patras. Processing, Quality and Nutraceutical Applications. Chapter 3– in “Chemistry of pulses—macronutrients” Pulse Foods (Second Edition), Edited by Brijesh K. Tiwari, Aoife Gowen and Brian McKenna, 2021, pp. 31-59, Publisher Academic Press.		11
12.	Amardeep Singh Viridi, Narpinder Singh* . Diversity in textural profile of indigenous food products in India: A comparative analysis in "Textural characteristics of world foods." editors Katsuyoshi Nishinari, Publisher Wiley, Inpress-2019.		2
13.	Narpinder Singh , Sandeep Singh and Khetan Shevkani. Maize: composition, bioactive constituents, and unleavened bread. Chapter 9, “In Flour and Breads and their Fortification in Health and Disease” Second Edition, Edited by Victor R. Preedy and Ronald Ross Watson, 2019, pp.111-121, Publisher Academic Press.		24
14.	Narpinder Singh , Prabhjeet Singh, Khetan Shevkani, Amardeep Singh Viridi. Amaranth: potential source for flour enrichment, Chapter 10, “In Flour and Breads and their Fortification in Health and Disease” Second Edition, Edited by Victor R. Preedy and Ronald Ross Watson, 2019, pp.123-135, Publisher Academic		27
15.	Balwinder Singh, Kanchan Suri, Khetan Shevkani, Amritpal Kaur, Amarbir Kaur, Narpinder Singh . Enzymatic Browning of Fruit and Vegetables: A Review Enzymes in Food Technology. (Publisher Springer), 2018, 63-78.		117
16.	Amardeep Singh Viridi, Narpinder Singh (2017) "Antimicrobial peptides and polyphenols: Implications in food safety and preservation" in "Microbial Control and Food Preservation: Theory and Practice" editor V K Juneja. Publisher Springer. 117-152.		0
17.	Narpinder Singh , Amritpal Kaur and Khetan Shevkani “Maize: Grain structure, composition, milling and starch characteristics”, In Maize: Nutrition Dynamics and Novel Uses Edited by D.P. Chaudhary et al. (Publisher Springer), 2014, 65-76.		36
18.	Narpinder Singh , Amritpal Kaur, Khetan Shevkani and Rajarathnam Ezekiel. Potato: Production, Composition and Starch Processing. In Advances in Food Science and Nutrition by Visakh. P. M, Laura B. Iturriaga and Pablo Daniel Ribotta (eds.), Scrivener Publishing LLC, 2014, 24-48.		2
19.	Narpinder Singh and Amritpal Kaur. “Plantation crops and Tree nuts: composition, phytochemicals and health benefits” In Handbook of phytochemicals: sources, stability and extraction, Edited by Brijesh Tiwari, Charles Brennan & Nigel Brunton (Publisher, Wiley Blackwell), 2013, 163-179.		5
20.	Narpinder Singh , Sandeep Singh, Amritpal Kaur, Mandeep Singh Bakshi, “Zein: Structure, production, film properties and applications” In NATURAL POLYMERS-VOL.1. Maya John and Sabu Thomas (RSC		15

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21.	Narpinder Singh. Physico-chemical and functional properties of pulse starch. In “Pulse Foods: Quality, Technology, and Nutraceutical Application” Edited by Brijesh Tiwari, Aoife Gowen and Brian McKenna, Publisher Elsevier, 2010, 91-119.		7
22.	B. Dave Oomah, A. Patras, A. Rawson and Narpinder Singh. Chemical composition of pulses. In “Pulse Foods: Quality, Technology, and Nutraceutical Application” Edited by Brijesh Tiwari, Aoife Gowen and Brian McKenna, Publisher Elsevier, 2011, 9-56.		11
23.	Narpinder Singh, Sandeep Singh and Khetan Shevkani. Maize: composition, bioactive constituents, and unleavened bread. Chapter 9, “In Flour and Breads and their Fortification in Health and Disease” First Edition, Edited by Victor R. Preedy, Ronald Ross Watson, and Vinood Patel, Publisher Elsevier, 2011, pp.89-99, Academic Press.		24
24.	Narpinder Singh and Prabhjeet Singh. Amaranth: potential source for flour enrichment, Chapter 10, “In Flour and Breads and their Fortification in Health and Disease” First Edition, Edited by Victor R. Preedy, Ronald Ross Watson, and Vinood Patel, Publisher Elsevier, 2011, pp.101- 111, Publisher Academic Press.		18
25.	Rajarathnam Ezekiel and Narpinder Singh. Use of potato flour in bread and flat bread. Chapter 23, In Flour and Breads and their Fortification in Health and Disease” Edited by Victor R. Preedy, Ronald Ross Watson, and Vinood Patel, 2011, pp. 247-259, London, Burlington, San Diego: Academic Press, Elsevier.		14
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26.	Narpinder Singh and A.C. Smith. Applications of extrusion cooking technology. In “Food Science and Technology Edited by Bhupinder Singh Khatkar. PP 20-33. Published by Daya Books.		
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1.	Narpinder Singh, Extrusion Problems Solved: Food, Pet Food and Feed, <i>International Journal of Food Science and Technology</i> , 2014, 49, 615.		3.3
2.	Narpinder Singh. Extrusion-Cooking Technology: Applications, Theory and Sustainability, <i>International Journal of Food Science and Technology</i> , 2014, 49, 308.		3.3
3.	Narpinder Singh. Wheat Chemistry and Technology” 4 th Edition, edited by K Khan and P. R. Shewry, <i>International Journal of Food Science and Technology</i> , 2010, 46, 896.		3.3
4.	Narpinder Singh. Industrial chocolate manufacture and uses, 4 th Edition, edited by Stephen T. Beckett, <i>International Journal of Food Science and Technology</i> , 2010, 45, 860.		3.3
5.	Narpinder Singh. Carbohydrate Chemistry for Food Scientists, 2nd Edition, edited by James N. BeMiller. <i>International Journal of Food Science and Technology</i> , 2010, 45, 859.		3.3
6.	Narpinder Singh. Bakery Products Science and Technology, edited by Y. H. Hui. <i>International Journal of Food Science and Technology</i> , 43, 2008, 1910-1911.		3.3
7.	Narpinder Singh. Starch in food: structure, function and applications edited by Ann-Charlotte Eliason. <i>International Journal of Food Science and Technology</i> , 41, 2006, 108-109.		3.3
8.	Narpinder Singh. Rice Chemistry and Quality edited by B.O. Juliano. <i>International Journal of Food Science and Technology</i> , 40, 2005, 571.		3.3
Research papers published in Conferences /Symposia /Seminars, etc.:			
1.	K S. Sekhon and Narpinder Singh. 1990. Disease in wheat in relation to milling and baking properties. In proceeding of the symposium on “Recent Development and Future Trends in Milling and Baking Technology” held at Mysore, 10 th to 12 th May, pp 14-25.		
2.	K. S. Sekhon, H. P. S. Nagi and Narpinder Singh*. 1996. Effect of sprouting of wheat on bread and chapati making properties. <i>Special Souvenir</i> 1940-1995 Published by Roller flour Miller Federation of India, pp 105-110.		
Newspaper articles			
1.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ ਭਵਿੱਖ ਲਈ ਉੱਚ ਸਿੱਖਿਆ ਵਿੱਚ ਸਿੱਖਿਆ ਸੁਧਾਰ ਦੀ ਲੋੜ ਹੈ ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 7 ^{ਵਾਂ} ਜੁਲੇ, 2023		
2.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ ਪੰਜਾਬ ਰਾਜ ਵਿੱਚ ਖੁਰਾਕ ਅਤੇ ਸਹਾਇਕ ਖੇਤਰਾਂ ਵਿੱਚ ਵਿਕਾਸ ਲਈ ਭਵਿੱਖ ਦੀਆਂ ਨੌਕਰੀਆਂ ਦੀਆਂ ਲੋੜਾਂ ਅਤੇ ਰਣਨੀਤੀਆਂ ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 20 ^{ਵਾਂ} ਜੁਨ, 2023		
3.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ “ ਜਲਵਾਯੂ ਸੰਕਟ ਨਾਲ ਲੜਨ ਦਾ ਵੇਲਾ” ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 3 ^{ਰਦ} ਸ਼ਬਟਮਸਬਰ, 2022		

