Annua Report 2021-22





College of Food Processing Technology and Bioenergy
Anand Agricultural University
Anand-388 110

Annual Report 2021-22



Compiled by
Er. Tanmay H. Bhatt
Assistant Professor, FPE

College of Food Processing Technology and Bioenergy
Anand Agricultural University
Anand-388 110

College Annual Report

Year : 2021-22

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Editors : Er. Tanmay H. Bhatt, Assistant Professor (FPE)

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Nr. Talati Hall,

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Ph.: 079-22148826







Anand Agricultural University Anand

Telfax: 02692-261302

Email: deanfpt@aau.in

Message

The College of Food Processing Technology and Bioenergy, AAU, Anand is one of the prestigious institutions in the country, which imparts education in the field of Food Technology. Since inception, the college is making a steady progress to achieve its vision and mission. The graduates and post graduates of the college have contributed significantly in the sectors such as food plant operations, plant management, food processing, food packaging, food product development, quality testing, equipment manufacturing, marketing, etc.

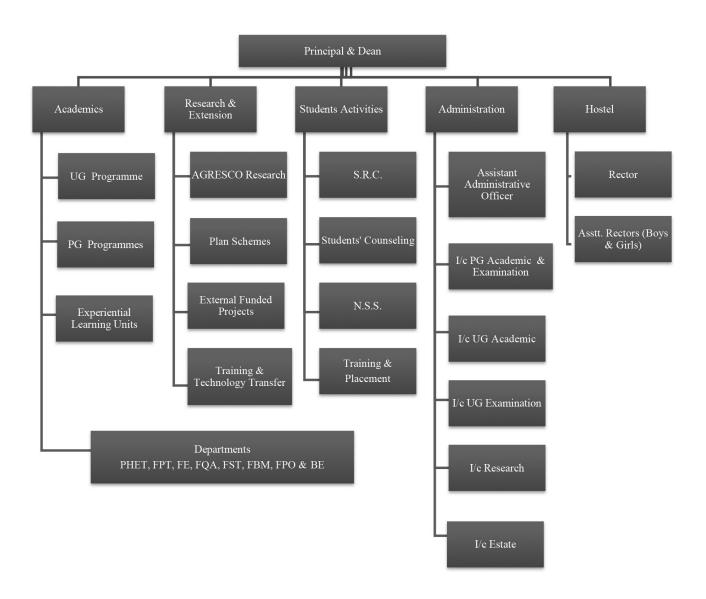
Since its inception keeping pace with technological advancement and other developments, it has upgraded its infrastructure, academic programmes and redesigned the curriculum from time to time. New innovations and use of niche techniques are being used by the college to develop useful products, processes and equipment. The college has excellent research environment with state-of-art equipment and instruments and has handled many sponsored mega projects funded by reputed national and international agencies

I feel delighted to forward the Annual Report of College of Food Processing Technology and Bioenergy for the year 2021-22. The brief details about the college, staff and fund utilization, academic programmes, departments, seminars, workshops and trainings, various programmes organized and attended by the staff, publications/faculty achievements, students' welfare activities, training and placement, etc. are comprehended and depicted in the report. The report will also help the College and University to take necessary measures for the further development to strengthen the education, help the processors and related industries in the state and country.

I appreciate the efforts made by SRC Chairman, NSS Cordinator, UG & PG Academic incharge, Head of the Departments, Assistant Administrative Officer, and all the staff for supporting in publishing of such informative document.

(Samit Datta)

Organizational Chart of the College of Food Processing Technology and Bio Energy



II. STAFF POSITION AND FUND UTILIZATION

Table 1 Total Manpower available with the college as on 31.03.2022

Sr. No.	Name Of Post	Pay Scale (Rs.)	В.Н.	Sanctioned	Filled	Vacant
-	Principal	37400-67000 (10000 Agp)	12950	1	П	0
7	Professor	37400-67000 (10000 Agp)	12950	ю	7	1
			12950	4	4	0
8	Associate Professor	37400-67000 (9000 Agp)	5073		0 -	- 0
			12957			0
		15600-39100	12950	17	17	0
_	A constant Deep Constant	(6000 Agp)	6502-3	4	0	4
4	Assistant Professor		12075	1	0	1
			12957	က	2	1
	Common Description A secretary		12950	2	2	0
w	A SCHOOL NESCALCE ASSISTANT	39900-126600	5073	2	1	1
	Assistant mist uctor		6502-3	1	0	1
9	Laboratory Technician	29200-92300	12950	1	1	0
7	Mechanic	25500-81100	12950	1	1	0
∞	Assistant Administrative Officer	44900-142400	12950	-	1	0
6	Head Clerk	35400-112400	5073	1	0	1
			12950	1	1	0
10	Senior Clerk	25500-81100	5073	1	0	1
			7228	1	1	0
			12950	1	1	0
11	Junior Clerk	19900-63200	5073	1	1	0
			7228	1	1	0
12	Driver	19900-63200	5073	1	1	0

Sr. No.	Name Of Post	Pay Scale (Rs.)	B.H.	Sanctioned	Filled	Vacant
13	Research Associate	38000+Hra	12993-21	-	1	0
7	Doctor A consists	2000011120	12960	2	2	0
1	Nesearch Associate	2000071112	12969	1	1	0
	I ohoustow. A440mlant/		12075	1	0	1
15	Peon / Helper / Lab Boy	14800-47100	5073	4	2	2
			6502-3	1	0	1
16	Hostel Asstt.Warden	19900-63200	12865	1	1	0
17	Asstt.E.E (Home)	57700-182400	5229	1	0	1
18	Asstt.Instructor Bakery	35400-11740	5229	8	0	3
19	Junior Instructor	35400-11240	5229	1	0	1
20	Bakery Operator	25500-81100	5229	1	1	0
21	Balwadi Teacher	25500-81100	5229	1	1	0
22	Sivan Teacher	25500-81100	5229	1	0	1
23	Hostel Asstt.Warden	25500-81100	5229	1	1	0
24	Senior Clerk	25500-81100	5229	1	0	1
25	Junior Clerk	19900-63200	5229	1	1	0
26	Helper	14800-47100	5229	1	1	0
27	Peon	14800-47100	5229	1	1	0
		Total		92	53	23

Table 2 Budget heads wise sanctioned grant and utilization (2021-22)

	Scheme	Budget	Sa	Sanctioned Grant	d Grant			Expenditure	liture		F	Fund Utilization %	zation %		Income
		וובאת	Pay & Allow	Rec	Non Rec	Total	Pay & Allow	Rec	Non Rec	Total	Pay & Allow	Rec	Non Rec	Total	
	(ii)	(iii)	(iv)	3	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(ivx)	(vx)	(xvi)
							Plan								
D S S S	Development of various biogas plants to use vegetative wastes	12075	11.28	3.0	2.0	16.28	11.26	2.54	2.0	15.80	%8.66	84.66%	100%	94.82%	
<u> </u>	Establishment of College of Food Processing Technology & Bio- Energy	12950	457.62	42.0	13.90	513.52	457.47	41.25	13.90	512.62	%6.96%	%86	100%	%66	24.86
	Post Harvest management of some important crops of middle Gujarat	12960	13.61	10.0	09.0	24.21	13.58	9.53	09.0	23.71	%66	95%	100%	97.9%	09.0
<u> </u>	Development of irradiation technology for agricultural, animal dairy and food products	12969	6.47	9.0	0	15.47	6.46	8.99	0	15.45	%6.66	%6.66	0	%6'66	0.32
E St E	Establishment of students training centre for food processing	12969-	0	14.0	8.0	22.0	0	13.14	7.76	20.90	0	93.8%	97%	95%	

			98			
			0.36			
100%	83%	77%	%6'66	73%	78.66%	100%
0	0	0	0	0	%06	0
100%	83%	77%	100%	73%	%08	100%
0	0	0	%6'66	0	%99	0
6.85	18.29	5.42	13.12	10.95	4.44	0.90
0	0	0	0	0	0.90	0
6.85	18.29	5.42	0.9	10.95	2.97	0.90
0	0	0	7.12	0	0.57	0
12.0	22.0	7.0	13.13	15.0	5.56	0.90
0	0	0	0	0	1.0	0
12.0	22.0	7.0	0.9	15.0	3.70	0.90
0	0	0	7.13	•	0.86	0
12969-	12987-	12987-	21	12988-	12865	12967
Strengthening of students training cum coaching centre	Establishment of department of food safety and testing at Anand	Establishment of instructional processing facilities for students	Development of food decontamination technology for safety and quality of fresh and minimally processed fruits and vegetables	Training programme on food processing technology	Upgrading of the students facilities at different campuses	Modernizing the students facilities at different campuses
9	r	∞	6	10	11	12

3 Scheme for establishing the establishing the office of the direction of student weeklare, counselling and placement cell 14 Award of fellowship 12967- 0 0.785 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0.785 0 0.785 0.785 0.785 0.785 0.785 0.785 0.785 0 0.785 0						
Scheme for establishing the office of the director of the dire					0.55	26.78
Scheme for establishing the of stabilishing the of free director 12967- 0 0.60 0 0.60 0 0.59 0 0.59 0 99.9% of student welfare, counseling and placement cell 4.45 6.785 0 0.755 0 0.755 0 0.755 0 0.755 0 0.755 0 0.755 0 0.755 0 0.755 0 0.055 0 0.92 0 0.755 0 0.095 0 0.92 <td>99.9%</td> <td>100%</td> <td>100%</td> <td>100%</td> <td></td> <td>%56</td>	99.9%	100%	100%	100%		%56
Scheme for establishing the office of the director of student welfare, of student welfare, consciousling and placement cell 12967- 0.60 0.60 0.60 0.60 0.659 0.59 0 0.59 0 counsellishing the offsulent welfare, counselling and placement cell 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0 0.785 0	0	0	0	0	100%	%86
Scheme for establishing the office of the director of student welfare, counselling and placement cell Award of fellowship 12967- 0 0 0.785 0 0.785 0 0.785 0 0.785 1 0 0.895 1	99.9%	100%	100%	100%	%6'66	%68
Scheme for establishing the office of the director of student welfare, counselling and placement cell Award of fellowship 12967- 0 0.785 0 0.785 0 0.785 0 0.785 to under graduate students in various faculties of AAU. Award of fellowship 12703 0 0.75 0	0	0	0	0	%66	%66
Scheme for stabilishing the office of the director of student welfare, counselling and placement cell 12967- 0 0.60 0 0.60 0 0.59 Award of fellowship and placement cell 12967- 0 0.785 0 0.785 0 0.785 Award of fellowship students in various faculties of AAU. 12703 0 0.75 0 0.75 0 0.75 Award of fellowship students in various faculties of AAU. 12930 0 0.92 0 0.95 0 0.75 Addition of the facilities for organizing Rural Agricultural Work Experience (RAWE) 12957 53.12 21.25 4.45 78.82 53.06 21.24 Polytechnic in Food Science & Home Experience & Home Economics 21.05 148.945 549.52 151.115	0.59	0.785	0.75	0.92	78.75	730.245
Scheme for establishing the office of the director 12967- 0 0.60 0 0.60 0 of student welfare, counselling and placement cell 4 0 0.785 0 0.785 0 Award of fellowship students in various students in various faculties of AAU. 4 0 0.75 0 0.75 0 Addition of the students in various faculties of AAU. 12930 0 0.92 0 0.92 0 Addition of the students in various faculties of AAU. 12930 0 0.92 0 0.92 0 Addition of the facilities for organizing Rural Agricultural Work Experience (RAWE) 53.12 21.25 4.45 78.82 53.06 Strengthening of Science & Home Economics Economics 168.905 29.95 748.945 549.52	0	0	0	0	4.45	29.61
Scheme for establishing the establishing the of fixed of the director of student welfare, counselling and placement cell 12967- 0 0.60 0 0.60 Award of fellowship and placement cell 12967- 0 0.785 0 0.785 Award of fellowship to under graduate students in various faculties of AAU. 12703 0 0.75 0 0.75 Award of fellowship to post graduate students in various faculties of AAU. 12930 0 0.92 0 0.92 Addition of the studities for organizing Rural Agricultural Work Experience (RAWE) 23.12 21.25 4.45 78.82 Strengthening of Science & Home Economics Economics 29.95 748.945	0.59	0.785	0.75	0.92	21.24	151.115
Scheme for establishing the establishing the of fluetor of student welfare, counselling and placement cell Award of fellowship 12967- 0 0.785 0 to under graduate students in various faculties of AAU. Award of fellowship 12703 0 0.75 0 to post graduate students in various faculties of AAU. Addition of the students in various faculties for organizing Rural Agricultural Work Experience (RAWE) Strengthening of 12957 53.12 21.25 4.45 Polytechnic in Food Science & Home Economics 29.95	0	0	0	0	53.06	549.52
Scheme for establishing the of fice of the director of student welfare, counselling and placement cell Award of fellowship 12967- 0 0.785 (to under graduate students in various faculties of AAU. Award of fellowship 12703 0 0.75 (to post graduate students in various faculties of AAU. Addition of the students in various faculties for organizing Rural Agricultural Work Experience (RAWE) Strengthening of Science & Home Economics Total 520.09 168.905 29	0.60	0.785	0.75	0.92	78.82	748.945
Scheme for establishing the of fice of the director of student welfare, counselling and placement cell Award of fellowship 12967- 0 0.785 to under graduate students in various faculties of AAU. Award of fellowship 12703 0 0.75 to post graduate students in various faculties of AAU. Addition of the students in various faculties for organizing Rural Agricultural Work Experience (RAWE) Strengthening of 12957 53.12 21.25 Polytechnic in Food Science & Home Economics Total 260.09 168.905	0	0	0	0	4.45	29.95
Scheme for 12967- 0 establishing the 2 office of the director of student welfare, counselling and placement cell Award of fellowship 12967- 0 to under graduate 01 students in various faculties of AAU. Award of fellowship 12703 0 to post graduate students in various faculties of AAU. Addition of the 12930 0 facilities for organizing Rural Agricultural Work Experience (RAWE) Strengthening of 12957 53.12 Polytechnic in Food Science & Home Economics 550.09	0.60	0.785	0.75	0.92	21.25	168.905
Scheme for establishing the office of the director of student welfare, counselling and placement cell Award of fellowship to under graduate students in various faculties of AAU. Award of fellowship to post graduate students in various faculties of AAU. Addition of the facilities for organizing Rural Agricultural Work Experience (RAWE) Strengthening of Polytechnic in Food Science & Home Economics	0	0	0	0	53.12	
	12967- 2	12967- 01	12703	12930	12957	
13			Award of fellowship to post graduate students in various faculties of AAU.			Total
	13	14	15	16	17	

