

DEPARTMENT OF FOOD TECHNOLOGY

ANNUAL REPORT
2020-21 (01.07.2020-30.06.2021)

DEPARTMENT OF Food Technology

(I) Name of the Department : Food Technology

(II) Year of Establishment : 1995

(III)

(a) Vision:

- To become a model department for scientific industrial research in the area of Food Science and Technology.
- To become an advanced Centre for Food Analysis aiming to provide guidance to food industries for sustainability and community well-being.

(b) Mission:

- To assist and promote the growth of food industry of the region through technology and technical services.
- To add value and utility to agro-resources through R&D
- To develop human resource for the food industry

(c) Objective of Department:

(As resolved by Staff Council)

- To provide quality education to the students
- To impart the knowledge of basic principles and novel techniques with respect to various aspects of food technology
- To train the best talents of the nation to provide a support base for the country's food security.

(IV) Course (s) offered in the department

Course	Sanctioned intake	Present strength(total) all semester
Ph.D.	16	15 (Registered)
P.G (M.Sc.)	35	70
P.G (M.Tech.)	20	10
U.G	30	108
Any other		

(V) Faculty detail

(Attach a list of the Faculty along with their qualifications and Experiences)

Professor		Associate Professor		Assistant Professor		Contract/Guest Faculty
Sanctioned	Filled	Sanctioned	Filled	Sanctioned	Filled	
01	01	02	NIL	04	03	11

Regular Faculty details

Name of Teacher	Designation	Qualification	Experience (in years)
Prof. B.S.Khatkar	Professor	Ph.D	31
Prof. Alka Sharma	Professor	Ph.D	25 years
Prof. Aradhita B.Ray	Professor	Ph.D	24 years 11 months
Dr. Manish Kumar	Associate Professor	Ph.D	16

Contract/Guest Faculty details

Name of Teacher	Designation	Qualification	Experience(in years)
Dr. Priyanka Kajla	Assistant Professor (Contractual)	Ph.D	8Years

60	15	60	34	60	29	60	30
----	----	----	----	----	----	----	----

(d) Detail of Foreign Students if any, admitted in the Department:

Sr. No.	Name of Course	No. of students Admitted	Name of Country
1	M.Sc.	0	0

(VIII) Research Scholars:

Intake capacity	Total no of Ph.D. students	Registered during the year	Thesis completed during the year	Specify number of different fellowships
16	15	01	01	TEQIP-III assistantship & URF

(IX) Sponsored Research/ Consultancy Project:

Title of the Project	Name of the Investigator(S)	Project in process	Awarded during the current year	Completed during the current year	Nature: Research/ Consultancy	Amount of Project
Ohmic heating assisted extraction of phytochemicals from Kinnow	Dr. Manish Kumar	Yes	2020-21	Ongoing	Research	1.1 (INR in lakhs)
TOTAL						

(X) Number of Publications of Faculty (in Total)

Books	Research papers		Research paper		Other Articles
	International (Foreign)	National (Indian)	Refereed	Non refereed	Book chapters
	15	4	19	-	8

(XI) Faculty wise detail of publication during the period:

a) Books/ Book Chapter/ Monograph

Authors	Book	Book/ Book Chapter	Mono graph	Title	Year of publication	Type of books (Text/Reference /Report)	National/ International
M.Kumar, A.Barmanray, K.K.Dash and S.Chakraborty	<u>Food Processing: Advances in Thermal Technologies</u>	Application of Ohmic heating in Food Processing.			June 2021	CRC Press.Book Edited by Kshirod Kumar Dash and Sourav Chakraborty	Taylor and Francis
Kiran Bala Nain, Sanju Bala Dhull, Sneha Punia and Aradhita Barmanray	<u>Nanotechnological Approaches in Food Microbiology</u>	Nanoemulsions: As Natural Antimicrobial Agents			2020	CRC Press	Taylor and Francis ISBN: 9780367359447
Parveen Kumari	Food Processing and Preservation	Pulsed Light and Ultrasound Processing		Scientific Publishers	Sept, 2020		National