4.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ “ਭੋਜਨ ਦੀ ਘਾਟ ਬਣੀ ਆਲਮੀ ਸੰਕਟ” ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 20ਵੇਂ ਜੁਲੇ, 2022		
5.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ “ਮੱਛੀ ਪਾਲਣ ਦੀ ਉਤਪਾਦਕਤਾ ਨੂੰ ਵਧਾਉਣ ਦੀ ਵਧੀਆ ਤਕਨੀਕ” ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 27ਵੇਂ ਜੁਲੇ, 2022		
6.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ “ਅਮਨ ਸੰਕਟ ਵੱਲ ਲਿਜਾ ਰਹੀ ਜੰਗ” ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 26ਵੇਂ ਅਪਰਲਿ, 2022		
7.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ. “ਸਿਹਤਮੰਦ ਜ਼ਿੰਦਗੀ ਲਈ ਜ਼ਰੂਰੀ ਕਾਰਜਸ਼ੀਲ ਭੋਜਨ” ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 16ਵੇਂ ਸ਼ਵਪਟਮਬਰ, 2021		
8.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ. “ਆਧੁਨਿਕ ਖੇਤੀ ‘ਚ ਹੈ ਪੰਜਾਬ ਦਾ ਭਵਿੱਖ” ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 18ਵੇਂ ਅਗਸਟ, 2021		
9.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ. “ਕੋਵਿਡ-19 ਦੌਰਾਨ ਭੋਜਨ ਲਈ ਅਤੇ ਚੰਗੀ ਸਿਹਤ ਲਈ ਕੀ ਉਪਰਾਲੇ ਕਰੀਏ” ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 4ਵੇਂ ਅਗਸਟ, 2021		
10.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ “ਪੰਜਾਬੀਆਂ ਦਾ ਭੋਜਨ ਨਹੀਂ ਜੰਕ ਫੂਡ” ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 20ਵੇਂ ਜੁਲੇ, 2021		
11.	‘ਓਰਪਨਿਦਰ ਸ਼ਨਿਗਰ “ਝੋਨੇ ਨੂੰ ਜੁਲਾਈ ਮਹੀਨੇ ਵਿੱਚ ਲਗਾਉਣ ਦੇ ਕੀ ਫਾਇਦੇ ਹਨ” ਫੁਨਜਓਬਿ ਝੋਗਰਓਨਿ, 13ਵੇਂ ਜੁਲੇ, 2021		
12.	Narpinder Singh* and Guninderjit Kaur. Preventing crystals in honey. The Tribune, 12 th Nov., 1992.		
Technical/popular articles			
13.	Narpinder Singh*. Techniques to improve quality of wheat and its products. <i>Everyman's Science</i> , XXXII, 1998, 10-15.		
14.	A.C. Smith and Narpinder Singh. New applications of extrusion technology. <i>Indian Food Industry</i> , 15, 1996, 14-23.		
15.	Narpinder Singh* and A. S. Bawa. Wheat quality in relation to natural calamities. <i>Special Souvenir</i> 1940-1995. Published by Roller Flour Miller Federation of India, 1996, 55-57.		
16.	Narpinder Singh* and K. S. Sekhon. Mold-damage, its effect on physico-chemical and functional properties of wheat. <i>Indian Food Industry</i> , 7, 1988, 9-11.		

14. Articles mapped to SDGs in Socpus

Sustainable Development Goals (SDGs)	Documents number
Goal 2: Zero hunger	22
Goal 3: Good health and well-being	33
Goal 4: Quality Education	1
Goal 6: Clean water and sanitation	4
Goal 7: Affordable and clean energy	10
Goal 8: Decent work and economic growth	8
Goal 9: Industry, innovation and infrastructure	12
Goal 10: Reduced inequalities	2
Goal 11: Sustainable cities and communities	2
Goal 12: Responsible consumption and production	16
Goal 13: Climate action	9
Goal 14: Life below water	4
Goal 15: Life on land	4
Goal 17: Partnership for the goals	6
Total	133