		0.13			0.13		1	1
	90.5%	%6'66	49.5%	97.9%	%96		1	1
	0	0	0	0	0		1	1
	84%	100%	0.03%	%6.66	94%		1	1
	97%	%66	%6.96%	%96	%86		1	1
	52.79	25.30	24.083	5.66	107.833		1	1
	0	0	0	0	0		1	1
	1.05	3.50	0.003	0.25	4.803		1	1
Non Plan	51.74	21.80	24.08	5.41	103.03	ICAR	1	1
	54.45	25.50	24.20	5.87	110.02		1	1
	0	0	0	0	0		1	1
	1.25	3.50	0.10	0.26	5.11		1	1
	53.20	22.0	24.10	5.61	104.91		1	1
	5073-	5229-	6502-	7228-			15211-	15221-
	Establishment Agril Product Process Engineering, Dairy Science College	Esta. of Polytechnic in Home Science & Economics, FPT&BE	Department of Agricultural Product Process Engineering	Strengthening of Existing School Of Baking	Total		Strength and Development of Aus	Strength and Development of Aus
	1	7	m	4			-	7

3 Rural Development 156.57 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.60 0.0 4.70 0.0 4.70 0.0 4.70 0.0 4.70 0.0 4.70 0.0 4.70 0.0 4.70 0.0 4.70 0.0 4.70 0.0 4.70 0.0 4.70 0.0 4.70 0.0										
Rural Betrief Service Scholarship 156.81 0 4.60 0 4.70				1	1		0			
Rural Awarenesship 156.57 0 4.60 0 4.70 0	100%	100%	100%	1	1	1	100%		%16	100%
Rural 15657- 0 4.60 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0 4.70 0	0	0	0	1	1	1	0		0	0
Rural 15687 0 4.60 0 4.60 0 4.60 0 4.60 4.60 Entrepreneurship 00 4.60 0.0 4.60 0.0 4.60 Entrepreneurship 00 4.60 0.46 0 4.76 0	100%	100%	100%	1	1	1	100%		%26	100%
Rural 15657- 0 4.60 0 4.60 0 4.60 0 Entrepreneurship 000 0.00 0.00 Development 15658- 0 4.76 0 4.76 0 4.76 0 Scholarship 000 0.46 0 0.46 0 0.46 0 Strengthening of 15912-	0	0	0	1	1	1	0		0	0
Rural 15657 0 4.60 0 4.60 0 4.60	4.60	4.76	0.46	1	1	1	9.82		0.74	6.40
Rural 15657	0	0	0	1	1	1	0		0	0
Rural 15657- 0 4.60 0 4.60 Entrepreneurship 00 00 Awareness and 00 00 00 Development 15658- 0 0.46 0 0.46 Scholarship 00 0.46 0 0.46 UG/Pg Teaching 15912- - - - Strengthening of 15912- - - - - Strengthening of 15921- - - - - Strengthening of 15921- - - - - Total 2044- - - - - - Total 2044- - - - - - Total 0 9.82 0 9.82 ICAR Junior 18311- 0 6.40 0.76 Research Fellowship 07 6.40 For post graduate 166 0.76 Students 18311- 0 6.40 Students 18404- 18404	4.60	4.76	0.46	1	1	1	9.82	ıcy	0.74	6.40
Rural 15657- 0 4.60 0 4.60 Entrepreneurship 00 00 Awareness and 00 00 00 Development 15658- 0 0.46 0 0.46 Scholarship 00 0.46 0 0.46 UG/Pg Teaching 15912- - - - Strengthening of 15912- - - - - Strengthening of 15921- - - - - Strengthening of 15921- - - - - Total 2044- - - - - - Total 2044- - - - - - Total 0 9.82 0 9.82 ICAR Junior 18311- 0 6.40 0.76 Research Fellowship 07 6.40 For post graduate 166 0.76 Students 18311- 0 6.40 Students 18404- 18404	0	0	0	1	1	1	0	ther ager	0	0
Rural 15657- 0 4.60 Awareness and 00 0.46	4.60	4.76	0.46	1	1	1	9.82	0	0.76	6.40
Rural Awareness and Development National Talent Scholarship OG/Pg Teaching Strengthening of ICAR Emeritus Total ICAR Junior ICAR Junior Research Fellowship for post graduate students Entrepreneurship 15659- 00 15659- 00 15612	0	0	0	1	1	1	0		0	0
Entrepreneurship 00 Awareness and 00 Scholarship 00 Strengthening of 15659- UG/Pg Teaching 00 Student and Faculty 15921- Amenities 00 ICAR Emeritus 16 Total 18311- ICAR Junior 18311- Research Fellowship for post graduate students	4.60	4.76	0.46	1	1	1	9.82		0.76	6.40
Rural Entrepreneurship Awareness and Development National Talent Scholarship UG/Pg Teaching Student and Faculty Amenities Total Total ICAR Emeritus Professor Scheme Total Total ICAR Junior Research Fellowship for post graduate students	0	0	0	1	1	1	0		0	0
	15657-	15658-	15659-	15912- 00	15921- 00	2044-			18273-	18311-07
E 4 R 0 L 8 1 1 1	Rural Entrepreneurship Awareness and Development	National Talent Scholarship		Strengthening of UG/Pg Teaching	Student and Faculty Amenities	ICAR Emeritus Professor Scheme	Total		National Service Scheme	ICAR Junior Research Fellowship for post graduate students
	ю	4	w	9	r	∞			-	8

			1	1		0
100%		10.65%	ı	1	18.8%	29.5%
0 0		0	1	1	%0	%0
100%		10.65%	-	-	21.5%	32%
0 0		0	1	1	0	0
4.21		2.43	ı	1	17.63	40.34
0 0		0	ı	1	0	0
4.21		2.43	ı	1	17.63	40.34
0 0		0	t	1	0	0
4.21		22.80	1	1	93.52	136.62
0 0		0	1	1	11.63	11.63
4.21		22.80	1	ı	81.89	124.99
0 0		0	ı	1	0	0
18311- 7C 18457-	35	18557- 67	18557-	18557- 79	-18557- 98	
Inspire Fellowship under INSPIRE Programme ICAR Senior	ReserchFelloship for Ph.D Students	Bhutan Student Hostel Fees	Swadeshi Science Movement	Minimal Processing Unit to Enhance Quality of Fruits & Vegetables	R-ABI	Total
ω 4		v	9	7	8	

Table 3 Summary of sanctioned grant and utilization (2021-22)

			Sanctioned Grant	ed Gran	t		Expenditure	diture		I I	Fund Utilization %	zation (%	
S	Scheme	Pay & Allow	Rec	Non Rec	Total	Pay & Allow	Rec	Non Rec	Total	Pay & Allow	Rec	Non Rec	Total	Income
(i)	(ii)	(iii)	(iv)	(4)	(vi)	(vii)	(viii)	(ix)	(x)	(xii)	(xiii)	(ivx)	(xx)	(xi)
Н	Plan	550.09	168.905	29.95	748.945	549.52	151.115	29.61	730.245	%66	%68	%86	%56	26.79
2	Non Plan	104.91	5.11	0	110.02	103.03	4.803	0	107.833	%86	94%	0	%96	0.13
ဇာ	ICAR	0	9.82	0	9.82	0	9.82	0	9.82	0	100%	0	100%	0
4	Other agency	0	124.99	11.63	136.62	0	40.34	0	40.34	0	32%	%0	29.5%	0
	Total	655.0	308.825	41.58	1005.405	652.55	206.078	29.61	888.238	88.3%	66.7%	71%	75.3%	26.92
	% of total													

Fund utilization		%
Pay and Allowances	••	88.30
Recurring Contingencies	••	02.99
Non-Recurring Contingencies	••	71.00
Overall	••	75.30

III. ACADEMIC PROGRAMMES

The details regarding the degree programmes offered, academic achievement, category wise students' strength during the year, scholarships awarded to the students, B.Tech. training, M.Tech and Ph.D. theses submitted as well as the details regarding subjects offered during B.Tech., M.Tech. and Ph.D. (FPT/FT) programmes for the academic year 2021-22 are included in this section.

Table 4 Eligibility criteria for admission in various degree programmes

Name of the graduate programme			_		neory subjects in Phys-
B.Tech. (Food Technol-	General	SC	ST	SEBC	EWS
ogy)	40	35	35	40	40
	Admission is of GUJCET of re		he merit basis	of 60% of PCM	PCB theory and 40 %
B.Tech. (Food Processing Technology) D-to-D	Admission is of in polytechnic			of 60% of OGP.	A/percentages achieved
M.Tech. (Food Technology)	is considered of gree and 50 % to obtain at least eligible for more be eligible for	on the merit ba of common st ast 50% of ma erit list). A car	asis of 50% of tate level entra rks in commondidate who of payment seat	OGPA (percenta ince examination in entrance examination pts for admission	B.Tech. (Agril. Engg.) age basis) of the last den (a candidate shall have ination so as to become in on payment basis will t least 45% of marks in
Ph.D. (Food Technology)	out of 10 point 65% of OGPA ination (a cand examination so sion on payme	ts or 60% of Oo for other cand lidate shall have as to become	GPA for reservidates and 50 ve to obtain at eligible for me e eligible for a	yed categories an % of common states 150% of materit list). A candidadmission on pay	on the merit basis of 6.0 d 6.5 out of 10 points or ate level entrance examrks in common entrance date who opts for admissment seats by obtaining

Table 5(a) Students intake and admitted in different graduation programmes (2021-22)

		Admissio it	No of admitted students	
Degree	Name of the College	Gen/ SC/ ST/ OBC/ EWS/ Other Board	ICAR	Admit- ted
B.Tech. (FT)	Food Processing Technology & Bio-Energy, Anand	48	7	55
B.Tech. (FT) D-to-D	Food Processing Technology & Bio-Energy, Anand	5	-	5
M.Tech. (FPT)	Food Processing Technology & Bio-Energy, Anand	6	2	8
M.Tech. (FPE)	Food Processing Technology & Bio-Energy, Anand	-	-	-
M.Tech. (FSQ)	Food Processing Technology & Bio-Energy, Anand	-	-	-
Ph.D. (FT)	Food Processing Technology & Bio-Energy, Anand	-	1	1

^{*}Includes Gen/SC/ST/SEBC/EWS (48 seats), ICAR (7 seats).

Table 5(b) Students admitted in different Post-Graduation programmes (2021-22)

Sr.	Subject	Subject Specialization	M. Tech.		Ph.D.		Total
No. Subject	Specialization	Regular	ICAR	Regular	ICAR	Total	
1		Food Processing Technology	4	2	0	1	7
2	Food Technol- ogy	Food Process Engineering	2	0	0	0	2
3		Food Safety and Quality Assurance	0	0	0	0	0
		Total	6	2	0	1	9

Table 6(a) Student evaluation as per V Dean' Committee Recommendations

Examination	UG	PG
Internal (percentage)	50	50
External (percentage)	50	50
Other (percentage)	-	-

Table 6(b) Frequency of student evaluation

	UG	PG
Mid-term theory test (UG) and one hourly tests (PG)	1	2
Internal Practical	1	-
Semester End Practical	1	1
Semester End Theory	1	1
Others (Assignments/Presentations)	-	2

Table 6(c) Examination and weightage for UG

- External theory (50%)
- Internal Theory + Practical (50%)
 - Courses with Theory and Practical

Mid-term Exam (30%) + Assignment (5%) in practical oriented courses + Practical (15%)

Courses with only Theory

Mid-term Exam (40%) + Assignment (10%)

• Courses with only Practical:

(100%) Internal

Table 6(d) Examination and weightage for PG

- Self-study (Assignments & Presentation)
 - Theory (20 marks)
- Internal tests

Theory (30 marks) and Practical (40 marks)

Semester-end Examination

Theory (50 marks) and Practical (60 marks)

Total marks

Theory (100 marks) and Practical (100 marks)

Table 7 Passed Out (Graduates and Post Graduates) of AAU in 2022

Sr. No.	Degree	First Class with Distinction	First Class	Second Class	Pass Class	Total
1	B.Tech. (FPT)	2	18	17	00	37
UG Total						
2	M.Tech. (FPT)	2	05	00	00	7
3	Ph.D.	3	00	00	00	3
PG (M.Tech. & Ph.D.) Total						10
Total Passed out					47	

Table 8 Class schedules of odd semester (2021-22)

DX-13.4. JOON.