Parveen Kumari	Essential Fatty Acids Source, Processing Effects, and Health Benefits	Effect of storage on Essential Fatty Acids		CRC press, Boca Raton Taylor and Francis	October, 2020		International
Parveen Kumari, Priyanka Kajla and Shreshtha Naudial	Handbook of Cereals, Pulses, Roots and Tubers	Finger Millets (Eleusine coracana L.). Properties and Health Benefits		Taylor and Francis	2021		International
Parveen Kumari, Priyanka Kajla and Dipanshi Kaushik	Handbook of Cereals, Pulses, Roots and Tubers	Barnyard Millet- Composition, Properties, Health Benefits and Food Applications		Taylor and Francis	2021		International
Bababode Adesegun Kehinde, Navnidhi Chhikara, Poonam Sharma, M.K.Garg, Anil Panghal	Handbook of Polymer Nanocomposites for Industrial Applications	Application of Polymer nanocomposites in food and bioprocessing industries		Elesvier			International
Manish Tiwari, Nisha Singhania, Astha Dewan, Roshan Adhikari, Navnidhi Chikkara, Anil Panghal	Active Packaging for various Food Applications	Organoleptic Acceptability of Active Packaged Food Products		Taylor and Francis	2021		International

b) Papers/ Articles in Journals

Authors	Year	Title of paper	Name of journal	Publishers	Pages	Vol.& No.	Impact factor	National/ International
Name :								
Sindhu, Ritu & Khatkar, B	2021	Recent Trends in Technologies of Cereal Based Food Products						International
Chaudhary, Nisha & Malik, Priya & Mohanty, Ashok & Khatkar, Bhupendar & Viridi, Amardeep & Singh, Narpinder	2021	Protein, Thermal and Functional Properties of α -, γ - and ω -gliadins of wheat and their effects on bread making characteristics	Food Hydrocolloids					International
Sindhu, Ritu & Devi, Amita & Khatkar, B.S	2020	Morphology, structure and functionality of acetylated, oxidized and heat moisture treated amaranth starches	Food Hydrocolloids					International
Sunil Bishnoi, Navnidhi Chhikara Nisha Singhania Aradhita Barman Ray	2020	Effect of cabinet drying on nutritional quality and drying kinetics of fenugreek leaves (<i>Trigonella foenum-graecum</i> L.)	Journal of Agriculture and Food Research	Elsevier Publication	2(2020)	100072		International
Manisha Malik and Alka Sharma	2021	Physicochemical and functional properties of yoghurt powder	International Journal of Chemical Studies		298-303	9		National

Rajiv Kumar, Manisha Malik and Alka Sharma	2021	Drying kinetics and effects of different drying methods on nutritional quality of raw and differently blanched green peas	Journal of Current Research in Food Science			2 (2)		National
PuniaBangar, S.; Chaudhary, V.; Thakur, N.; Kajla, P.; Kumar, M.; Trif, M.		Natural Antimicrobials as Additives for Edible Food Packaging Applications: A Review	Foods		2282	10 (10)		International
Chaudhary V, Thakur N, Kajla P, Thakur S and Punia S	2021	Application of Encapsulation Technology in Edible Films: Carrier of Bioactive Compounds	<i>Frontiers in Sustainable Food Systems</i>		374			International
Poonam and Sonika	2021	Extraction and Physico-chemical Behaviour of Fenugreek (<i>Trigonella foenum-graecum</i>) Gum of Cultivars HM-57 and Kasuri Methi.	Annals of Biology		37 (1)	121-126		National
Aastha Dewan		Development and nutritional evaluation of value added products from Ber	Research and Reviews: Journal of Food and Dairy Technology					National
Nisha Chaudhary, Priya Dangi, Vandana Chaudhary, Aastha Dewan, Sujata Pandit Sharma, Amrita Poonia, Manoj Kumar	2021	A review on instant controlled pressure drop technology – a strategic tool for extraction of bioactive compounds	International Journal of Food Science and Technology					International
Anshid Venthodika, Navnidhi Chhikara, Sandeep Mann, Mukesh Kumar Garg, Sajad Ahmad Sofi, Anil Panghal	2021	Bioactive compounds of <i>Aegle marmelos</i> L., medicinal values and its food applications: A critical review	Phytotherapy Research		1887-1907	35(4)		International
Poorva Sharma, Bababode Adesegun Kehinde, Navnidhi Chhikara, Anil Panghal	2021	Development of whey and turmeric based functional synbiotic product	Environmental Sustainability		4(4)	861-872		International
Anil Panghal, Anjali Onakkaramadom Shaji, Kiran Nain, Mukesh Kumar Garg, Navnidhi Chhikara	2021	<i>Cnidioscolus aconitifolius</i> : Nutritional, phytochemical composition and health benefits– A review	Bioactive Compounds in Health and Disease		4(11)	260-286		International
Sanju Bala Dhull, Sneha Punia Bangar, Ranjan Deswal, Preeti Dhandhi, Manish Kumar, Monica Trif, Alexandru Rusu	2021	Development and Characterization of Active Native and Cross-Linked Pearl Millet Starch-Based Film Loaded with Fenugreek Oil	Foods		10(12)	3097		International
Vanya Pareek, Parveen Kumari, Priyanka Kajla and Vandana Chaudhary	2021	FoSCoS: Simplified for FBO.	Food and Beverage Processing		18-19	7(12):		International
Sumit Grover, Parveen Kumari, Anil Kumar, Anjali Soni, Shalini Sehgal, Vasudha Sharma	2021	Preparation and Quality Evaluation of Different Oil Blends	Letters in Applied NanoBioScience		2126 - 2137	10(2)		International
Aneeta Khatak, Monika Yadav, Nisha Singhania and Sunil Bishnoi	10.06.2020	Comparative analysis of various processing on total phenolic content and antioxidant activity of flaxseed	International Journals of Chemical Studies		3738-3744	Vol. 8(4)		International
Aneeta Khatak ^a , Charul Chaudhary ^b and Raj Bala Grewal ^c	13.02.2021	Evaluation of anti-nutrient and mineral content in different pearl millet varieties	The Pharma Innovation Journal		19-23	Vol. 9(2)	Journal	International