15. Participation and contribution in National/International I in the area of your academic and professional expertise

Plenary Lectures/Invited Talks	International	13
	National	73

(c) International=14

Sr. No.	Date	Title of Conference or Institution	Title/Subject of presentation (if made)
1.	December 29, 2023	6 th World congress on Disaster Management held at Graphic Era Deemed to be university from 28 th November to 1 st Decembr, 2023	Challenges of Food and Nutrion security by 2047
2.	December 18, 2020	Pacific Rim Web Conference on Food Hydrocolloids organized by Hubei University of Technology, China.	Changes in protein and starch characteristics caused by heat stress and altitude and their effects on functional properties of wheat flours.
3.	November 21, 2018	School of Food Science and Engineering, South China University of Technology, WuShan, GuangZhou, China.	Approaches to Improve nutraceutical, value addition and functionality to cereals and pulses.
4.	November 17, 2018	School of Food Science and Engineering, South China University of Technology, WuShan, GuangZhou, China.	Starch Functionality: Role of Source, Major and Minor Constituents.
5.	16 th to 20 th May, 2016	International Hydrocolloids Conference, University of Guelph, Canada	Diversity in amylose, amylopectin chain length, particle size, thermal and pasting properties of starches from different Indian potato cultivars
6.	2011	ISTP Canada-India DBT Workshop, Saskatoon, Canada.	Diversity in starch properties amongst cereals and pulses.
7.	August 17, 2006	Extrusion course by International Grain Program, Kansas State University, USA.	Starch processing and functionality.
8.	August 22, 2006	Department of Grain Science and Technology, in Kansas State University, USA.	Morphological, thermal, rheological and retrogradation properties of starch from different plant sources.
9.	August, 22-26, 2010	15 th IUFOST World Congress in Food Science and Technology, Cape town, South Africa	Relationship of isoamylase debranched fractions and granules size distribution with pasting, thermal and dynamic rheological properties amongst kidney bean starches
10.	December, 10, 2012	International Conference on Cellular & Molecular Bioengineering (ICCMB3) organised by Nanyang Technological University, Singapore	Key note “Diversity in flour and starch characteristics amongst Indian wheat varieties”
11.	August, 11, 2004	Graduate School of Human Life, Osaka City university, Japan Science, Osaka City University, Japan.	Delivered lecture on Morphological, thermal, rheological and retrogradation properties of starch from different botanical sources”
12.	December, 13, 2004	Symposium on “Starch” organized by Graduate School of Human Life Science, Osaka City University, Japan.	Microstructural, cooking and textural characteristics of potato (<i>Solanum tuberosum</i> L) tubers in relation to physicochemical and functional properties of their flours.
13.	Oct 13-17, 2002	87 th Annual Meeting of American Association of Cereal Chemists held at Montreal, Canada.	Morphological, thermal, rheological and retrogradation properties of starch fractions varing in granules size.
			Morhological, thermal and rheological properties of corn and potato acetylated starches.
14.	September 13-17, 1998	83 rd Annual Meeting American Association of Cereal Chemists held at	Relationship between degree of polish, ash distribution pattern and conductivity in brown rice

	Minneapolis, USA.	Effect of butter and peanut oil on the extrusion behavior of rice grits
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(d) Lecture Delivered as Resource Person at national level/universities: 78

	Organisation		Area of Specialisation
Resource person	1.	Delivered two lectures as subject expert in the Refresher course for university scientists and teachers on “Advances in Food Science & Technology” on 30-12-2001 at Guru Jambheshwar University, Hisar.	Food Science and Technology
	2.	Delivered an invited lecture on “Functional Food” in Rotary Club Amritsar on 6 th Feb., 2002.	Food Science and Technology
	3.	Delivered a lecture on “Elderly people diet” in Chinmaya Mission, Amritsar on 17 th March, 2002.	Food Science and Technology
	4.	Delivered two lectures as subject expert in the summer school “Advances in Food Science and Technology” sponsored by ICAR, New Delhi, in Dept. of Food Science and Technology, PAU, Ludhiana on 12 th June, 2002.	Food Science and Technology
	5.	Delivered invited lecture on Food security and postharvest processing on National Science day (28-2-2011) at IHBT, Palampur.	Food Science and Technology
	6.	Delivered lecture on “Cereals and Legumes-research opportunities in India” on 23-11-2010 in the Indo-Canada Strategic Meet organized by National Agri-Food Biotechnology Institute, Mohali from 22-11-10 to 25-11-2010.	Food Science and Technology
	7.	Delivered a key note address in the Seminar on “Rheology-a new perspective in food, sugar and pharmaceutical research” on 3 rd December, 2010 organized by Department of Applied Chemical Sciences, Guru Nanak Dev University and Thermo Fisher Scientific.	Food Science and Technology
	8.	Delivered invited lecture on Food for better health on 1 st September, 2012 in the Department of Food Science and Technology, DAV College, Jalandhar.	Food Science and Technology
	9.	Delivered Sardar Boshan Singh Samundri Memorial Lectureship Award lecture on Food Security and postharvest processing- A challenge on 9 th Jan., 2013 at Guru Nanak Dev University	Life sciences
	10.	Deliver a talk on “Food Security and Food Processing- a challenge” as Chief guest on the occasion of “National Technology Day’ on May 11, 2013 at CSIR-NBRI, Lucknow.	Food Science and Technology
	11.	Delivered invited talk on “Cereals and Pulses Starch; Functionality and applications in the Food Industry in the 29 th Carbohydrate Conference organized by Centre of Innovative & Applied Bio- processing (CIAB) and Association of Carbohydrate Chemists & Technologists, India from 29 th to 31 st , December, 2014 at IISER, Mohali.	Food Science and Technology
	12.	Delivered invited talk in the foundation week in Central University of Punjab, Bhatinda on 23 rd February, 2015.	Food Science and Technology
	13.	Delivered a lecture as resource person in General Orientation Course (GOC)-69 on the topic of Functional Foods organised on 01.03.2007 by Guru Nanak Dev University (GNDU), Amritsar.	Food Science and Technology
	14.	Delivered two lectures as resource person in General Orientation Course (GOC)-70 on the topic of Health Benefits of Soya Bean and Functional Food, Nutraceutical & Nutrition Myths organised on 21.05.2007 by GNDU, Amritsar.	Food Science and Technology
	15.	Delivered two lectures as resource person in General Orientation Course (GOC)-70 on the topic of Soya Bean and Health Benefits and Functional Food & Nutraceutical organised on 26.06.2007 by GNDU, Amritsar.	Food Science and Technology
	16.	Delivered a lecture as resource person in General Orientation Course (GOC)-76 on the topic of Nutraceutical and Health Benefits of Soya Bean	Food Science and Technology