COLLEGE OF FOOD PROCESSING TECHNOLOGY AND BIOENRGY, AAU, ANAND

Class Schedule of M. Tech. / Ph.D. (Food Technology) Specialization in Food Processing Technology / Food Safety and Quality Assurance

Academic Year: 2021-22 (w.e.f. Date: 31/08/2021)

p (ard e 5th Comester)

Semester: N	1. Tech. (3rd Semo	ester) & Ph.D. (3	& 5" Semester	Thursday	Friday	Saturday
Time/Day	Monday	Tuesday	Wednesday	Huisday		1 st , 3 rd 5 th
09.00-10.00	FPT-541/641	FPT-541/641	FPT-541/641	FPE-503 (THB)	FPE-503 (THB)	FPT-531
10.00-11.00	FBM-505 (SD)	FBM-505 (SD)	-	-	-	
11.00-12.00	-	-	-	-	-	-
			Lunch Break			
14.30 to 17.30 (Practical)	FPT-597-697 (Concerned Guide)	FPT-597-697 (Concerned Guide)	FPT-541-641	FPE-503	FPT-541-641	FPT- 641/FQA998

Course No.	Title	Teacher	Credit
FBM -505	Operation Research	Dr. Samit Dutta	2(2+0)
FPT-597-697	Special Problem	Concerned Guide	2(0+2)
FPT-531	Masters Seminar	Concerned Major Guide	1(1+0)
FPT-641	Doctorate Seminar (Major)	Dr. R F Sutar	1 (1+0)
FQA-998	Doctorate Seminar (Minor)	Dr. H G Bhatt	1 (1+0)
FPE-503 Advances in Instrumentation & Proc Control in food		Mr. T H Bhatt	3 (2+1)
FPT-541/641,	Masters Research/ Doctorate Research	Respective Guide	10(0+10)/ 5(0+05)

No. AAU/FPTBE/PGAcad/4017-18/21,

Date: 31 /08 /2021

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COLLEGE OF FOOD PROCESSING TECHNOLOGY AND BIOENRGY, AAU, ANAND

Class Schedule of M. Tech. / Ph.D. (Food Technology) Specialization in

Food Processing Technology / Food Safety and Quality Assurance

Academic Year: 2021-22 (w.e.f. Date: 31/08/2021)

M. Tech. (3rd Semester) & Ph.D. (3rd & 5th Semester)

Semester: N	I. Tech. (3" Semo	ester) & Th.D. (5	TVI I and an	Thursday	Friday	Saturday
Time/Day	Monday	Tuesday	Wednesday	Indisday		1st, 3rd 5th
		,		FPE-503	FPE-503	
09.00-10.00	FPT-541/641	FPT-541/641	FPT-541/641	(THB)	(THB)	FPT-531
10.00-11.00	FBM-505 (SD)	FBM-505 (SD)	-	-	-	
11.00-12.00	-	-	-	-	-	-
			Lunch Break			
14.30 to 17.30 (Practical)	FPT-597-697 (Concerned Guide)	FPT-597-697 (Concerned Guide)	FPT-541-641	FPE-503	FPT-541-641	FPT- 641/FQA998

Course No.	Title	Teacher	Credit
FBM -505	Operation Research	Dr. Samit Dutta	2(2+0)
FPT-597-697	Special Problem	Concerned Guide	2(0+2)
FPT-531	Masters Seminar	Concerned Major Guide	1(1+0)
FPT-641	Doctorate Seminar (Major)	Dr. R F Sutar	1 (1+0)
FQA-998	Doctorate Seminar (Minor)	Dr. H G Bhatt	1 (1+0)
FPE-503 Advances in Instrumentation & Process Control in food		Mr. T H Bhatt	3 (2+1)
FPT-541/641, Masters Research/ Doctorate Research		Respective Guide	10(0+10) 5(0+05)

No. AAU/FPTBE/PGAcad/1017-18/21, Date: 31 /08 /2021

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Table 9 Class schedules of even semester (2021-22)

COLLEGE OF FOOD PROCESSING TECHNOLOGY AND BIOENRGY, AAU, ANA

Tentative Class Schedule of

M. Tech. / Ph.D. (Food Technology) Specialization in

(i) Food Processing Technology

(ii) Food Process Engineering

Academic Year: 2021-22 (w.e.f. 14-03-2022) EVEN SEMESTER

Semester: Second (M. Tech./Ph. D.)

Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday 1 st & 3 rd
09.00 – 10.00	FPT-510 (AR)	FPE-501(MM)	FPT-517 (HP)	FPT-510 (AR)	FPT-510 (AR)	
	138 35%		FPE-506 (AN)		FPE-506 (AN)	
10.00-11.00	Thesis Work	FPT-518 (SD)	FPT-518 (SD)	FQA-501 (HGB)	Thesis Work	PGS 503 (SRP)
11.00-12.00	Thesis Work	FPT-515 (HP)	Thesis Work	FPT-515 (HP)	FPT-517 (HP)	(10.00-12.00)
			Lunch Break			
13.30 to 15.30 (Practical)	FPE-501(MM)	Thesis Work	Thesis Work	FPE-501(MM)	Thesis Work	PGS 505 (GNT) (14.00-16.00)
15.30-17.30	0 FPT-515 (HP) PGS 506 (NVS)					
(Practical)	FPT-518 (SD)	FPE-506 (AN)	(15.00-16.00)	FQA-501 (HGB)	FQA-501(HGB)	Thesis Work

Course No.	Title	Teacher	Credit
FPE-501	Computer Aided Design of Food Plant, Machinery And Equipment	Er. M. Makwana	3(1+2)
FPE-506	Engineering, Textural & Rheological Characteristics of Food Materials	Dr. A. Nema	3(2+1)
FPT-510	Lipid Technology	Dr. A. Ravani	3(3+0)
FPT-515	Technology for RTE/RTC Food Products	Dr. H. Pandey	3(2+1)
FPT-517	Technology of Frozen Foods	Dr. H. Pandey	2(2+0)
FPT 518	Traditional and Value-added Food Products	Dr. Samit Dutta	3(2+1)
FQA-501	Advances in Analytical Techniques	Dr. H. G. Bhatt	3(1+2)
PGS- 503 (e course)	Intellectual Property and its management in Agriculture	Dr. Shaktiranjan	1(1+0)
PGS- 505 (e course)	Agricultural Research, Research ethics and Rural Development Programs	Dr. C. N. Thomas	1(1.0)
	Disaster Management	Dr. G. N. Thorat Er. N. V. Shah	1(1+0)

No. AAU/FPTBE/PG Acad/ 2642-44

Date: 08-03-2022

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 Chairman SRC, FPT&BE

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College of Food Processing Technology & Bio-Energy, AAU, Anand Tentative Class Schedule for Second Semester B.Tech (FT) w.e.f.:12/04/2022

OFFICE ORDER

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 st , 3 rd & 5 th)	
9:00 – 10:00	FPE 123(L) AN	FQA 122(L) AMP	FPE 121(L) MM	MATH 121(L) ANN (8.00-10.00)	FPE 121(L) MM	FPE 123(L)	
10:00 – 11:00	FPE 122(L) NVS	FPT 121(L) AVR	FPT 121(L) AVR	FQA 121(L) JKM	FQA 121(L) JKM	AN	
11:00 - 12:00	FPE-124 (L) THB	FPE 122(L) NVS	FPE-124 (L) THB	FQA 122(L) AMP			
12:00 - 13:30	11.15		LUNCI	H BREAK	EDE 123 (D) II		
12:00 - 13:50	FQA 122 (P) 1	FPE-124 (P) I THB	FPT 121(P) 1 AVR	FPE 123 (P) I AN	FPE 123 (P) II AN	NSS	
13:30- 15:30	FPE-124 (P) II	FPT 121(P) II AVR	FPE 121 (P) II MM		FPE 122(P) I NVS	1433	
	THB SRC Activities	FQA 121 (P) 11	141141	FQA 121 (P) I JKM	FPE 121 (P) I MM		
15:35 - 17:35		JKM	White .	FQA 122 (P) II AMP	FPE 122(P) II NVS		

Details of Courses and Course Teachers

_		Сонивая	Credits	Course Teachers
		Courses	3 (2+1)	Dr.J.K.Momin
1	FQA 121	Food Microbiology	3 (2+1)	Sh.A.M.Patel
2	FQA 122	Food Chemistry of Micronutrients		Er.M.A.Makwana
3	FPE 121	Food Thermodynamics	3(2+1)	Er.N.V. Shah
4	FPE 122	Fluid Mechanics	3 (2+1)	
		Post-Harvest Engineering	3 (2+1)	Dr.A.Nema
5	FPE 123	Basic Electronics Engineering	3 (2+1)	Er.T.H.Bhatt
6	FPE 124	Basic Electronics Engineering	3 (2+1)	Dr.A.V.Ravani
7	FPT 121	Fundamentals of Food Processing	2 (2+0)	Er.A.N.Nakiya
8	MATH 121	Engineering Mathematics-II	The second secon	Dr.K.V.Vala
	PED 121	NCC/NSS/Physical Education	1 (0+1)*	DI.K. V. Vala
_	120	Total	23 (16+7)	
		* Non-Credit Course		Venue: Lecture Hall-II

Date: 06 04 2022 No. AAU/FPTBE/UGAcad/ 20 -2 /2022

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College of Food Processing Technology & Bio-Energy, AAU, Anand OFFICE ORDER

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1st, 3rd & 5th)			
9:00 - 10:00	FQA 241 (L)	FQA 241 (L) RD	FPT 243 (L) SHA/KVV	FPT 242 RBM (L)	FPT 242 RBM (L)	FPT 244 (L			
10:00 - 11:00	FQA 242 (L) JKM	FPE 241 (L) AKS	FPT 241 (L) SB	FPT 241 (L) SB	FPT 243 (L) SHA/KVV	GPT			
11:00 - 12:00	FPT 244 (L) GPT		FPE 241 (L) AKS	FBM 241 (L) DP	FBM 241 (L) DP				
12:00 - 13:30	011		LUNCH BREAK						
12:00 = 15.50	FQA 242 (P) 1 JKM	FQA 241 (P) 1 RD	FQA 242 (P) 11 JKM	FQA 241 (P) II RD	FPT 243 (P) I KVV-SA	NSS			
13:30- 15:30	FPT 243 (P) II KVV-SA	FPE 241 (P) II AKS	FPE 241 (P) I AKS						
15:35 - 17:35	FPT 242 RBM (P) II	FPT 242 RBM (P) I	FPT 241 (P) I JPR	SRC Activities					
	FPT 244 (P) I HGB	FPT 244 (P) 11 HGB		Y	FPT 241 (P) II JPR				

S.		Details of Courses and Course To Semester-IV	Credits	Name of course Teachers
No.	E0 4 241	Fard Distachnology	3 (2+1)	Sh. R.Dhingani
1	FQA 241	Food Biotechnology	2 (1+1)	Dr. J.K.Momin
2	FQA 242	Food Plant Sanitation	3 (2+1)	Dr. A.k.Sharma
4	FPE 241	Food Plant Utilities & Services Unit Operations in Food Processing	3 (2+1)	Dr.S.Bhise(T) Er.J.P.Rathod(P)
5	FPT 242	Processing Technology of Dairy Products	3 (2+1)	Dr. Ramesh Modi
6	FPT 243	Processing Technology of Legumes and Oilseeds	3 (2+1)	Dr. S.H.Akbari(T) Dr. K.V.Vala (T&P) Ms.Swati Anadani(P)
7	FPT 244	Processing of Spices and Plantation Crops	3 (2+1)	Dr. Govind P.T. (T) Dr.H.G.Bhatt (P)
8	FBM 241	Business Management and Economics	2 (2+0)	Dr. D.B.Patel
0	PED 241	NCC/NSS/Physical Education	1 (0+1)*	Dr. K.V.Vala
	PED 241	Total	22 (15+7)	Venue: Lecture Hall-

Principal & Dean

Date: 30 112 | 21

*indicates non-credit course

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College of Food Processing Technology & Bio-Energy, AAU, Anand Tentative Class Schedule for Sixth Semester B. Tech(F

T: / D			Sixth Semeste	b. rech(FT	w.e.f.: 01/01/	2022		
Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
9:00 - 10:00	FPT 364(L) RBM-GPT	FPT 361 (L) GPT	FPT 364(L) RBM-GPT	FQA 362 (L)	FQA 362 (L)	(1 st , 3 rd & 5 th)		
10:00 - 11:00	FPT 362 (L) HP	FPE 361(L) THB	FPE 362 (L)	FPE 361(L)	SD FPT 362 (L)	FPT 363 (L) SB		
11:00 - 12:00	FQA 361 (L) KSD	FPT 363 (L)	FBM 361 (L)	THB	HP FPT 361 (L)	Visit to Centra		
12:00 - 13:30		KSD SB DP GPT LUNCH BREAK						
13:30 - 15:30	1	FQA 361 (P) I KSD	FQA 361 (P) II KSD	FPT 361 (P) II NS	FPT 361 (P) 1			
	FPE 362 (P) I SSK	FPT 362 (P) II NRS	FPT 362 (P) I NRS		FPE 362 (P) II	SRC Activities		
15:35 - 17:35	FPT 363 (P) I SB		FPT 364(P) I GPT-RBM	FPT 364(P) II GPT-RBM	FPT 363 (P) II			
	FBM 361 (P)II DP	FBM 361 (P)! DP	FPE 361 (P)II THB	GI I-KBM	FPE 361 (P)I THB			

Details of Courses and Course Teacher

1	FOA 261	Semester-VI	Credits	Name of course	
2	FQA 361	Food Additives and Preservatives	2 (1+1)	Sh. K.S.Damle	
3	FQA 362 FPE 361	Food Quality, Safety Standards and Certification	2 (2+0)	Dr. S.Dutta	
4	FPE 362	instrumentation and Process Control in Food Industria	2 (2 . 1)	Er.Tanmay Bhatt	
		Applications of Renewable Energy in Food Processing	2(1+1)	Dr.S.S.Kapdi	
6	FPT 361	Processing of Meat, Fish & Poultry Products	3 (2+1)	Dr.Govind P.T.(T) Er.Nilesh Sardar (P)	
_	FPT 362	Processing Technology of Beverages	3 (2+1)	Dr.H.Pandey(T)	
7	FPT 363	Sensory Evaluation of Food Products	3 (2+1)	Er.Nilesh Sardar (P Dr.Suresh Bhise	
8	FPT 364	Food Packaging Technology and Equipment	3 (2+1)	Dr.Ramesh.Modi	
9	FBM 361	Entrepreneurship Development		Dr.Govid P.T.	
			2 (1+1)	Dr.D.B.Patel	
_		Total	23 (15+8)	Venue: Lecture Hall-IV	

Principal & Dean

No. AAU/FPTBE/UGAcad/ 2017-03 /2021

Date: 30/12/21

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College of Food Processing Technology & Bio-Energy, AAU, Anand

OFFICE ORDER

Tentative Schedule for the Eighth Semester B.Tech.(FT) during Academic Year 2021-22.