(XII) Participation of faculty in Seminar/Conference/Workshop and refresher courses etc. during the period:

(a) Total Number of Seminars/ Conferences/ Workshop attended by faculty and papers presented

Positions	Attended			Papers presented		
	International	National	Total	International	National	Total
Professors	4	2	6			
Associate Professors						
Assistant Professors	1	3	4			

(b) International Seminar /Conference/ Workshop:

Name of the Teacher/Faculty	Title of paper presented	Theme of Seminar/ conference	Name of Host organization	Place	Dates
Aradhita Barmanray	“Sustainability in Food Industry; isn’t it now the Time?”	one day International Webinar seminar	The Department of Food Engineering And Technology, SLIET, Longowal	SLIET, Longowal: 148106, Punjab	12th August, 2020
Aradhita Barmanray	“Application of Statistics in Science and Technology using SPSS	three days International Webinar Workshop	World Food Preservation Center (WFPC),	USA	8th to 10th August, 2020.
Aradhita Barmanray	“Recent Trends in Processing Technologies for Food Quality and Safety”	International Webinar conference	Bihar Agricultural University, Sabour, Bhagalpur, Bihar	Sabour, Bhagalpur, Bihar	20th July, 2020
Aastha Dewan, Prof. B S. Khatkar	Relative significance of wheat quality factors determining gluten strength	Food Security and Food Chemistry 2020	Research & Reviews: Journal of Food and Dairy Technology	Online	24 August, 2020
Dr. Aneeta Khatak	Data Analysis through R Software	Data Analysis through R Software	Royal University of Bhutan	Online	29.04.2021

(c) National Seminar / Conferences/ Workshop:

Name of Teacher/ Faculty	Title of paper presented	Theme of Seminar/ conference	Name of Host organization	Place	Dates
Name:					
Aradhita Barmanray	“Environmental impacts of Covid-19 Pandemic challenges and Remedies through Science and Engineering”	five days Short term Webinar Training Program	Department of Applied Science, Poornima Institute of Engineering and Technology	Jaipur	27th to 31 st July, 2020
Aradhita Barmanray	“Government e-Marketplace” organized by National Project Implementation Unit (NPIU)	National Webinar	State Project Implementation Unit-UP, under Ministry of HRD,	Govt. of India	7th th July, 2020
Er. Aastha Dewan		Webinar on Virtual Classroom: Enhance Teaching through Learning Management System (LMS)			15-06-2021

(d) Regional/ State Level Seminars/ Conferences/Workshops:

Name of Teacher/Faculty	Title of paper presented	Theme of Seminar/ Conference	Name of Host organization	Place	Dates
Dr. Alka Sharma		Webinar on International Day of Yoga on Role of Yogic	GJUS&T HISAR		21-06-2021
Dr. Sonika		Webinar on International Day of Yoga on Role of Yogic	GJUS&T HISAR		21-06-2021
Er. Aastha Dewan		Webinar on International Day of Yoga on Role of Yogic	GJUS&T HISAR		21-06-2021
Dr Aneeta Khatak		Workshop on Outcome Based Education Framework	GJUS&T HISAR		17-03-2021
	TOTAL				

(e) Refresher/ Orientation Courses

Name of Teacher Faculty	Title of Refresher course	Name of Host organization	Dept.	University	Place	Dates
Er. Aastha Dewan	Advanced Concepts for Developing MOOCS	Ramanujan College		Ramanujan College	online	2-17 July,2020
	TOTAL					

(f) Total number of Refresher/ Orientation Courses attended:

- i) Refresher Courses : 1
ii) Orientation Courses :
iii) Short term course :
iv) Total : 1

(XIII) Association with National and State Level Bodies (Give teacher-wise details):

i) Membership of Professional Bodies:

Prof B.S.Khatkar:

Elected President of AFSTI
Editorial membership of International Journal of Food, Agriculture & Veterinary Sciences, Indian Science Abstracts & Journal of Food Science and Technology

Prof. Alka Sharma:

Life member: Nutrition Society of India, NIN, Hyderabad
Life member: Associations of Microbiologist of India-AMI
Life member: Associations of Home Scientists for Rural and Agricultural Institutions
Referee for Journal of Food Science and Technology, CFTRI, Mysore
Referee of the Journal of Dairy Science, Karnal

Prof. Aradhita B. Ray

Executive member AFST (I), Hisar Chapter, from 2017 -2019.
Life member of Haryana society of Horticultural Sciences.