	organised on 22.09.2008 by GNDU, Amritsar.	
17.	Delivered a lecture as resource person in General Orientation Course (GOC)-76 on the topic “Functional Foods” organised on 23.09.2008 by GNDU, Amritsar.	Food Science and Technology
18.	Delivered a lecture as resource person in General Orientation Course (GOC)-77 on the topic of Free Radicals, Antioxidants and Health organised on 04.03.2009 by GNDU, Amritsar.	Food Science and Technology
19.	Delivered a lecture as resource person in General Orientation Course (GOC)-77 on the topic of Functional Foods organised on 05.03.2009 by GNDU, Amritsar.	Food Science and Technology
20.	Delivered a lecture as resource person in Refresher course on Environmental sciences on the topic of Free Radicals, Antioxidants and Health on 01.01.2009 organised by GNDU, Amritsar.	Food Science and Technology
21.	Delivered a lecture as resource person in General Orientation Course (GOC)-81 on the topic of Food for Better Health organised on 25.02.2010 by GNDU, Amritsar.	Food Science and Technology
22.	Delivered a lecture as resource person in General Orientation Course (GOC)-81 on the topic of Functional Foods: Role in Diseases Prevention organised on 26.02.2010 by GNDU, Amritsar.	Food Science and Technology
23.	Delivered a lecture as resource person in General Orientation Course (GOC)-82 on the topic of Food for Better Health organised on 13.05.2010 by GNDU, Amritsar.	Food Science and Technology
24.	Delivered a lecture as resource person in General Orientation Course (GOC)-82 on the topic of Soya Bean-Health Benefits organised on 20.05.2010 by GNDU, Amritsar.	Food Science and Technology
25.	Delivered a lecture as resource person in General Orientation Course (GOC)-82 on the topic of GM Foods organised on 21.05.2010 by GNDU, Amritsar.	Food Science and Technology
26.	Delivered a lecture as resource person in General Orientation Course (GOC)-83 on the topic of Food for Better Health organised on 20.06.2010 by GNDU, Amritsar.	Food Science and Technology
27.	Delivered two lectures as resource person in General Orientation Course (GOC)-85 on the topic of Functional Foods and Food Security and Post Harvest Processing organised on 16.05.2011 by GNDU, Amritsar.	Food Science and Technology
28.	Delivered two lectures as resource person in Refresher course on Environmental Studies on the topic of Food Security & Climate Change and Nutritional Health Benefits of Soya Bean on 01.01.2011 organised by GNDU, Amritsar.	Food Science and Technology
29.	Delivered two lectures as resource person in Refresher course on Environmental Studies on the topic of Functional Foods and Food Security on 07.01.2012 organised by GNDU, Amritsar.	Food Science and Technology
30.	Delivered a lecture as resource person in General Orientation Course (GOC)-95 on the topic of Food Security organised on 28.05.2014 by GNDU, Amritsar.	Food Science and Technology
31.	Delivered a lecture as resource person in Refresher course on Environmental Studies on the topic of Food Security on 18.06.2014 organised by GNDU, Amritsar.	Food Science and Technology
32.	Delivered a lecture as resource person in Special Winter School on the topic of Functional Food for Better Health on 20.12.2014 organised by GNDU, Amritsar.	Food Science and Technology
33.	Delivered a lecture as resource person in Refresher course on Environmental Studies (ID) on the topic of Challenges related to Food Security and Post Harvest Process on 15.06.2015 organised by GNDU, Amritsar.	Food Science and Technology

34.	Delivered a lecture as resource person in Orientation Programme-97 on the topic of Security and Post Harvest Challenges organised on 16.05.2015 by GNDU, Amritsar.	Food Science and Technology
35.	Delivered a lecture as resource person in Special Summer School on the topic of Issues related to Food Security and Food Problems in India on 16.06.2015 organised by GNDU, Amritsar.	Food Science and Technology
36.	Delivered a lecture as resource person in Orientation Programme-101 on the topic of Junk Food: We Must Know What We Eat organised on 06.06.2017 by GNDU, Amritsar.	Food Science and Technology
37.	Delivered a lecture as resource person in Orientation Programme-101 on the topic of Secrets to Publications in Reputed Journals organised on 16.06.2017 by GNDU, Amritsar.	Food Science and Technology
38.	Delivered Inaugural Lecture as resource person in Short Term Course on Research Methodology on 27.05.2017 organised by GNDU, Amritsar.	Food Science and Technology
39.	Delivered a lecture as resource person in Short Term Course on Research Methodology on the topic of How to Write a research Article on 30.05.2017 organised by GNDU, Amritsar.	Food Science and Technology
40.	Delivered a lecture as resource person in Summer Programme on the topic of Why we need to worry about the Junk Food on 20.06.2017 organised by GNDU, Amritsar.	Food Science and Technology
41.	Delivered Valedictory Address as resource person in Orientation Programme-103 on 25.12.2017 organised by GNDU, Amritsar.	Food Science and Technology
42.	Delivered Valedictory Address as resource person in Refresher Course in Punjabi Language Literature & Culture on 05.07.2018 organised by GNDU, Amritsar.	Food Science and Technology
43.	Delivered Inaugural Address as resource person in Short Term Course on Preparing a Research Project Proposal and Research Paper Writing on 05.02.2019 organised by GNDU, Amritsar.	Food Science and Technology
44.	Delivered invited lecture in INSPIRE INTERNSHIP SCIENCE CAMP on 10 th August, 2013 organised by Guru Nanak Engineering College, Ludhiana.	Food Science and Technology
45.	Delivered lecture on “Junk Food and its effect on body” as guest speaker in Rotary Club Amritsar South East on 26 th August, 2015.	Food Science and Technology
46.	Delivered invited lecture in the DST-INSPIRE Camp on 4 th Nov., 2015 organised by Lyallpur Khalsa College, Jalandhar, 144001, Punjab, India.	Food Science and Technology
47.	Delivered invited lecture in the DST-INSPIRE Camp on 6 th Dec., 2015 organised by DAV College, Amritsar, Punjab, India.	Food Science and Technology
48.	Delivered a talk on “Wheat starch: processing and factors controlling its functionality” in 24 th Indian Convention of Food Scientists and Technologists (ICFoST XXIV) on 19 th December, 2015 at Parbhani, Maharashtra.	Food Science and Technology
49.	Delivered invited lecture in the DST-INSPIRE Camp on 23 th Dec., 2015 organised by RR Bawa DAV College, Batala.	Food Science and Technology
50.	Delivered a lecture on “Junk Food: we need to know what we eat” in Refresher Course on Environmental Biology on 6 th February, 2016 organized by Central University of Punjab, Bathinda.	Food Science and Technology
51.	Delivered a lecture on “Food Security Challenges” in Refresher Course on Environmental Biology on 6 th February, 2016 organized by Central University of Punjab, Bathinda.	Food Science and Technology
52.	Chaired AFST (I)-AACCI joint session on Grain Science and technology on 10 th November 2016 in ICFoST XXV, organized by AFSTI at Guru Nanak Dev University, Amritsar.	Food Science and Technology
53.	Delivered invited talk on Pulses: Diversity and challenges in India on 10 th November 2016 in ICFoST XXV, organized at Guru Nanak Dev University,	Food Science and Technology