S. No.	Course No.	Title of the Course	Credits	Duration	Name of Teachers
1	FPO 481	Student READY - Industrial Tour	2 (0+2)	27/12/2021 to 09/01/2022	Dr.H.G.Bhatt Ms. Nimita Runajkar
2	FPO 482	Student READY - Internship/In-Plant Training	20 (0+20)	15/01/2022 to 07/05/2022	Dr.Govind P.T. Dr.Suresh Bhise
		Total Credits	22	~	

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V. C. Acard

No. AAU/FPTBE/UGAcad/ 1987

/21

Date: 98/12/2011

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Academic Achievements

Table 10 : Year wise students passed out

Year	Ph.D.	M.Tech.	B.Tech.	Total
2005	-	5	-	5
2006	-	1	-	1
2007	-	1	-	1
2008	-	2	-	2
2009	1	6	-	7
2010	-	5	-	5
2011	-	6	-	6
2012	-	7	-	7
2013	-	13	21	34
2014	1	13	25	39
2015	1	8	34	43
2016	-	9	32	41
2017	-	7	33	40
2018	9	10	34	53
2019	6	8	38	52
2020	1	8	37	46
2021	3	7	40	50
2022	3	8	48	49
Total	25	124	342	491

Table 11 : Semester- wise results of students of B.Tech/ M.Tech/ PhD (FT)

The semester wise results of students admitted in various years of B.Tech/ M.Tech/ Ph.D. (FT) are given below:

PG TABLE

Degree (Admission Year)	Semester	Dist.	First Class	Second Class	Pass Class	Fail	Total	Students Dropped
Ph.D.	VII	1	0	0	0	0	1	0
(2017-18)	VIII	1	0	0	0	0	1	0
	III	4	0	0	0	0	4	0
Ph.D.	IV	4	0	0	0	0	4	0
(2018-19)	V	4	0	0	0	0	4	0
	VI	4	0	0	0	0	4	0
	VII	2	0	0	0	0	2	0
	I	1	0	0	0	0	1	0
Ph.D.	II	1	0	0	0	0	1	0
(2019-20)	III	1	0	0	0	0	1	0
	IV	1	0	0	0	0	1	0
	V	1	0	0	0	0	1	0
Ph.D.	I	1	0	0	0	0	1	0
(2020-21)	II	1	0	0	0	0	1	0
	III	1	0	0	0	0	1	0
Ph.D. (2021-22)	I	1	0	0	0	0	1	0
M. Tech. (2019-20)	IV	2	4	2	0	0	8	0
	I	4	3	1	0	0	8	0
M. Tech. (2020-21)	II	6	1	1	0	0	8	0
	III	6	1	1	0	0	8	0
M. Tech. (2021-22)	I	4	3	0	0	0	7	0

^{(*} Including In service)

UG TABLE

	I	6	6	10	3	1	26	-
	II	5	6	6	3	6	26	2
	III	5	8	5	2	4	24	1
D. T. 1 (2000 10)	IV	4	9	6	3	1	23	-
B. Tech.(2009-10)	V	6	8	4	5	0	23	-
	VI	6	9	7	1	0	23	2
	VII	6	9	6	0	0	21	-
	VIII	21	0	0	0	0	21	-
	I	4	6	14	7	4	35	1
	II	0	8	6	11	11	36	6
	III	3	7	10	8	4	32	6
B. Tech.(2010-11)	IV	3	5	17	2	0	27	-
B. 1ech.(2010-11)	V	3	11	12	1	0	27	-
	VI	6	8	9	1	0	25	1
	VII	2	11	08	4	1	26	1
	VIII	24	1	0	0	0	25	-
	Ι	6	7	5	4	7	29	6
	II	4	6	10	11	1	32	4
	III	4	6	14	6	6	36	3
B. Tech.(2011-12)	IV	3	10	11	4	4	32	1
D. Tech.(2011-12)	V	2	11	17	2	2	34	1
	VI	5	12	16	0	0	33	-
	VII	1	11	20	2	0	34	-
	VIII	32	2	-	-	-	34	-
	I	1	8	11	4	14	38	5
B.Tech. (2012-13)	II	3	9	6	6	13	37	11
D. 10011. (2012-13)	III	3	9	9	3	6	30	-
	IV	7	10	8	5	3	33	1

	V	3	10	10	5	3	31	-
	VI	5	10	16	1	0	32	-
	VII	8	11	11	1	1	32	-
	VIII	22	7	03	0	0	32	-
	I	7	8	11	13	5	44	3
	II	4	6	8	6	14	38	8
	III	7	6	14	4	7	38	4
D.T. 1. (2012-14)	IV	11	14	9	0	0	34	-
B.Tech. (2013-14)	V	7	13	13	1	1	35	-
	VI	10	16	8	1	0	35	2
	VII	7	15	11	0	0	33	-
	VIII	8	12	13	0	0	33	-
	I	5	5	7	7	9	33	4
	II	5	11	4	6	4	30	-
	III	4	10	12	5	8	39	1
D Took (2014 15)	IV	6	6	16	5	5	38	4
B.Tech. (2014-15)	V	9	15	10	0	2	36	2
	VI	11	17	3	1	0	32	-
	VII	8	15	7	3	1	34	-
	VIII	34	0	0	0	0	0	-
	I	7	8	5	8	6	34	3
	II	6	9	10	3	3	31	3
	III	5	16	12	0	1	34	-
B. Tech.(2015-16)	IV	2	11	8	16	2	39	-
	V	10	18	5	6	0	39	-
	VI	7	20	12	0	0	39	-
	VII	4	15	13	5	2	39	-
	VIII	09	20	10	00	0	39	

	I	8	12	13	1	5	39	4
	II	10	5	6	11	2	34	1
	III	10	6	10	10	2	38	1
	IV	11	12	13	1	0	37	-
B.Tech. (2016-17)	V	14	10	11	2	0	37	-
	VI	-	-	-	-	-	37	
	VII	-	-	-	-		37	
	VIII	10	15	11	01	00	37	
	I	3	7	17	13	7	47	3
	II	5	8	22	6	4	45	5
B.Tech. (2017-18)	III	4	10	20	2	13	49	4
B. ICCII. (2017-18)	IV	5	15	27	0	0	47	5
	V	5	21	21	0	0	47	5
	VI	5	28	15	0	0	48	5
	VII	5	31	12	0	0	48	5
	VIII	3	7	17	13	7	47	3
	I	1	8	8	1	20	38	-
B.Tech. F.T.	II	2	9	15	5	3	35	-
(2017-18)	III	2	10	15	11	1	39	-
	IV	2	15	7	0	14	38	
	V	2	15	17	2	2	38	-
	VI	2	17	18	0	0	37	-
	VII	2	17	18	0	0	37	-
	VIII	2	18	17	0	0	37	-
	Ι	3	7	17	13	7	47	
B.Tech. F.T.	II	5	8	22	6	4	45	
(2018-19)	III	4	10	20	2	13	49	
	IV	5	15	27	0	0	47	
	V	5	21	21	0	0	47	
	VI	5	28	15	0	0	48	
	VII	5	31	12	0	0	48	
	VIII	4	32	12	0	0	48	

	I	2	6	7	7	34	56	-
B.Tech. F.T.	II	2	11	33	1	0	47	-
(2019-20)	III	5	25	21	0	0	51	-
	IV	6	36	9	0	0	51	-
	V	4	27	18	0	2	51	-
	VI	4	23	17	0	6	50	-
	VII	4	27	19	0	0	50	-
	VIII	-	-	-	-	-	-	-
	I	13	27	4	0	1	45	-
B.Tech. F.T.	II	12	31	1	0	1	45	-
(2020-21)	III	3	22	5	2	18	50	-
	IV	2	21	9	0	17	49	-
	V	2	23	23	0	1	49	
	VI	-	-	-	-	-	-	-
	VII	-	-	-	-	-	-	-
	VIII	-	-	-	-	-	-	-
	I	1	6	12	5	27	51	-
	II							
		2	9	17	2	14	44	1
	III	1	11	15	4	21	52	1
B.Tech. F.T. (2021-22)	IV	-	-	-	-	-	-	-
(====)	V	-	-	-	-	-	-	-
	VI	-	-	-	-	-	-	-
	VII	-	-	-	-	-	-	-
	VIII	-	-	-	-	-	-	-
B.Tech. F.T.	I	1	20	11	4	32	68	
(2022-23)	II	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-
	IV	-	-	-	-	-	-	-

Students Strength

Table 12(A): Category wise strength of UG students –Odd semester (2021-22)

Category	First semester Third semester		emester	Fifth semester		Seventh semester		Total		
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
General	16	9	15	5	18	8	10	10	59	33
SEBC	6	5	2	5	7	2	9	4	24	16
EWS	3	2	3	1	3	1	0	0	9	4
ST	2	1	7	1	2	2	1	4	12	8
SC	1	1	1	2	2	0	1	0	5	3
Other Board	1	1	0	1	1	1	1	1	3	4
ICAR	6	1	4	1	3	1	3	2	16	5
FOREIGN	0	0	1	0	0	0	1	1	2	1
P.H.	0	0	0	0	0	0	0	0	0	0
PARSI	0	0	0	0	0	0	0	0	0	0
Total	35	20	33	17	36	15	26	22	130	74
Total										

Table 12(B) Category wise strength of UG students –Even semester (2021-22)

Category	Second semester		Fourth semester		Sixth semester		Eighth semester		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
General	9	9	15	6	17	8	10	10	51	33
SEBC	6	5	2	5	7	2	9	4	24	16
EWS	3	2	2	1	3	1	0	0	8	4
ST	0	1	7	1	2	2	1	4	10	8
SC	1	1	1	2	2	0	1	0	5	3
Other Board	0	1	0	1	1	1	1	1	2	4
ICAR	5	1	4	1	3	1	3	2	15	5
FOREIGN	0	1	1	0	0	0	1	1	2	2
P.H.	0	0	0	0	0	0	0	0	0	0
PARSI	0	0	0	0	0	0	0	0	0	0
Total	24	21	32	17	35	15	26	22	117	75
Total										

Table 13: Strength of Ph.D. and M.Tech. students (2021-22)

Sr No.	Degree (Specialization)	No. of students registered			
		Fresh		In-service	
		Boys	Girls	Boys	Girls
1	Ph.D. (FPT-2)	0	0	0	1
2	M.Tech (FT). (FPT-4), (FPE-2), (FSQA-2)	6	2	0	0

Table 14: Scholarship awarded to the students (2021-22)

Sr. No.	Types of Scholarship/Financial Aids	Number of Recipient	Amount (Rs.)
1	National Talent Scholarship (3000/p.m./student)	21	7,56,000/-
2	University Scholarship (UG) (500/p.m./student)	16	96,000/-
3	AAU Fellowship (PG) (1500/p.m./student for MTech) 2000/p.m./student for PhD)		
4	SEBC Post Metric Scholarship (UG & PG)	DBTS	
5	SC Post Metric Scholarship		
6	ST Post Metric Scholarship		

Table 15: Post-graduate thesis completed (2021-22)

Sr. No.	Thesis Title	Degree	Name of Student	Major Guide
1	Development of Cactus Fruit based Tisane	M.Tech. FT (FPT)	Bhalara Yashkumar Pravinbhai	Dr. SamitDatta
2	Technology for Production of Pomegranate Molasses.	M.Tech. FT (FPT)	Dholu Uttamkumar Chunilal	Dr. S. H. Akbari
3	Production of edible oyster mushroom (<i>Pleurotus ostreatus</i>) using groundnut shell and meal.	M.Tech. FT (FPT)	Molakathalla Jagadeeswara Reddy	Dr. B. H. Joshi
4	Development of Carbonated Ready-to- Serve Beverage from Aonla Fruit.	M.Tech. FT (FPT)	Niamcha Lowang	Dr. R. R. Gajera
5	Technology for Production of Ready to Serve (RTS) Green Tomato Beverage.	M.Tech. FT (FPT)	Patel Arpitkumar Hareshbhai	Dr. S. H. Akbari

6	Standardization of Ultrasonic Pretreatment for Drying Brahmi leaves for the Development of Tisane.	M.Tech. FT (FPT)	Pavitra Gangadhar Hegde	Dr. K. B. Kamaliya
7	Development of production technology for beetroot based blended juice.	M.Tech. FT (FPT)	Theba Tabbuben Yusufbhai	Dr. A. V. Ravani
8	Development of the flaxseed based spred.	M.Tech. FT (FPT)	Kadam Rohit Sudhir	Dr. Samit Datta
9	Production technology of nectar from aonla fruit (Indian gooseberry) using stevia as natural sweetener.	M.Tech. FT (FPT)	Sarvade Shila Kailas	Dr. R. R. Gajera
10	Study on drying characteristics of custard apple pulp using different dryers.	M.Tech. FT (FPE)	Shalini Singh	Dr. A. K. Sharma
11	Development of Drying Technology for Jamun Seed Powder and Grits and its Utilization.	Ph. D. FT (FPT)	Manish Tiwari	Dr. R. F. Sutar
12	Development of Technology for Extraction and Encapsulation of Bioactive compounds from Fenugreek seeds.	Ph. D. FT (FPT)	Butti Prabhakar	Dr. R. V. Prasad
13	Extraction, Characterization and Encapsulation of Bioactive Compounds from Garden Cress GA-1 Seed Deoiled Meal.	Ph. D. FT (FPT)	Neha Kharkwal	Dr. R. V. Prasad

Table 16: Members of Board of Studies, Food Processing Technology & Bio-Energy

From: OCTOBER 2020 to FEBRUARY-2022

- (a) The Dean, Faculty of Food Processing Technology and Bio-Energy, AAU, Anand : Chairman
- (b) The Heads of Departments and Professors teaching subjects assigned to this faculty
 - 1. Head, Department of Post-Harvest Engineering and Technology, College: Member of FPT & BE, AAU, Anand
 - 2. Head, Department of Food Quality Assurance, College of FPT & BE, AAU, : Member Anand
 - 3. Head, Department of Bio-Energy, College of FPT & BE, AAU, Anand : Member
 - 4. Head, Department of Food Processing Technology, College of FPT & BE, : Member AAU, Anand
 - 5. Head, Department of Food Engineering, College of FPT & BE, AAU, Anand: Member

- 6. Head, Department of Food Business Management, College of FPT & BE, : Member AAU, Anand
- 7. Head, Department of Food Safety and Testing, College of FPT & BE, AAU, : Member Anand
- 8. Head, Department of Food Plant Operations, College of FPT & BE, AAU, : Member Anand
- (c) The Director of Extension Education, AAU, Anand : Member
- (d) The Director of Research and Dean, Post-graduate Studies, AAU, Anand : Member
- (e) Five Co-opted members
 - 1. Dr. Sunil Patel, Assoc. Professor, Dept. of Dairy Engineering, Dairy Science: Co-opted College, AAU, Anand.