Life member of Nutrition Society of India (NSI), National Institute of Nutrition, Hyderabad
 Annual member of Association of Food Scientists and Technologists (AFST), Hisar, Chapter
 Annual member of Association of Microbiologists of India (Hisar chapter) during 2009 – 2010.

Dr. Manish Kumar
 AFSTI membership
 SWEFT Society membership

Member of Expert Committee :

Prof. B.S.Khatkar:

Member, Research Board, NIFTEM, Kundli.
 Member, Selection Committee, CIAB, Mohali.
 Member, Scientific Advisory Committee, NABI, Mohali

Prof. Aradhita B.Ray:

Member, Faculty of Environmental, Biosciences and Technology (FEBT)
 Member, Committee to frame guidelines for common structure under CBCS for M. Tech. Programs

Detail of Consultancy Work in Department:

Name of Teacher	Job Work	Name of Agency	Total Amount
--	--	--	--

(XIV) Lecture (other than class) delivered (Give teacher wise detail)

	Type	Topic/ Subject	Institution	Dates
Invited Talk delivered in refresher courses	-	-	-	-
Extension lectures	-	-	-	-
Any other				

(XV) Additional Duties Performed/Positions held in the University (Teacher-wise)

Sr. No.	Name of Teacher	Additional Positions	Duration From to
1.	Aradhita Barmanray	Appointed as Selection Committee Subject Expert member to conduct three days interview to recruit Scientist B for Food Technology discipline, by Human Resource Development (HRD) Department, Bureau of Indian Standards (BIS), Ministry of Consumer Affairs (Food and Public Distribution Division), New Delhi	5th to 7th August, 2020

(XVI) Training & Placement Activities of the Department:

Activity	No. of Students placed	No. of Companies in which placed*
Training	79	
Placement	61	

- Note:- Please attach a list of companies along with number of students placed, dates of placement

**(XVII) Detail of Academic activities/Professional Activities/
Programmes Organized in Department during the year:**

i. Seminar/ Conference/ Refreshers course/ Workshop/ Training Programme

Name of the Event	National/ International	Number of Participants	Duration	Date of the Event
Online training on Data Analysis through R Software	International	120	One Day training workshop	29.04.2021

ii. Extension Lecture: (with resource person & date)

Topic	Resource Person	Number of Participants	Dates of Event
Expert lecture on Making a difference by choosing the right "How"	Ms. Veena Sharma, Dr. Reddy's Laboratories, Delhi	70	2020

iii Student tour/Training Programme : (with dates & places visited)

Name	Place visited	Number of Participants	Dates of Event
NIL	-	-	-

iv Industry interaction Programs: (with name of company & date)

Name of the Event	Number of the Industry	Number of Participants	Duration	Date of the Event
NIL	-	-	-	-

v Any other

(XVIII) Awards/ Honours received by Faculty (Give teacher-wise details about title of award, awarding agency and date of conferment):

Name of the Teachers	Title of Award	Name of Awarding Agency	National/ International	Date Conferred
-	-	-	--	-
-	-	-	-	-

(XIX) Any other important Information /Achievement of the Department:

ANNEXURE

DEPARTMENT OF FOOD TECHNOLOGY

- (I) **TOTAL NO. OF RESEARCH PAPERS PUBLISHED:**
NATIONAL: 4
INTERNATIONAL: 15
- (II) **TOTAL NO. OF FUNDED RESEARCH PROJECTS:**
COMPLETED: _____ 1 _____
ON GOING: _____ 1 _____
- (III) **TOTAL NO. OF PARTICIPATED AND CONTRIBUTED RESEARCH PAPERS: 19**
SEMINARS & CONFERENCES: 12
INTERNATIONAL LEVEL:
- (IV) **TOTAL NO. OF BOOKS PUBLISHED: NIL**
- (V) **NUMBER OF SCHOLARS COMPLETED THEIR PH.D. DEGREE: 00**
- (VI) **TOTAL NUMBER OF SCHOLARS REGISTERED TO PH.D. PROGRAMME: 01**

Signature of the Chairperson