	Amritsar.	
54.	Delivered a lecture on “Junk Food” in in the DST-INSPIRE Camp on 8 th Nov., 2017 organised by Lyallpur Khalsa College, Jalandhar.	Food Science and Technology
55.	Delivered lecture on starch structure-functional relationship on 7 th Jan, 2018 in a workshop on “Bio-Imaging for Food Quality Monitoring and Process Automation” financially supported by GIAN program of MHRD from 05 to 09 th Jan 2018.	Food Science and Technology
56.	Delivered lecture on “Food Security and Postharvest Challenges” on 8 th Jan, 2018 in a workshop on “Bio-Imaging for Food Quality Monitoring and Process Automation” financially supported by GIAN program of MHRD from 05 to 09 th Jan 2018.	Food Science and Technology
57.	Addressed inaugural Function of DST INSPIRE INTERNSHIP SCIENCE CAMP on 15 th January, 2018 at Hans Raj Mahila Maha Vidyalaya, Jalandhar.	Food Science and Technology
58.	Delivered a lecture on “Junk Food vs Functional foods” in the DST-INSPIRE Camp on 22 nd Jan., 2018 organised by Akal College of Pharmacy & Technical Education, Mastuana Sahib, Sangrur, Punjab.	Food Science and Technology
59.	Delivered a lecture on “Food for Healty Living: Junk Food vs Functional foods” in the DST-INSPIRE Camp on 3 rd Nov., 2018 organised by ISF College of Pharmacy, Ghal Kalan, Ferozepur G.T. Road, Moga, Punjab.	Food Science and Technology
60.	Delivered invited lecture on “Contribution of food products from rebind flours to modern life style diseses” on 29 th march, 2019 organised by DAV College, Amritsar, 143001, Punjab, India.	Food Science and Technology
61.	Delivered convocation address on 30th March, 2019 on The Convocation and Annual prize distribution function of Guru Nanak College Sukhchainana Sahib, Phagwara.	---
62.	Delivered a Plenary Lecture on “Food Security and Global Warming: Chellanges and Future Prospective” in 23 rd Punjab Science Congress, SLIET, Longowal on February 7-9, 2020.	Food Science and Technology
63.	Delivered invited talk “Art of Publishing in International Journals” on 18/07/2020 in UGC Refresher Course on Research Methodology: Tools and Techniques (7-20 July, 2020) organized by Mizoram University.	Research Methodology: Tools and Techniques
64.	Delivered invited talk “Ethics of Manuscript Publishing and Significance of Selection of Legitimate vs Predatory Journals” On 19/07/20 in UGC Refresher Course on Research Methodology: Tools and Techniques (7-20 July, 2020) organized by Mizoram University.	Research Methodology: Tools and Techniques
65.	Delivered invited talk “Enhancing skills to publish in Reputed Journals” on 24-08-2020 in UGC-STRIDE Refresher Course on Research Ethics, Methods, Skills Writing and Communication (19 th August-1 st September, 2020) organized by Mizoram University.	Research Ethics, Methods, Skills Writing and Communication
66.	Delivered invited talk “Ethics of Manuscript Publishing and distinguishing between Legitimate vs Predatory Journals” on 25-08-2020 in UGC-STRIDE Refresher Course on Research Ethics, Methods, Skills Writing and Communication (19 th August-1 st September, 2020) organized by Mizoram University.	Research Ethics, Methods, Skills Writing and Communication
67.	Delivered invited talk “Grits from different Corn types: Quality, Extrusion Behaviour & Product Characteristics” on 17.02.2021 in AIBTM, Greater Noida.	Extruded Snacks and Food Products
68.	Delivered invited talk on “Effect of heat stress on composition and processing quality of wheat and rice” on 20 th December, 2021 in ICFoST XXVIII, organized by AFSTI.	Heat stress on processing quality of wheat and rice
69.	Chaired Bio-processing of agro food resources and byproducts Technical	Food Processing

		session on 20 th December, 2021 in ICFoST XXVIII, organized by AFSTI	
	70.	Delivered invited talk on “Food Security and Processing Challeges” on 14 th May, 2022 organized by Agricultural and Food Engineering Department, I.I.T, Kharagpur	Food Science and Technology
	71.	Delivered invited talk on “Food Security and Safety Challeges” on 7 th June, 2022 organized by Department of Community Medicine & School of Public Health, PGIMER, Chandigarh	Food Safety
	72.	Delivered invited talk on “Art of Publishing in International Journals” on 9 th June, 2022 organized by Department of Applied Agriculture, CUP, Bhatinda	Research Methodology
	73.	Delivered invited talk on “Future Challenges of Food Security and Processing “ on 15 th July, 2022 in the UGC-HRDC Refresher Course in Life Science organized by Pondicherry University, Puducherry	Food Science
	74	Chaired session “Guardians of the Planet” on 30 th November, 2023 in the 6 th World Congress on Disaster Management organised from 28 th November to 1 st December, 2023 at Graphic Era Deemed to be University, Dehradun	Disaster management and climate change
	75	Delivered a lecture on “Food and Nutrition Security: Challenges by 2047” in the DST-INSPIRE Camp on 7 th August, 2024 organised by Amity University Punjab, Mohali.	Food and Nutrition Security: Challenges
	76	Delivered a lecture on “Food and Nutrition Security: Challenges by 2047” in the DST-INSPIRE Camp on 19 nd November., 2024 organised by Graphic Era Deemed to be University	Food and Nutrition Security: Challenges
	77	Delivered an endowment lecture on “Leveraging Food Chemistry and Metabolomics to Address Climate-Induced Challenges in Cereal and Pulse for Food and Nutritional Security” in 61 st Annual Convention of Chemists, on 20 th December, 2024 organised by Indian Chemical Society at JCERC University, Jaipur. Graphic Era Deemed to be University	Food Chemistry and Metabolomics
	78	Delivered talk on Food and Nutritional security challeges by 2047 in the International Conference on bridging conventional alternative healthcare practice: innovative futuristic approach 28 th February, 2025 organised by Manav Rachna International Institute of Research and studies	