 Member
 - 2. Dr. M. N. Dabhi, Prof. and Head, Dept. of Agri. Processing and Food Engi- : Co-opted neering, JAU, Junagadh Member
 - 3. Dr. S. M. Srivastava, Professor and Head, Dept. of Food Processing Technol-: Co-opted ogy, A. D. Patel Institute of Technology, CVM University, VU Nagar Member
 - 4. Mr. Nikunj Shah, Director, Clarion-Casein limited, 199&212&213/1, Opp. : Co-opted Amitron, Irana patia, Kadi-382715, Gujarat Member
 - 5. Post graduate student of the college : Co-opted

 Member
- (f) Assistant Registrar (Academic), AAU, Anand : Secretary

FEB 2022 to Till date

- (a) The Dean, Faculty of Food Processing Technology and Bio-Energy, AAU, Anand: Chairman
- (b) The Heads of Departments and Professors teaching subjects assigned to this faculty
 - 1. Head, Department of Post-Harvest Engineering and Technology, College : Member of FPT & BE, AAU, Anand
 - 2. Head, Department of Food Quality Assurance, College of FPT & BE, AAU, : Member Anand
 - 3. Head, Department of Bio-Energy, College of FPT & BE, AAU, Anand : Member
 - 4. Head, Department of Food Processing Technology, College of FPT & BE, : Member AAU, Anand
 - 5. Head, Department of Food Engineering, College of FPT & BE, AAU, Anand : Member
 - 6. Head, Department of Food Business Management, College of FPT & BE, : Member AAU, Anand

- 7. Head, Department of Food Safety and Testing, College of FPT & BE, AAU, : Member Anand
- 8. Head, Department of Food Plant Operations, College of FPT & BE, AAU, : Member Anand
- (c) The Director of Extension Education, AAU, Anand : Member
- (d) The Director of Research and Dean, Post-graduate Studies, AAU, Anand : Member
- (e) Five Co-opted members
 - 1. Dr. R. V. Prasad, Retd. Prof. and Head, Dept. of Food Quality : Co-opted Assurance, CFPTBE, Anand Agricultural University, Member Anand.6,Sanskar Twins, Madhuvan Society, B/h. Bavisgam School, VV Nagar, 388120

Email: rvprasad.anand@gmail.com

- 2. Dr. A. S. Kulkarni, Associate Professor, Dept. of Food Processing Technology,
 A. D. Patel Institute of Technology, CVM University, VU Nagar-388121

 Member
- 3. Mr. Suraj Savaliya, Chairman & M.D. Patson Group of Companies, "Co-opted "RASANAND HOUSE", Block No. 887, 888 & 905, Vada Road N.H. No. Member 48, Sisodara (Ganesh), Navsari- 396 463
- 4. Mr. Kishan Makani, COO & Co-Founder, Alliance Food Engg. Consultant : Co-opted Pvt. Ltd., 307, Swagat Rainforest-2, Kudasan, Gandhinagar-382421 Member
- 5. Post graduate student of the college : Co-opted

 Member
- (f) Assistant Registrar (Academic), AAU, Anand : Secretary

IV. HIGHLIGHTS OF THE DEPARTMENTS

The teaching and research activities (university schemes) carried out by the different departments/sections of the college during the year 2021-22 are reported in this section. Also, the names and qualifications of the staff working in different departments as well as other schemes have been included hereunder.

(A) Department of Post Harvest Engineering and Technology

The courses related to Post harvest Engineering, cereals, pulses, oilseeds, fruits and vegetables are the major focus for teaching to the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy. Research is undertaken in majority of the area of post-harvest and agro-processing technology, for use by farmers and industry.

Table 17 : Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes

Sr. No.	Course No.	Subjects	UG / PG	Semester	Credits
1	PHE 231	Post Harvest Engineering	UG	Third	4 (3+1)
2	FPE 233	Food Process Engineering-I	UG	Third	2+1
3	FPT 242	Processing Technology of Food Grains	UG	Fourth	4 (3+1)
4	FPE 352	Bio Process Engineering	UG	Fifth	2+1
		As per ICAR 5th Dean Committees' recomm	nendations		
5	FPE 123	Post-Harvest Engineering UG		Second	3 (2+1)
6	FPE 233	Fundamentals of Food Engineering	UG	Third	3 (2+1)
7	FPT 243	Processing Technology of Legumes and Oilseeds	UG	Fourth	3 (2+1)
8	FPT 244	Processing of Spices and Plantation Crops	UG	Fourth	3 (2+1)
9	FPE 512	Post-harvest Management and Storage Engineering	PG	First	3 (2+1)
10	FPE 504	Thermal Process Engineering PG Fir		First	3 (2+1)
11	FPE 506	Engineering, Textural & Rheological Characteristics of Food Materials	PG	Second	3 (2+1)

Table 18 Research schemes undertaken

Sr.	Title (B.H.)	Principal	Co Investigators	Period	
No.		Investigator		From	То
Fund	ing Agency: Govt. of Gujarat (Plan-F	Research)			
1	Post Harvest Management of some important crops of middle Gujarat,	Dr. R.F. Sutar, HoD-PHET	Scientists and Research Staff,	April 2012	-continue-
	Anand (12960-00)		FPT&BE		

Table 20: Faculty and Staff in the department

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remark
1.	Dr. R. F. Sutar	Professor & Head	Ph.D.	Agricultural Processing & Food Engineering	PG Guide	Additional Charge of Principal & Dean
2.	Dr. S. H. Akbari	Associate Professor	Ph.D.	Agricultural Processing & Food Engineering	PG Guide	Additional Charge of HOD, FPO Dept.
3.	Dr. A. Nema	Assistant Professor	Ph.D.	PHP & Food Engg.	PG Guide	Transferred From FE Dept. on May 01, 2018
4.	Er. (Mrs) Swati Anadani	Senior Research Assistant	Ph.D.	Agril. Processing & Food Engineering		Transferred from FPT Dept. on May 01, 2018
6.	Er. Vishal D. Kukadiya	Research Associate	M. Tech	Process and Food Engineering		Since April 6, 17
7.	Dr. Bhaumik B. Patel	Research Associate	Ph.D.	Food Processing Technology		Since February 21, 19

(B) Department of Food Processing Technology

The courses related to technology for food grains, fruits & vegetables, milk and milk products, bakery and confectionery, packaging etc are the major focus for teaching to the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy. Allied courses like functional foods and nutraceuticals and design and formulation of foods are also covered. Research is undertaken in majority of the area of technology for use by industry.

Table 21 : Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes

Sr. No.	Course No	Subjects	UG/ PG	Semester	Credits
1	FPT 231	Food Processing Technology - I		Third	3 (2+1)
2	FPT 241	Food Processing Technology - II	UG	Fourth	3 (2+1)
3	FPT 243	Design & Formulation of Foods	UG	Fourth	3 (2+1)
4	FPT 351	Processing Technology of Fruits & Vegetables	UG	Fifth	4 (3+1)
5	FPT 352	Processing Technology of Milk and Milk Products	UG	Fifth	4 (3+1)
6	FPT 471	Food Packaging Technology & Equipment	UG	Seventh	3 (2+1)
7	FPT 473	Functional Foods & Nutraceuticals	UG	Seventh	4 (3+1)
8	FPE 473	Dairy Engineering	UG	Seventh	4 (3+1)
9	FPT 361	Processing Technology of Meat, Fish & Poultry	UG	Sixth	4 (3+1)
11	FPT 472	Bakery and Confectionery Products	UG	Seventh	4 (3+1)

Sr. No.	Course No	Subjects	UG / PG	Semester	Credits		
	As per ICAR 5 th Dean Committees' recommendations						
12	FPE 505	Advances in Dairy Engineering	PG	First	3(2+1)		
13	FPT-503	Brewing Technology	PG	First	3(2+1)		
14	FPT 121	Fundamental of Food Processing	UG	Second	3 (2+1)		
15	FPT 231	Processing Technology of Liquid Milk	UG	Third	2 (1+1)		
16	FPT 232	Processing Technology of Cereals	UG	Third	3 (2+1)		
17	FPT 241	Unit Operations in Food Processing	UG	Fourth	3 (2+1)		
18	FPT 242	Processing Technology of Dairy Products	UG	Fourth	3 (2+1)		
19	FPT 502	Advances in Food Processing Technology	PG	First	3(2+1)		
20	FPT 513	Protein Technology	PG	First	3(3+0)		
21	FPT 501	Advances in Food Packaging Technology	PG	Second	3(2+1)		
22	FPT 510	Lipid Technology	PG	Second	3(3+0)		
23	FPT 515	Technology for RTE/RTC Food Products	PG	Second	3(2+1)		
24	FPT 517	Technology of Frozen Foods	PG	Second	2(2+0)		

Table 22: Research schemes undertaken

Sr.	T'41. (D.H.)	Principal	C. I	Period	
No.	Title (B.H.)	Investigator	Co Investigators	From	То
Fund	ing Agency: Govt. of Gujarat (Plan-Educ	ation)			
1	Establishment of students training centre for food processing (12969-01)	Er. H. Pandey, HoD-FPT	Scientists and Research Staff, FPT&BE	April 2012	-continue-
2	Establishment of instructional processing facilities for student. (2034)	Er. H. Pandey, HoD-FPT	Scientists and Research Staff, FPT&BE	April 2017	-continue-

Table 24 : Faculty and Staff in the department

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1.	Er. H. Pandey	Associate Professor & Head	Ph.D.	Agricultural Engineering (PFE)	PG Guide	Ph.D. completed in 2018
2	Er. G. P. Tagalpallewar	Assistant Professor	M.Tech.	Food Processing Technology	PG Guide	PhD (In service) 2015 registration
3.	Er. R. B. Modi	Assistant Professor	M.Tech.	Dairy Technology	PG Guide	PhD (In service) 2015 registration

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
6.	Er. N. R. Sardar	Senior Research Assistant	M.Tech.	Food Processing Technology	-	M.Tech. completed in 2018 PhD (In service) 2018 registration

(C) Department of Food Engineering

The courses related to engineering subjects such as food process engineering, mechanical engineering, electrical engineering, instrumentation and process control are the major focus for teaching to the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy. Allied courses like plant design, utilities and services and food irradiation are also covered. Research is undertaken in majority of the area of process and food engineering for use by industry.

Table 25 : Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes

Sr. No.	Course No	Subjects	UG/PG	Semester	Credits
1	FPE 231	Fluid Mechanics	UG	Third	3 (2+1)
2	FPE 232	Engineering Drawing and Graphics	UG	Third	3 (1+2)
3	FPE 241	Food Process Engineering – II	UG	Fourth	3 (2+1)
4	FPE 242	Material Science and Engineering	UG	Fourth	3 (2+1)
5	FPE 243	Food Refrigeration and Air Conditioning	UG	Fourth	4 (3+1)
6	FPE 351	Process Equipment Design	UG	Fifth	3 (2+1)
7	FPT 362	Processing Technology of Spices and Plantation Crops	UG	Sixth	(2+1)
8	PHE 241	Engineering Properties of Biological Materials	UG	Fourth	3(2+1)
9	PHE 351	Storage Structures & Environment Control	UG	Fifth	2+1
10	FPE 353	Food Plant Utilities & Services	UG	Fifth	3 (2+1)
11	FPE 361	Process Control in Food Industry	UG	Sixth	3 (2+1)
12	FPE 471	Food Plant Design and Layout	UG	Seven	3 (2+1)
	•	As per ICAR 5 th Dean Committees' recomme	ndations		
13	FPE 111	Basic Electrical Engineering	UG	First	3 (2+1)
14	FPE 112	Workshop Technology	UG	First	3 (1+2)
15	FPE 113	Engineering Drawing and Graphics	UG	First	3 (1+2)

Sr. No.	Course No	Subjects	UG / PG	Semester	Credits
16	FPE 121	Food Thermodynamics	UG	Second	3 (2+1)
17	FPE 122	Fluid Mechanics	UG	Second	3 (2+1)
18	FPE 124	Basic Electronics Engineering	UG	Second	3 (2+1)
19	FPE 231	Heat and Mass Transfer in Food Processing	UG	Third	3(2+1)
20	FPE 232	Food Refrigeration and Cold Chain	UG	Third	3 (2+1)
21	FPE 241	Food Plant Utilities & Services	UG	Fourth	3(2+1)
22	FPE 352	Food Process Equipment Design	UG	Fifth	3(2+1)
23	FPE 361	Instrumentation and Process Control in Food Industry	UG	Sixth	3(2+1)
24	FPE 502	Advances in Food Process Engineering	PG	First	3 (2+1)
25	FPE 501	Computer Aided Design of Food Plant, Machinery and Equipment	PG	Second	3(1+2)
26	PGS 506	Disaster Management	PG	Second	1(1+0)

Table 26: Research schemes undertaken

Sr.	Title (B.H.)	Principal	Со	Period	
No.		Investigator	Investigators	From	То
Fund	ing Agency: Govt. of Gujarat (Plan-Resea				
1	Development of Irradiation Technology for Agricultural, Animal & Food Products (12969-00)	Dr. A.K. Sharma, HoD-FE	Scientists and Research Staff, FPT&BE	April 2012	-continue-

Table 28 : Faculty and Staff in the department

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1.	Dr. A.K. Sharma	Professor & Head	Ph.D., CEA&M by NPC-BEE, GoI and RP/ RSO by AERB, GoI	Food Engg Tech & Energy Audit- ing	PG Guide	
2.	Er. N.V. Shah	Assistant Professor	M.E.	Civil Engineer- ing	-	Ph.D. (In service) 2017 registration
3.	Er. M. A. Mak- wana	Assistant Professor	M.Tech.	CAD/CAM (Mechanical Engg)	-	Ph.D. (In service) 2017 registration

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
4.	Er. A.N. Nakiya	Assistant Professor	M.Tech.	PEMD (Electrical Engg)	-	Ph.D. (In service) 2018 registration
5.	Er. T.H. Bhatt	Assistant Professor	M.E.	Microprocessor System & Applications	-	Ph.D. (In service) 2017 registration
6.	Dr. A. Nema	Assistant Professor	Ph.D.	PHP & Food Engg	PG Guide	Transferred to PHET Dept. on May 01, 2018 to PHET
7.	Dr. K.V. Vala	Assistant Professor	Ph.D.	Agricultural Processing & Food Engg		Transferred from Bioenergy Dept. on May 01, 2018. Ph.D. completed in 2018
8.	Er. J. P. Rathod	Senior Research Assistant	B.Tech.	Ag Engg	-	M. Tech (In service) 2015 registration. Transferred to Bioenergy Dept. on May 01, 2018
11.	Mr. R. M. Barot	Craft teacher	Diploma	Electrical Engi- neering	-	
12.	Er. P. B. Moradiya	Research Associate	M.Tech.	Processing and Food Engineer- ing	-	Since February 22, 2019

(D) Department of Food Safety & Quality Assurance

The courses related to food science and laboratory analysis for quality assurance are the major focus for teaching to the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy. A state of art Food Testing Laboratory also established for analysis of food products.