(e) Inagural address delivered

S No.	Conference/workshops
1.	International conference on Advances in Management & Technology organised by GEU on 28 th June, 2024.
2.	Inagugural speech as chief Guest in two days “Senior foresters Woorkshop (35 years in IFS)” organised by Indira Gandhi National Forest Academy (IGNFA) on 28 th May, 2024.
3.	6 th international conference on Mathematical techniques in Engineering Applications (ICMTEA-2023) organised from 1 st December, 2023 at Graphic Era Deemed to be University, Dehradun from 1 st to 2 nd December, 2023
4.	International Conference on Mountain Ecosystems: Biodiversity and Adaptations on the Climate Change Scenario (MBCC-2023) 22-24 March 2023
5.	Sustainable Water Management in Changing Climate for Hilly Region workshop from 2 nd to 3 rd December, 2023 organised at Graphic Era Deemed to be University, Dehradun
6.	Synthetic biology and its biology workshop from 4 th to 9 th December, 2023 FDP worshop organised at Graphic Era Deemed to be University, Dehradun
7.	International Conference on Artificial Intelligence in Agriculture & Biomedical Sciences- 22-23 August 2023
8.	International Workshop on Smart Agriculture and Biomedical (IWSAB23OI) 18-22 August 2023

9.	International Workshop on Innovations in Food Technology 15-19 May 2023
10.	International Conference on Recent Advances in Nutraceuticals and Functional Foods (RANFF-2023) 22-23 May 2023
11.	G20 Symposium on Digital Agriculture in Collaboration with Alliance Bioversity & CIAT and College of Agriculture & Technology, Canada 28-29 August 2023
12.	National Workshop for Promoting Solar Farming for Socio Economic Development and for Net Zero Emission Mission, 30 September 2024, Graphic Era University, Dehradun
13.	International Faculty Development Program "Innovative Practices and Trends in Hospitality Education and Research", 8th Feb, 2025 organised by Graphic Era University, Dehradun
14	International Conference on Physics and Chemistry of Materials' (Feb. 20-22, 2025 organised by Graphic Era University, Dehradun
15	International conference on Science, spirituality and sustainability on 23-02-2025 organised by Graphic Era University, Dehradun

Reviewer of journal = 32

1. Food Research International (Elsevier)
2. Food Chemistry (Elsevier)
3. Journal of Food Science and Technology (AFST (I).
4. Journal of the Science of Food and Agriculture (Wiley)
5. International Journal of Food Science and Technology (Blackwell Publisher)
6. Journal of Food Science (IFT, USA)
7. Cereal Chemistry
8. LWT-Food Science and Technology (Elsevier)
9. Food Hydrocolloids (Elsevier)
10. Journal of Food Processing and Preservation
11. Carbohydrate Polymers (Elsevier)
12. Journal of Cereal Science (Elsevier)
13. Field Crops Research
14. Journal of Agricultural and Food Chemistry (ACS)
15. Journal of Food Engineering (Elsevier).
16. International Journal of Food Properties (Taylor & Francis)
17. European Food Research and Technology (Springer)
18. Food Science and Technology International (SAGE)
19. Journal of Research (PAU, Ludhiana, India)
20. Journal of Food Quality (Food Nutrition Press, USA)
21. International Journal of Biological Macromolecules (Elsevier)
22. Agro Food Industry Hi-tech (Teknosienze)
23. Advances in Food Sciences (PSP Publishing, Germany)
24. Biomacromolecules (ACS)
25. Carbohydrate Research (Elsevier)
26. Journal of Food Composition and Analysis (Elsevier)
27. Journal of Food Quality (Food Nutron Press)
28. Agricultural and Forest Meteorology (Elsevier)

29. Vibrational Spectroscopy (Elsevier)
30. Starch/Starke (Wiley)
31. Journal of Scientific and Industrial Research (CSIR, India)
32. Pakistan Journal of Scientific and Industrial Research

12. Research collaborations:

International

1. Dr. M.P. Yadav, Sustainable Biofuels and Co-Products Research Unit, Eastern Regional Research Center, ARS, USDA, 600 East Mermaid Lane, Wyndmoor, PA 19038, USA.
2. Prof. Naoyoshi Inouchi, Department of Applied Bioscience, Fukuyama University, Fukuyama 729-0297, Japan.
3. Dr. Takahiro Noda, National Agricultural Research Center for Hokkaido Region, Memuro, Hokkaido 082-0071, Japan
4. Dr. Naoto Isono, Graduate School of Bioresource, Mie University, Tsu 514-8507, Japan.
5. Dr. Peter S. Belton, School of Chemical Sciences and Pharmacy, University of East Anglia, Norwich, Norfolk, NR4 7TJ, United Kingdom.
6. Dr. DMR Georget, School of Chemical Sciences and Pharmacy, University of East Anglia, Norwich, Norfolk, NR4 7TJ, United Kingdom.
7. Dr. S. Barker, School of Chemical Sciences and Pharmacy, University of East Anglia, Norwich, Norfolk, NR4 7TJ, United Kingdom.
8. Dr. M. S. Bakshi, Department of Chemistry, Wilfrid Laueier University, Waterloo, Canada.
9. Dr. B. K. Tiwari, Manchester Metropolitan University, Manchester M14 6HR.
10. Dr. H. S. Guraya, Research Food Technologist, USDA ARS SRRC PO BOX 19687 1100 Robert E Lee Building, New Orleans LA 70179-0687, USA.
11. Dr. Finlay McRitchie, Department of Grain Science and Industry, Kansas State University, Manhattan, Kansas 66506, USA.
12. Dr. Sajid Alavi, Department of Grain Science and Industry, Kansas State University, Manhattan, Kansas 66506, USA.
13. Dr. A.C.Smith, Institute of Food Research, Norwich, Norfolk, United Kingdom.
14. Dr. V.J. Morris, Institute of Food Research, Norwich, Norfolk, United Kingdom.
15. Mr. Neil Frame, Research Center, APV Bakers, United Kingdom.
16. Dr. Seung-Taik Lim, School of Life Sciences and Biotechnology, Korea University, 5-1 Anam-dong, Sungbuk-ku, Seoul 136-701, South Korea.

National

17. Dr. J.C.Rana, National Bureau of Plant Genetic Resources, Regional Station, Phagli, Shimla 171.
18. Dr. Anju Mahendru Singh, Division of Genetics, Indian Agricultural Research Institute, New Delhi 110012.
19. Dr. Gulshan Mahajan, Department of Plant Breeding & Genetics, Punjab Agricultural University, Ludhiana-141004.
20. Dr. Rajarathnam Ezekiel, Central Potato Research Institute, Shimla 171001.
21. Dr. C. S. Nautiyal, National Botanical Research Institute, Lucknow
22. Dr. Baljit Singh, Department of Food Science and Technology, Punjab Agricultural University, Ludhiana-141004.

Collaborations/services provided to Industry

23. The General Mills, U.S.A.
24. Sukhjit Starch and Chemicals Ltd., Phagwara.
25. Kulwant Nutrition, Batala.
26. Golden Greens Inc., Verka, Batala.
27. Nestle India Pvt. Ltd.
28. GlaxoSmithKline, India.
29. Unti Co-operative cum processing society Ltd. Punajb.
30. Nijjar Agro, Jandiala.

15. Summary of the scientific contribution

Dr. Singh has made a consistent effort through his lifetime career in advancing the knowledge of chemistry and technology of cereals and pulses. His work was concentrated on starch and protein chemistry, extruded products, modified starches, baked products, cereal & legumes quality, milling, gluten-free product, value addition, selection of raw material, germplasm evaluation and identification cereal/pulses lines with novel traits etc., that has advanced the knowledge of food scientists and Industrialist worldwide.

Starch structure-functional relationship: He and his co-workers have carried out extensive work on establishment of structure-function relationship in starch present in different crops (potato [1 2 3 4 5 6 7 8 9 10](#), corn [11 12 13 14 15](#), rice [16 17 18 19 20](#), wheat [21 22 23](#), pulses [24 25 26 27 28 29 30 31 32 33 34](#), amaranth [35](#), sorghum [36](#), mango kernel [37](#), unripe-apples [38](#)). The variation in properties among the starches present in different crops has been explained on the basis of differences in amylose content, unit chains of amylopectin, the proportion of short- and long-side chains of amylopectin, crystallinity, granules structure, and amylose-lipids complexes. Knowledge generated on the structural-functional properties of starches from different sources proved highly valuable in understanding their difference in processing attributes. This was also useful in determining the suitability of starch present in different crops and their varieties/lines for different kinds of industrial applications.

Modified starches: He and his co-workers work on modified starches has provided alternative ways to improve the properties of native starches that have some shortcomings such as low shear resistance, thermal decomposition, high retrogradation and syneresis. Various types of chemical modifications of industrial importance such as acetylation [39 40 41 42 43](#), cross-linking [44](#), hydroxypropylated [45](#), oxidation [46](#), acid thinning [47 48](#) were employed using starches of different origin. This research has direct applicability as this explains as to why starches of different origins are transformed to modified starches with variable properties when treated under similar chemical reactions conditions. Developed the OSA modified starches from different sources and demonstrated its use in the preparation of low-fat mayonnaise by substituting 75% fat [49](#). Developed a simple method to synthesize environmental friendly biodegradable starch films containing gold (Au) and cadmium sulfide (CdS) nanoparticles with significantly improved mechanical properties than native starch films for various industrial applications [49a](#).

Environment temperature: The predicted climate change and global warming have indicated that high temperature (heat stress, HS) during grain filling stage in wheat and rice is likely to reduce yield of both the cereals. The reduction in yield in cereals due to HS has been demonstrated. Nevertheless, the effects of HS on processing quality attributes of wheat were not clearly understood. The changes in grain hardness and accumulation of proteins (gliadins, glutenins and albumins), respectively, affected milling and dough rheological properties of wheat [50](#). His research clearly explained the effects of environment temperature on wheat quality highlighting the strategies to be made keeping in view expected changes in environment. Paddy is sown on about 7 million acres of land in Punjab State, India and the state government's legislation does not allow the paddy to be sown before June 20 as delayed transplantation is complemented by the monsoon that drastically reduces dependence on the subsoil water. However, the scientific evidence on how composition as well as **milling and cooking quality of rice from the early and**

delayed transplanted paddy differ was unknown. Our studies have given scientific evidence that delayed sowing of paddy will result in higher head rice yield and better-quality rice [51](#) besides helping in saving subsoil water.

Pulses and pigmented rice germplasm evaluation for breeding program: Research work on the quality evaluation of large number of breeding lines/varieties of kidney bean [52 53 54 55 56 57 58](#), field pea [59 60 61](#), chickpea [62 63 64 65](#), horse gram [66 67](#), lentils [67 68](#), rice bean and pigmented rice [69](#), pigmented corn [70](#), wheat helped in identifying the accessions/lines, which had good processing attributes and has the potential for developing varieties of desirable traits.

Corn dry milling: Demonstrated differences in suitability of grit and flour fractions obtained by dry milling of different corn types on the basis of particle size distribution, physicochemical, pasting and protein profiling of grit and flour fractions indicating differences in their suitability for various products [71 72 73 74 75](#). These results are useful for the corn milling industry and snack manufacturing industry.

Novel technique for Wheatgrass production: The phenomenon of enhanced photoperiod and a decrease in dark period is popularly known as “speed breeding”. He and his co-workers have demonstrated how the photoperiod can be used to get high yield of wheatgrass and its juice with higher nutraceutical properties [76 77 78](#). This method is being scaled up for commercial production of wheatgrass and will help wheatgrass producers to produce the same throughout the year in shorter duration.