 $Table\ 29: Semester\ wise\ distribution\ of\ Subjects\ in\ UG\ \&\ PG\ Food\ Processing\ Technology/Food\ Technology\ programmes$

Sr. No.	Course No	Subjects	UG / PG	Semester	Credits
1	FQA 231	Food Biochemistry and Human Nutrition	UG	Third	3 (2+1)
2	FQA 351	Food Plant Sanitation	UG	Fifth	3 (2+1)
3	FQA 361	Food Regulations & Quality Assurance	UG	Sixth	3 (2+1)
		As per ICAR 5 th Dean Committees' recomme	ndations		
4	FQA 111	General Microbiology	UG	First	3 (2+1)
5	FQA 112	Food Chemistry of Macronutrients	UG	First	3 (2+1)
6	FQA 121	Food Microbiology	UG	Second	3 (2+1)
7	FQA 122	Food Chemistry of Micronutrients	UG	Second	3 (2+1)

Sr. No.	Course No	Subjects	UG / PG	Semester	Credits
8	FQA 231	Food Biochemistry and Nutrition	UG	Third	3(2+1)
9	FQA 241	Food Biotechnology	UG	Fourth	3 (2+1)
10	FQA 242	Food Plant Sanitation	UG	Fourth	2(1+1)
11	FQA 232	Industrial Microbiology	UG	Third	3(2+1)
12	FQA 511	Advances in Fermentation Technology	PG	First	4 (2+2)

Table 30: Research schemes undertaken

		D.	Со	Period	
Sr. No.	Title (B.H.)	Principal Investigator	Investigators From	То	
Fund	ing Agency: Govt. of Gujarat (Plan-Researc	eh)			
1	Development of food decontamination technology for safety and quality of fresh and minimally processed fruits and vegetables, Anand (12993-21)	Dr. B. H. Joshi, HoD-FQA	Dr. J K Momin Dr. R. M. Dhingani	April 2012	-continue-
Fund	ing Agency: Govt. of Gujarat (Plan-Educati	on)			
2	Establishment of department of food safety and testing (12987-11)	Dr. B. H. Joshi	Dr. H. G. Bhatt	May 2015	-continue-
Fund	ing Agency: ICAR, New Delhi				
3	Development of non-thermal plasma (NTP) decontamination technology for fruits and vegetable (2036)	Dr. R.V. Prasad, HoD-FQA Rtd. 30/06/2021	Dr. R.F. Sutar, Dr. B.H. Joshi	April 2016	March 2018

Table 32 : Faculty and Staff in the department

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1	Dr. B. H. Joshi	Associate Professor & Head	Ph. D.	Microbiology	PG Guide	PG Centre In Charge
2	Dr. Devesh H. Patel	Assistant Professor	Ph. D.	Dairy Chemistry	-	
3	Dr. Jafarali K. Momin	Assistant Professor	M.Sc.	Dairy Microbiology	PG Guide	
4	Mr. Rashmin Dhingani	Assistant Professor	M.Sc.	Biotechnology	PG Guide	Ph.D. (In service) 2018 registration
5	Mrs. N. P. Runajkar	Laboratory Technician	B.Sc.	Microbiology	-	
6	Mrs N. P Jariwala	Laboratory Technician	B.Sc.	Microbiology	-	
7	Dr. Hetal Bhatt	Research Associate	M.Tech.	Food Processing Technology		Joined on 21st Feb, 2019

(E) Department of Food Business Management

The department mainly focuses on courses such as Project Management, Entrepreneurship Development, Marketing Management & International Trade, Operation Research, Computer Programming & Data Structures, IT Applications in Food Industry, Engineering Mathematics and Language & Communication Skills.

The department is also looking after the Training & Placement and Under Graduate academic activities of the college along with implementation of special projects as assigned by the college/university.

Table 33 : Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes

Sr. No.	Course No	Subjects		Semester	Credits
1	FBM 361	Project Management & Entrepreneurship Development	UG	Sixth	3 (2+1)
2	FBM 471	Marketing Management & International Trade	UG	Seventh	3 (3+1)
3	FPE 472	IT Applications in Food Industry	UG	Seventh	1 (0+1)
4	STAT 361	Statistics & Optimization	UG	Sixth	3(2+1)
		As per ICAR 5 th Dean Committees' recommenda	tions		
5	MATH 111	Engineering Mathematics-I	UG	First	2 (2+0)
6	MATH 121	Engineering Mathematics-II	UG	Second	2 (2+0)
7	ENG 111	English Language	UG	First	2 (1+1)
8	FBM 241	Business Management and Economics	UG	Sixth	2 (2+0)
9	FBM 111	Computer Programming and Data Structures	UG	FIRST	2(1 + 1)
10	FQA 509	Advances in Food Additives & Preservatives	PG	First	3 (2+1)
11	FPT 518	Traditional and Value-added Food Products	PG	First	3 (2+1)
12	FPT 999	Masters Seminar	PG	Forth	1 (1+0)
13	STAT 231	Statistical Methods and Numerical Analysis	UG	Third	2(1 + 1)
14	PGS- 503	Intellectual Property and its management in Agriculture	PG	Second	1(1+0)
15	PGS- 505	Agricultural Research, Research ethics and Rural	PG	Second	
13		Development Programs			1(1+0)
16	FPT-982	Operational Research	PG	Third + Fifth	3(3+0)

Table 34: Faculty and Staff in the department

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1.	Dr. S. Dutta	Associate Professor & Head	Ph.D.	Management	PG Guide	
2.	Mr. P. S. Parsania	Assistant Professor	M.Sc.	Information technology	-	Ph.D. (In service) 2014 registration
3.	Mr. N. M. Chavda	Assistant Professor	M.Phil.	English	-	Ph.D. (In service) 2015 registration
4.	Dr. D. B. Patel	Assistant Professor	Ph.D.	Marketing	-	Ph.D. completed in 2019

(F) Department of Bioenergy

The department mainly focuses on Environmental, Bioengry, Solar energy, Wind energy and Non-conventional energy sources, system and management courses of the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy.

Table 35 : Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes

Sr. No.	Course No.	Subjects		Semes- ter	Credits
1	Env 231	Environment Science	UG	Third	2 (1+1)
2	BE 361	Bio energy	UG	Sixth	4 (3+1)
		tions			
3	ESD 111	Environmental Sciences & Disaster Management	UG	First	2 (1+1)

Table 36: Faculty and Staff in the department

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1	Dr. S.S. Kapdi	Professor & Head	Ph.D.	Renewable Energy	PG Guide	
3	Er. J.P. Rathod	Senior Research Assistant	B.Tech.	Ag Engg	-	M. Tech (In service) 2015 registration. Transferred From FE Dept. on May 01, 2018

(G) Department of Food Plant Operations

The department mainly focuses on hands on experience through 10 experiential learning namely extrusion, frying, IQF, Juice processing, retort, fruits and vegetables handling, drying, oilseed processing and dhal milling.

Table 37 Faculty and Staff in the department

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1	Dr. S. H. Akbari	Associate Professor	Ph.D.	Agricultural Processing & Food Engineering	PG Guide	Additional Charge of HOD, FPO Dept.
2	Dr. A. V. Ravani	Assistant Professor	Ph.D.	Food Processing Technology	PG Guide	Transferred From FPT Dept. on September 01, 2019

(H) Department of Food Safety and Testing

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1	Dr. H.G. Bhatt	Associate Professor	Ph.D.	Material Science	PG Guide	
2	Mr. Kedar S. Damle	Assistant Professor	M.Sc.	Organic Chemistry	-	
3	Dr. Akashamrut M. Patel	Assistant Professor	Ph.D.	Dairy Chemistry	PG Guide	

Table 38: Administrative and Supporting Staff of the College

Sr No.	Name	Designation	Qualification
1.	Shri M.J. Rana	Senior Clerk	B.Com
2.	Shri A.R. Solanki	Senior Clerk	HSC Pass
3.	Shri M.A.Shaikh	Junior Clerk	B Com
4.	Shri.G.S.Harijan	Junior Clerk	HSC Pass
5.	Mrs. Vandana. C. Parmar	Junior Clerk	B.E.Electrcal
6.	Shri . M.H.Chavda	Lab Attendant	7 th Pass
7.	Shri.R.S.Parmar	Lab Attendant	Old SSC Pass
8.	Shri V. R. Raval	Lab Attendant	Old SSC Pass

Extension Activities

Table 39: Extension Activities carried out (2021-22)

Sr. No.	Name of Centre / Training	No. of Participation
1	Training Program on Food Processing Technology (Certificate course)	06
2	Training cum coaching for ICAR National Eligibility Test (NET)	NA

Table 40: Extension Education Activities carried out under special training programs (2021-22)

Sr. No.	Activity	Remarks
1	Agri. Fairs / Exhibitions	A commercial model of "Solar Powered Vending Cart for Fruits and Vegetables" have been displayed and demonstrated in the Pre Agri Vibrant Event held at AAU, Anand
2	Guidance to Farmers / visitors	218 Nos. are benifited
3	Farm Literature Published/Distributed	01

Note: Figures in bracket indicate numbers of participants/beneficiaries

V. SEMINAR, WORKSHOPS AND TRAININGS

Table 41 : Training/Workshop/Meeting/Seminar/Symposium/Conference/Convention organized by the college during 2021-22

Title	Duration	Sponsoring Authority
Online elementary FDP course on Non-	5 days	AICTE Training and Learning
thermal Processing of Food Products		(ATAL) Academy
Online advance FDP course on Non-	5 days	AICTE Training and
thermal Processing of Food Products		Learning (ATAL) Academy
Seminar on SSIP 2.0	1 day	Online mode, AAU, Anand

Table 42 : Training/Workshop/Meeting/Seminar/Symposium/Conference/Convention/Council Meeting/ QRT Meeting attended by the Faculty

Sr.	Name of Teacher/	Participated (detail Name of Event/Program,	Duration	
No.	Scientist	Institute, Place)	From	То
1.	Dr. Govind	Training on "Sandalwood" Organized by- Centre		
	Tagalpallewar	for Agricultural Market Intelligence , NAHEP-	09/04/2021	11/04/2021
		CAAST Anand Agricultural University, Anand	09/04/2021	11/04/2021
		and Chandan Vikas Association (India)		
2	Dr. R. B. Modi	National Webinar on 'Nutraceuticals and		
		Immunity Booster Foods for Combating		
		COVID-19' organized by the Department of	17/05/2021	17/05/2021
		Food Science and Nutrition, ASPEE College of	17/03/2021	17/03/2021
		Home Science & Nutrition, S. D. Agricultural		
		University, Sardarkrushinagar		
3	Dr. Govind	International conference on Sustainable		
	Tagalpallewar	Approaches in Food Engineering and	24/06/2021	25/06/2021
		Technology (SAFETy-2021)		
4	Er. N. V. Shah	International webinar on "Approaches to		
		Develop Drugs to Inhibit SARA-CoV-2	29/06/2021	29/06/2021
		Replication"		
5	Dr. Govind	ATAL on line elementary FDP on Non-	20/06/2021	02/07/2021
	Tagalpallewar	thermal Processing of Food Products	29/06/2021	03/07/2021
6	Dr. J. K. Momin	21 days National Training Couse on		
		"Opportunities in Agriculture, Animal		
		Husbandry & Allied Sectors for sustainable		
		Entrepreneurship & livelihood Security"		
		jointly organised by Centre for Agribusiness		
		Incubation and Entrepreneurship, Rajmata		
		Vijayaraje Scindia Krishi Vishwas Vidyalaya,	01/07/2021	21/07/2021
		Gwalior (Madhya Pradesh), India,		
		National Bank for Agriculture and Rural		
		Development (NABARD) Gwalior, M. P. and		
		Agro Environmental Development Society		
		(AEDS), Majhra Ghat, Rampur, U.P. (India)		
		held on July 01-21, 2021, via virtual mode.		

7	Dr. Govind Tagalpallewar	ATAL on line elementary FDP on Nutraceuticals: Basic & Beyond	12/07/2021	16/7/2021
8	Er. N. V. Shah	Training on "Rainfall data analysis using different packages of R-Software" by KSCSTE-CWRDM, Kerela.	12/07/2021	22/07/2021
9	Dr. R. B. Modi	Online webinar on 'Latest Trends in Packaging for Food Processing' organized by FICSI	16/07/2021	16/07/2021
10	Dr. J. K. Momin, Er. Tanmay. H. Bhatt	Participated in the online Orientation Programme on "J- Gate and CMIE Database" organised by National Agricultural Higher Education Project – CAAST, Centre for Agricultural Market Intelligence, Anand Agricultural University, Anand.	16/07/2021	17/07/2021
11	Er. A. N. Nakiya	One week online faculty development programme on "Green Technology & Sustainable Development" organized by Civil Engineering Department, Raj kumar Goel Institute of Technology, Ghaziabad.	19/07/2021	23/07/2021
12	Er. A. N. Nakiya	A webinar on "Computational Methods in Applied Mathematics and Engineering" by Department of Applied Science and Humanities, Sankalchand Patel College of Engineering (SPCE) Affiliated to Sankalchand Patel University, Visnagar.	13/08/2021	14/08/2021
13	Dr. A. Nema	Agripreneurship Development Boot Camp organized at College of FPT & BE, AAU, Anand	21/08/2021	21/08/2021
14	Dr. P S Parsania	International Seminar/Conference on Innovation in computer applications and usages org. by Shri Param Hans Education & Research Foundation Trust, New Delhi	22/08/2021	22/08/2021
15	Dr. H Pandey	AICTE Training and Learning (ATAL) Academy Online FDP on ": Novel Technological Approaches for Utilization of Food Industry Waste", National Institute of Food Technology Entrepreneurship and Management (NIFTEM), Kundli, Haryana	13/09/2021	17/09/2021
16	Er. N. V. Shah	Workshop on "Application of 1D-2D Hydraulic Modelling in Water resources Engineering" by S.P. University, Visnagar.	16/09/2021	17/09/2021

17	Dr. Govind	International e-conference on Post Covid		
	Tagalpallewar	Journey of Food Sector. Organized by –	17/09/2021	18/09/2021
		A.D. Patel Institute of Technology, CVM	1//09/2021	10/09/2021
		University, Vallabh Vidya Nagar		
18	Dr. H Pandey	International e-conference on Post Covid		
		Journey of Food Processing Sectors		
		(PCJFPS) organized by A. D. Patel Institute	17/09/2021	18/09/2021
		of Technology, CVM University, New VV		
		Nagar, Anand		
19	Er. N. V. Shah	FDP on "Air Pollution and Climate change		
		(APCC-2021)" through AICTE Training and	20/09/2021	24/09/2021
		Learning (ATAL) Academy.		
20	Dr. H Pandey	AICTE Training and Learning (ATAL)		
		Academy Online FDP on "Recent trends		
		in Nonthermal Processing: Prospects	04/10/2021	08/10/2021
		and Challenges", Indian Institute of Food		
		Processing Technology, Thanjavur		
21	Dr. A. K. Sharma	FDP on "Artificial Intelligence in the		
		Renewable Power Generation" through	10/10/2021	22/10/2021
		AICTE Training and Learning (ATAL)	18/10/2021	22/10/2021
		Academy.		
22	Dr. A. K. Sharma	FDP on "Recent Development in Food		
		Processing" through AICTE Training and	25/10/2021	29/10/2021
		Learning (ATAL) Academy.		
23	Dr. Samit Dutta	National Workshop (online) on Intellectual		
		Property Rights & Innovations org. by IPR	27/10/2021	27/10/2021
		Cell, Directorate of Research, AAU, Anand		
24	Dr. Samit Dutta	Regional Seminar (offline) on Agricultural		
		Market Intelligence: Prospects and		
		Challenges org. by NAHEP-CAAST Centre	20/10/2021	20/10/2021
		for Agricultural Market Intelligence, AAU,	28/10/2021	29/10/2021
		Anand in Collaboration with Indian Society		
		of Agricultural Economics, Mumbai		
25	Dr. P S Parsania	National Conference on Contemporary		
		Preactices in Management & Information		
		Technology org. by K S School of Business	26/11/2021	26/11/2021
		Management & Information Technology,		
		Gujarat University, Ahmedabad.		