Protein isolates and applications: The secondary structure-functional properties relationships for pulses and amaranth and quinoa were established and the utilization of the extracted proteins in gluten-free (GF) foods and edible/biodegradable films were demonstrated [79 80 81 82 83](#). Demonstrated the zein protein toward the synthesis of bioconjugated gold (Au) nanoparticles. The amphiphilic nature of unfolded zein led to its readily adsorption on the nanoparticles surface and thus generated bioconjugated nanoparticles (NPs) suitable for drug release vehicles in the systemic circulation. Zein coating dramatically reduces hemolytic effects of Au NPs and thus makes them suitable models for appropriate biomedical applications [84](#).

Environmental calamities on wheat quality: He appraised the effect of sprouting, hailstorms, and bunt infection on the quality of wheat during his earlier career. The Karnal bunt caused by *Neovossia indica* appeared in epidemic form during 1978-79, 1980-81 and 1986-87 in many parts of North India. He developed methods that enable the utilization of bunt infected [85 86](#) and sprouted wheat [87 88 89](#). His research on evaluation of hailstorm damaged wheat [90](#) led to understanding the extent of deterioration in processing quality caused to wheat. This work was very useful for the milling and baking industry as well as procurement agencies in estimating the extent of damage caused by hailstorms. Demonstrated the relationships of polymeric as well as monomeric proteins (unextractable and extractable) and secondary structure with various flour properties amongst Indian wheat varieties [91 92 93 94 95 96 97 98 99 100](#). Allele [94](#) combination and high molecular weight Glutenin subunits in flours from different wheat varieties was demystified.

Metabolomics applications: The comprehensive metabolomic profile of wheatgrass [100](#) and microgreens from pulse [102](#), fenugreek [103](#) and basil [104](#) analysed by UHPLC–QToF–IMS, revealed the presence of various classes of compounds. The metabolomic profile of these greens elucidated the variation in the expression levels of metabolites due to growing conditions. These results can assist plant breeders in customizing growth according to demand. Also, the metabolomics finds application in evaluating the impact of defatting on the metabolites of brown rice [105](#). The industrial potential of supercritical carbon dioxide (sCO₂) extraction as an innovative method for lipid removal in brown rice from various Indian varieties was demonstrated. This process enhances the rice’s organoleptic and nutritional properties while preserving its quality, offering a superior alternative to conventional polishing methods. UHPLC–QToF–IMS analysis further underscores its effectiveness in refining fatty acid, phenolic, and amino acid profiles, making it a valuable approach for the food and rice processing industries. Furthermore, the industrial potential of ultrasonication combined with germination as an innovative technique to enhance the nutritional and functional properties of amaranth grains has been demonstrated [106](#). The method

significantly increases health-promoting compounds like GABA, proteins, and antioxidants while improving key baking and rheological properties. These findings present a promising approach for developing nutrient-rich functional food ingredients, catering to the growing demand for healthier and high-quality food products. In addition, the industrial potential of rice bran protein hydrolysate (RBPH) as a valuable by-product for functional food and nutraceutical applications has been worked out Through ultrafiltration and RP-HPLC, bioactive peptides with antioxidant and antihypertensive properties were identified using mass spectrometry and UHPLC-QTOF-IMS profiling. These findings demonstrate a promising approach to enhancing the utilization of rice by-products, contributing to the development of health-promoting ingredients for the food and pharmaceutical industries [107](#).

Plant-based meat alternatives: Findings demonstrated how WG and SPI can be utilized to develop meat analogues with a texture similar to chicken patties, providing valuable insights for plant-based meat development through extrusion [108](#). His research examines the development of high-moisture meat analogues (HMMA) by blending wheat gluten (WG) and rice protein (RP) with pea protein isolate (PPI) under high-moisture extrusion. It analyzes the effects on texture, rheology, color, and protein interactions. Results show that WG-PPI blends exhibit superior fibrillation and anisotropy, while RP-PPI blends have weaker texture due to RP's limited crosslinking. High RP incorporation (50%) led to poor structure due to its insoluble protein fraction. These findings highlight the need for optimized RP modifications to enhance its functionality in meat analogues [109](#).

Review papers: Review paper were also published on edible films and coatings, where we explored the role of biopolymers, plasticizers, and antimicrobial agents in improving food shelf life. Discussed various EFC fabrication techniques and their role in minimizing food waste [11221](#). Additionally, the review paper on the applications of SDS-PAGE in protein profiling, allergen detection, and quality assessment across cereals, pulses, dairy, and plant-based products [11231](#). Summarized the impact of ozone treatment on microbial reduction and bioactive compound enhancement in fruits and vegetables, emphasizing eco-friendly preservation methods [11241](#). Covered enzymatic starch modification techniques, highlighting their ability to tailor amylose/amylopectin ratios for improved digestibility, water-holding capacity, and functional properties in food applications [11251](#). Reviewed the impact of climate stress on wheat yield and quality, focusing on breeding strategies, genetic engineering, and agronomic practices to enhance resilience [11261](#). Discussed digital transformation in food quality management, integrating AI, big data, blockchain, and smart sensors for improved safety and traceability [11271](#). Explored the use of nanotechnology to enhance the bioavailability and therapeutic potential of phytoestrogens for hormone replacement and sports nutrition [11251](#). Analyzed the structural and functional properties of lentil proteins, emphasizing their amino acid composition and techno-functional potential in food formulations [11281](#). Reviewed emerging protein sources and advanced extraction techniques (ultrasound, pulsed electric field, enzyme-assisted, subcritical water) with a focus on sustainability and circular economy principles [11291](#).

(I) Publications Impact

I have effectively shared my research expertise with the scientific community, as evidenced by research (334) and review papers (55) in journals of international repute. I have a keen interest and ability to bring investigators from diversified backgrounds together to address research problems comprehensively. Published articles with more than 200 co-authors from around 100 different institutes, universities, and industry located in 25 different countries, which clearly reflected leadership quality. Co-authored book entitled "Pulse Chemistry and Technology (2012) is prescribed as a textbook in many universities. Has h-index 100 on Google Scholar and citations of more than 37,000. Highly cited papers with more than 100 citations=100 and more than 50 citations =160. This indicates the high impact and acceptability of my published work within the research community.

Dr. Narpinder Singh

Date: 23.02.2026