26	Er. Tanmay. H.	"Remote Sensing and Machine Learning	29/11/2021	
	Bhatt	Technology for Precision Farming "jointly		
		organized by Centre for Agricultural Market		
		Intelligence, NAHEP-CAAST AAU, Anand		29/11/2021
		and Deptt. of Basic Science and Humanities		
		BACA, AAU Anand.		
27	Dr. A. K. Sharma	FDP on "Non-Thermal Processing of Food	27/12/2021	31/12/2021
	Di. M. K. Sharma	Products" through AICTE Training and	2//12/2021	31/12/2021
28	Dr. Govind	Learning (ATAL) Academy.	13/12/2021	17/12/2021
20		International Workshop on Technologies	13/12/2021	1//12/2021
	Tagalpallewar	for increasing the shelf life of perishable		
		foods Organized by- National Institute of		
		Technology, Department of Food Process		
		Engineering		
29	Dr. H Pandey	AICTE Training and Learning (ATAL)		
		Academy Online FDP on ": Material Science	20/12/2021	24/12/2021
		and Engineering Approaches for Food	20,12,2021	21/12/2021
		System Design", Tezpur University, Assam		
30	Dr. S.R. Bhise	AICTE Training and Learning (ATAL)		
		Academy Online Advanced FDP on "Non-		
		Thermal Processing of Food Products" at	27/12/2021	21/12/2021
		College of Food Processing Technology and	27/12/2021	31/12/2021
		BioEnergy, Anand Agricultural University,		
		Anand		
31	Dr. S. R. Bhise	International Conference 28th Indian		
		Convention of Food Scientists &		
		Technologists (ICFoST): Emerging and		
		Adoptable Technologies for Sustainable	20/01/2022	22/01/2022
		Agro-Food industries and Economy (EAT-		
		SAFE)" at Aurangabad, Maharashtra.		
32	Dr. H Pandey	International Conference on Emerging		
	1. II I allucy	trends and new opportunities in high		
			21/02/2022	22/02/2022
		pressure processing held online during	21/02/2022	22/02/2022
		21-22, 02, 2022 organized by Kerala		
22	Г. Т	Agricultural University, Kerala.	20/02/2022	
33	Er. Tanmay H.	"Smart Farming: Application of AI,	28/02/2022	
	Bhatt	Robotics, IoT & Cloud Computing" jointly		
		organized by Centre for Agricultural Market		04/03/2022
		Intelligence, NAHEP-CAAST AAU, Anand		
		and College of Horticulture and College of		
		AIT, AAU Anand.		
34	Dr. Govind	ICSSR sponsored National Seminar on		
	Tagalpallewar	Indian Dairy Sector @75: From Self-reliance		
		to the verge of Booming World Leader	05/03/2022	05/03/2022
		organized by SMC College of Dairy Science,		
		Kamdhenu University, Anand		

Table 43: List of Dignitaries Visited College (2021-22)

SN	Name of Dignitaries	Date of Visit
1	C.M Palit Joint director Agriculture (RKVY)	16-11-2021
2	Dr. R. Goumavaul Dairy Development Officer Government of Pondicherry	15-12-2021
3	Arazazmi Selvaraj	15-12-2021
4	Dr. Ashwin Trivedi Senior Technical Officer ICAR-Directorate of Medicinal & Aromatic Plants Research, Anand, Gujarat	23/02/2022
5	ICAR peer review team	23/02/2022

VI. PUBLICATIONS / ACHIEVEMENT BY FACULTY

This section includes the publications made by the staff during the year 2021-22. The research papers published and presented have been listed hereunder.

Research paper published during year 2021-22 (Category Wise)

(i) International journal

- 1. Mukherjee A., Nema A., Sharma H. P. and Akbari S. H. (2021). Standardization of drying technique for the production of powder from Shankhpushpi leaves. *The Pharma Innovation Journal*, 10(6): 13-16.
- 2. Anadani S. V., Akbari S. H., Ravani A. and Nema, A. (2021). Physico-chemical characteristics of bael (Aegle marmelos) fruit and pulp. *The Pharma Innovation Journal*, 10(8): 1282-1284.
- 3. Kaur A., **Bhise S. R.** and Kaur M. (2021), Effect of hydrothermal treatments on pasting properties of parboiled brown rice. *Carpathian Journal of Food Science and Technology*, 13(3): 33-46 (Impact factor 0.8) (ISSN NO. 2066-6845) (Scopus rated).
- 4. Athawale G. H., Devkatte A. N., Akbari S. H., Raichrkar S. J. and Dagadkhair R. A. (2022). Effect of Extrusion process variables on hardness of hordegram-tomato pomace extruded product. *Journal of Xidian University*, 16 (2), 497-504.
- 5. Dr. Akashamrut M Patel, Jafarali K Momin and Kedar S Damle (2021). Development of sugar-free Kajukatli: A traditional Indian sweet. *International Journal of Chemical Studies*. 9(4): 238-241.
- 6. A. M. Patel, B. H. Joshi and R. M. Dhingani (2021). Surface enhanced Raman spectroscopy for detection of pathogens: A review. *The Pharma Innovation Journal*, 10 (10): 1195-1202.
- 7. R. M. Dhingani, G. S. Shah & B. H. Joshi (2021). Sequential optimization of bioprocess nutritional parameters for maximum 1-asparaginase production from Pseudomonas aeruginosa BGR1I1, *Biocatalysis and Biotransformation*, DOI: 10.1080/10242422.2021.2018420
- 8. Vala K. V., Kumpavat M. T., and Datta S. (2021). Long distance supply of tomato: A case study of Anand (Gujarat). *International Journal of Research in Agricultural Sciences*, 8(3): 127-131.
- 9. Makwana M. A., and Patolia H. P. (2021). Forward kinematics of delta manipulator by novel hybrid neural network. *International Journal of Mathematical, Engineering and Management Sciences*, 6(6): 1694-1708.
- 10. Shah M. J., Saiyad M. M., and Nakiya A. N. (2021). Asymmetric active front end converter. *Design Engineering (Toronto)*, 7: 1939-1948.
- 11. Singh S., and Sharma A. K. (2021). Review on preservation methods for custard apple and pulp. *Jamshedpur Research Review International Research Journal*, 9(47): 11-17.

(ii) National journal

- 1. Jethva K. R., Sutar R. F., Kumar N. and Vyas D. K. (2021). Effect of whey protein on sun dried protein enriched kesar mango leather. *Journal of Pharmacognosy and Phytochemistry*. 10(2): 824-830.
- 2. Sayyad F. G., Akbari, S. H., Vyas, D. K., Kumar, N. and Sutar, R. F. (2021). Mathematical modelling of hot air drying of water chestnut kernels. *Journal of Pharmacognosy and Phytochemistry*. 10(2): 275-280.

- 3. Patel A. M., Bhatt, H. G. and Sutar, R. F. (2021). Boric acid adulteration detection in wheat flour using ATR-FTIR spectra and feed forward neural network. *The Pharma Innovation Journal*. 10(10): 1279-1283.
- 4. Vahora K. A., Patel, B. B., Sutar, R. F., Mankad, M. C. and Patil, G. B. (2022). Gum arabic nanoemulsion coating for shelf life extension of tomato (*Solanum lycopersicum* L.) fruit under ambient storage. *Indian J. Hort.* 79(1): 99-108.
- 5. Tegeye M. E., Kaur A. and Bhise S. R. and Singh B. (2021), Development of nutritious convenience extruded snacks using composite flour of sorghum, maize and sweet potato. *International Journal of Food and Fermentation Technology*, 11(01): 1-19 (NAAS Rating 4.03) (ISSN NO. 2249-1570).
- 6. Patel A. M., Damle, K. S., & Bhatt, H. G. (2021). Application of mass spectrometry in detection of food adulteration: A review. *The Pharma Innovation*, SP-10(10), 1188–1194.
- 7. Vala K. V., Gajera R. R., Ravani A. V., and Kumpavat, E. M. (2021). Supply chain management of vegetables-a review. *Journal of Progressive Agriculture*, 11(2): 1-11.
- 8. Theba T., Ravanim, A. and Bhatt H.G. (2021). Utilization of beetroot pomace for food fortification. *International Journal of Chemical Studies*, 9(1): 2653-2657.

Research paper presented at Seminar / symposia etc. in 2021-22 (Category Wise)

(i) International level

(i) International level

- 1. Tagalpallewar, G. P., Akbari, S. H. and Bhatt, H. G. (2021). Effect of Irradiation on Aflatoxins and Bioactive Compounds of Deoiled Peanut Cake. International Conference on "Sustainable Approaches in Food Engineering and Technology (SAFETy-2021)" organized by Department of Food Engineering & Technology, Tezpur University, Assam, India and Department of Food Science & Technology, University of Georgia, Georgia (US), during 24-25 June, 2021.
- 2. Akbari, S. H. and Tagalpallewar, G. P. (2021). Effect of Microwave on Aflatoxins and Bioactive Compounds of Deoiled Peanut Cake. International Conference on "Sustainable Approaches in Food Engineering and Technology (SAFETy-2021)" organized by Department of Food Engineering & Technology, Tezpur University, Assam, India and Department of Food Science & Technology, University of Georgia, Georgia (US), during 24-25 June 2021.
- 3. Dhankecha, D and Pandey, H. (2021). Mineral Analysis of Kesar Mango Peel Powder. International e-conference on "Post Covid Journey of Food Processing Sectors (PCJFPS)" online by A D Patel Institute of Technology, New VV Nagar, Anand during 17 September, 2021.
- 4. Bhise S. R., Patel D. and Datta S. (2022). Effect of incorporation of erythritol on baking and sensory quality of muffins. International Conference "28th Indian Convention of Food Scientists & Technologists (ICFoST): Emerging and Adoptable Technologies for Sustainable Agro-Food industries and Economy (EAT- SAFE)" held on 20-22 January, 2022 at Aurangabad, Maharashtra.
- 5. Pandey H. (2022). High Pressure Processing of Underutilized Crops- A case Study on Indian Gooseberry. International workshop on "Emerging trends and new opportunities in high pressure processing" held online during 21-22 February, 2022 organized by Kerala Agricultural University, Kerala.

- 6. Makwana M. A., and Patolia H. P. (2021). Model-based motion simulation of delta parallel robot. *Journal of Physics: Conference Series* (IOP Publishing), 2115(1) 012002: 1-12.
- 7. Sharma A. K. and Moradiya P. B. (2021). Effect of continuous microwave drying of Moringa (Moringa oleifera) leaves on retention of ascorbic acid and drying time. An abstract presented in the 55th Annual Convention of ISAE and International Symposium on 'Emerging Trends in Agricultural Engineering Education, Research and Extension' at Patna, Bihar during 23-25 November, 2021.
- 8. Kapdi, S. S., Sagarika, N. and Sutar. R.F. (2021). Optimization of drying technology for date palm fruits using novel techniques. A research paper presented in Annual Convention of ISAE and International Symposium on "Emerging Trends in Agricultural Engineering Education, Research and Extension & published in souvenir of ISAE convention organized by DRPCAU, Pusa at Patna 23-25 November, 2021. pp 262.
- 9. Parsania, P. S. and Virparia, P. V. (2021). Image scaling techniques using cluster computing in International Seminar/Conference on "Innovation in computer applications and usages" organized by Shri Param Hans Education & Research Foundation Trust, New Delhi on 22 August, 2021.

(ii) National level:

- 1. Kunal M. Gawai, Govind P. Tagalpallewar, Subrota Hati & Mital Kathiriya Oral Paper presentation in National Seminar on "DVS Cultures Key Contributor in the Growth of Indian Fermented Milk Industry" In ICSSR sponsored National Seminar on Indian Dairy Sector @75: From Self-reliance to the verge of Booming World Leader organized by SMC College of Dairy Science, Kamdhenu University, Anand during 05 March, 2022.
- 2. Chhasatiya Hemrajsinh, Govind Tagalpallewar, Kunal Gawai & Nilesh Sardar National Seminar on "Camel Milk Powder a Novel Introduction to Indian Dairy Sector" In ICSSR sponsored National Seminar on Indian Dairy Sector @75: From Self-reliance to the verge of Booming World Leader organized by SMC College of Dairy Science, Kamdhenu University, Anand during 05 March, 2022.
- 3. Analysing growth & export opportunities for value added potato products, Dave, K. D., Prajapati, D. M., Khanna, V., Dutta, S., Makwana, A. K., Gurjar, M. D. in Regional Seminar (offline) on Agricultural Market Intelligence: Prospects and Challenges org. by NAHEP-CAAST Centre for Agricultural Market Intelligence, AAU, Anand in Collaboration with Indian Society of Agricultural Economics, Mumbai during 28-29.10.2021
- 4. Trade Competitiveness of Indian Milk Fat & Oil Commodities, Prajapati, D. M., Gurjar, M.D., Dave, K. D., Dutta, S., Makwana, A. K., Khanna, V. in Regional Seminar (offline) on Agricultural Market Intelligence: Prospects and Challenges org. by NAHEP-CAAST Centre for Agricultural Market Intelligence, AAU, Anand in Collaboration with Indian Society of Agricultural Economics, Mumbai during 28-29.10.2021
- 5. Computational complexity and quality of image scaling algorithm using cluster computing, Parsania, P. S. and Virparia, P. V. in National Conference on Contemporary Preactices in Manage-

ment & Information Technology org. by K S School of Business Management & Information Technology, Gujarat University, Ahmedabad on 26.11.2021

Books/Chapter or article published in books during year 2021-22 (Category Wise)

(i) Books published

1	Practical manual. FPE 233 – Fundamentals of Food Engineering. As per ICAR 5th Deans' Committee Recommendations	Nema A., Patel, B. and Sutar R. F.	College of Food Processing Technology and Bio Energy, Anand Agricultural University, Anand
2	Forced convection solar assisted drying of tomato	Anadani S. V. Amee Ravani	Lambert Academic Publishing
3	Production technology of ready-to- serve unripe mango beverage (Pana)	Ravani A. Anadani S. V.	Lambert Academic Publishing
4	Meat based functional food; In Book: Functional foods,	Ravani, A. and Sharma, H.	Chhikara, N, Panghal, A. Chaudhary, Scrivener Publishing, Wiley, pp 235-287
5	Khetima Punh Prapy Urja Strotoni Upyogita	Kapdi, S. S. Rathod, J. P., Shri Patel, P. C. and Shri Desai, J. D.	Directorate Extension Education, Anand Agricultural University, Anand - 388110
6	Training Report on Food Processing Technology	Vala, K.V., Kapdi, S. S., Rathod, J. P., and Sutar R.F.	Department of Bio Energy, College of FPTBE, AAU, Anand
7	Applications of Renewable Energy in Food Processing (FPE 362)	Kapdi, S. S. and D. K.Vyas	Principal, College of FPTBE, AAU, Anand
8	Environmental Science & Disaster Management (ESD 111)	Kapdi, S. S.	Principal, College of FPTBE, AAU, Anand

(ii) Book chapter/article published

Sr. No.	Name of Books / Booklets	Name of Book Chapter	Name of Authors	Name of Publisher
1	Indian Dairy Sector @ 75: From Self-reliance to the verge of becoming World Leader	Camel Milk Powder: A Novel Introduction To Indian Dairy Sector	Chhasatiya Hemrajsinh, Govind Tagalpallewar, Kunal Gawai & Nilesh Sardar	S .M .C. College Of Dairy Science Kamdhenu University, Anand
2	Indian Dairy Sector @ 75: From Self-reliance to the verge of becoming World Leader	Dvs Cultures - Key Contributor In The Growth Of Indian Fermented Milk Industry	Kunal M. Gawai, Govind P. Tagalpallewara, Subrota Hati & Mital Kathiriya	S .M .C. College Of Dairy Science Kamdhenu University, Anand
3	Cereal and cereal based foods: Functional benefits and technological advances for nutrition and healthcare	Maize: A potential grain for functional and nutritional properties	Kaur R., Pahwa A. and Bhise S. R.	CRC Press, Apple Academic Press, Abingdon, Oxon, UK. Pp: 65-80

VII. STUDENTS' WELFARE ACTIVITIES

The brief details about the students' amenities, NSS and co-curricular activities carried out during the year have been reported in this section

Hostel Facility

Separate well-equipped boys and girls hostels to accommodate U.G. and PG boys and girls students exist on the campus, which provide residential facilities to the students. During the reporting period 96 boys students (UG & PG) were accommodated in the Visvesvaraya boys hostel and 38 girls students (UG & PG) were accommodated in the Maitreyee girl's hostel. Each hostel is facilitated with a T.V., Guest and Reading room, gym and sports facilities, R.O. with Water Cooler, solar / gas water heating system and vehicle parking facilities. University primary health centre is offering the health services to the students and staff. During the reporting period Dr. A. K. Sharma (Professor) and Er. A. N. Nakiya (Assistant Professor) worked as Rector and Assistant Rectors, respectively.

Table 44: Hostel Facility of the College

Sr No.	Hostel Name	Floor	Room	Student Capacity	Actual Student Accommodated
1	Visveshvaraya	Ground	09	27	26
		1 st	12	36	35
		2 nd	12	36	35
2	Subhash	Ground	10	30	06
3	Maitreyee	Ground	07	14	8
		1 st	10	20	16
		2 nd	10	20	14

Mess management

During the reporting period in all the hostels messes were run by the private contractor. Each hostel provided with all the required items like dinning furniture, kitchen vessels, fridges, cooking gas connections, etc for running the messes. For smooth running of mess and to provide nutritious and delicious food to the students, a weekly menu was prepared by the mutual understanding of students in the presence of college authority. A canteen facility through private contractor appointed by the university is available in the vicinity of hostel area. Similarly another canteen and an Amul Parlour are situated on the campus near university bhavan for providing refreshment to the students on payment basis during the working hours.

Counselling committee

With a view to provide overall guidance and counselling to young students of B.Tech. (FT), following faculty members of the college are appointed as Counsellors for the students whose names are mentioned against their name:

SR. No.	Name of Counsellor	Name of Students	Year
1	Dr. S. S. Kapdi	Alok Kumar Gupta	1 st
		Neelesh Kumari	2 nd
		Nishi Chaurasia	3 rd
		Patel Srushti Umesh	4 th
		Ajay Bhairi	1 st
		Shah Niyati Ankitbhai	2 nd
		Ritesh Kumar	3 rd
		Upadhyay Bhargaviben Dipakkumar	4 th
		Solanki Siddhiben Arvindbhai	1 st
2	Dr. H. G. Bhatt	Aneket Buraman	1 st
		Sounak Biswas	2 nd
		Shah Ravina Ketankumar	3 rd
		Vegad Pujaben Dineshbhai	4 th
		Anshul Meena	1 st
		Patel Mehulkumar Yogeshbhai	2 nd
		Patel Janvi Prakashbhai	3 rd
		Sangada Yagnam Jashwantlal	4 th
		Vahora Mahammadkaif Rafikbhai	1 st
3	Dr. S. H. Akbari	Barad Ravisinh Haribhai	1 st
		Milind Nadapara	2 nd
		Macwan Srushti Sunilbhai	3 rd
		Patel Kritikakumari Rajeshkumar	4 th
		Bamrotiya Savankumar	1 st
		Patel Tatvikkumar Sureshbhai	2 nd
		Patel Meetkumar Nileshbhai	3 rd
		Sharma Samridhi Anand Prakash	4 th
		Zalavadiya Mitul Hareshbhai	1 st

	1		
4	Dr. A. K. Sharma	Bariya Ridhdhiben Vinodbhai	1 st
		Chauhan Urmi Tarunkumar	2 nd
		Trivedi Krishani Bharatbhai	3 rd
		Meda Kavitaben Punambhai	4 th
		Bhagat Yash Prakashbhai	1 st
		Santoki Milee Hareshkumar	3 rd
		Boricha Disha Kishorbhai	4 th
		Dangar Akshay Hirabhai	4 th
5	Dr. H Pandey	Chavda Bhakti Ajaykumar	1 st
		Rakesh Kumar Saini	2 nd
		Prajapati Jay Ashokbhai	3 rd
		Suthar Pankti Ashokkumar	4 th
		Dalwadi Devkumar Jigneshkumar	1 st
		Patel Dhruvit Vikrambhai	2 nd
		Parmar Priya Basil	3 rd
		Rathod Ajaysinh Ganpatbhai	4 th
6	Dr. B. H. Joshi	Desai Utsavben Pradipbhai	1 st
		Raj Dhavalsinh Pradipsinh	2 nd
		Prajapati Dipakkumar Gokalbhai	3 rd
		Sonam Choden	4 th
		Dristika Singh	1 st
		Shekhda Ronak Ketanbhai	3 rd
		Dabhi Tanvi Sureshbhai	3 rd
		Chaudhari Zinal Kumari Arvindbhai	4 th
7	Dr. Samit Dutta	Gajera Umang Pradipbhai	1 st
		Pavra Vandanaben Nareshbhai	2 nd
		Patel Rohankumar Pareshbhai	3 rd
		Solanki Chintankumar Kantibhai	4 th
		Gandhi Militkumar Nishant	1 st
		Parmar Arjunsinh Juvansangbhai	2 nd
		Varu Sandip Rambhai	3 rd
		Pethani Kashyap Nileshbhai	4 th
	I.	1	

8	Dr. Amee Ravani	Gohil Adhirajsinh Bhagirathsinh	1 st
		Kikani Chintan Savajibhai	2 nd
		Valvi Jyotiben Vijaybhai	3 rd
		Morvadiya Sagar Sureshbhai	4 th
		Gohil Jaydip Manubhai	1 st
		Jadav Bansariben Vinodbhai	2 nd
		Gamdha Darshan Nareshbhai	3 rd
		Kartik Sharma	4 th
9	Dr. Devesh Patel	Gujriya Vaman Navghan	1 st
		Patel Priyansi Pankajkumar	2 nd
		Patel Jaydeep Vijaykumar	3 rd
		Shah Janviben Snehalkumar	4 th
		Jadav Darshrajsinh Mahipatsinh	1 st
		Goyani Om Gautambhai	2 nd
		Gadhavi Vishvraj Pravindan	3 rd
		Jansari Riddhiben Manishkumar	4 th
		Veda Gokulkrishnan	1 st
10	Dr. P. S. Parsania	Joshi Jeet Pravinbhai	1 st
		Thakkar Surajprakash Udaykumar	2 nd
		Solanki Dhruviben Rameshbhai	3 rd
		Vijay Laxmi Meena	4 th
		Joshi Pratik Yogeshbhai	1 st
		Pandya Deveshbhai Chandubhai	2 nd
		Onkar Shinde	3 rd
		Patel Vrushangkumar Rohitbhai	4 th
		Prajapati Hitkumar Jasubhai	4 th
11	Dr. N. M. Chavda	Karavadara Krishna Suresh	1 st
1			
		Savaliya Manas Kailashkumar	2 nd
		Savaliya Manas Kailashkumar Rathod Kevin Dipakbhai	2 nd 3 rd
			-
		Rathod Kevin Dipakbhai	3 rd
		Rathod Kevin Dipakbhai Undhad Denish Vijaybhai	3 rd 4 th
		Rathod Kevin Dipakbhai Undhad Denish Vijaybhai Kartik	3 rd 4th 1 st

	Dr. K. V. Vala	Kishan Kumar	1 st
12		Patel Jay Kantilal	2 nd
		Parmar Randheer Chandrasinh	3 rd
		Rathod Tarunkumar Dharmprakashbhai	4 th
		Lashkari Pooja Hemendrabhai	1 st
		Sindha Yogendrasinh Vikramsinh	2 nd
		Sagar Kuldeep Jayeshbhai	3 rd
		Vaddoriya Jay Hareshbhai	4 th
13	Er. M. A. Makwana	Mahida Vishalsinh Balbhadrasinh	1 st
		Vanzara Aartiben Bhilaji	2 nd
		Vaghela Brijesh Jitendrabhai	3 rd
		Zalariya Darshit Vinodbhai	4 th
		Manjani Mansi Hareshkumar	1 st
		Malek Najameenbanu Baksudmiya	2 nd
		Macwan Meet Rajesh	3 rd
		Patel Ishan Jayeshkumar	4 th
14	Mr. K. S. Damle	Om Bhavinkumar Patel	1 st
		Garasiya Bhavikkumar Sureshbhai	2 nd
		Dodiya Jaydip Natubhai	3 rd
		Chaudhari Dishtiben Ajitbhai	4 th
		Parmar Anuragsinh Hasmukhbhai	1 st
		Maheshwari Lokesh Bhagwandas	2 nd
		Kanojiya Khushiben Krishnkant	3 rd
		Patel Dhruva Anilbhai	4 th
		Sorthiya Badal Rugnath	1 st
15	Er. N. V. Shah	Parmar Bhargavkumar Ketanbhai	1 st
		Zala Dishaben Bipinkumar	2 nd
		Valand Nishit Rakeshkumar	3 rd
		Mesvaniya Mitalben Rameshbhai	4 th
		Parmar Niyati Ashwin	1 st
		Bibhanshu Kumar	2 nd
		Chauhan Rajdipsinh Lalabhai	3 rd
		Modhiya Kinchit Rajendrakumar	3 rd
		Ishita Ashokkumar Surve	4 th

1.6	D C D T 1 11	Downson Douth Dovon clayeron	1 st
16	Dr. G. P. Tagalpallewar	Parmar Parth Devangkumar	
		Malek Ayshabanu Mohamadrafik	2 nd
		Lunagariya Haresh Nileshbhai	3 rd
		Patel Arpitkumar Pankajbhai	4 th
		Parmar Rincy Vijay	1 st
		Parmar Chiragkumar Bhupendrasinh	2 nd
		Kotak Chintankumar Mukundrai	3 rd
		Trivedi Smit Rajanikant	4 th
		Meta Hiren Pravinbhai	3 rd
17	Dr. J. K. Momin	Parmar Vishalkumar Dineshbhai	1 st
		Khalasi Nishilbhai Gopalbhai	2 nd
		Jidiya Rohitbhai Bhalabhai	3 rd
		Milind Kumar Thakre	4 th
		Patel Abhi Hashmukhbhai	1 st
		Kharadi Juhil Govindbhai	2 nd
		Joshi Hansal Tusharbhai	3 rd
		Parmar Urviben Ranjitsinh	4 th
18	Dr. R. B. Modi	Patel Mahi Rajeshkumar	1 st
		Dhodia Ujwalkumar Bhikhubhai	2 nd
		Dishaben Mahendrasinh Chavada	3 rd
		Ginoya Jeet Mukeshbhai	4 th
		Patel Prituben Miteshkumar	1 st
		Riyaben Chaudhari	2 nd
		Purohit Het Tarakkumar	3 rd
		Ugyen Lhendup	4 th
19	Dr. Deval Patel	Patel Stuti Chandrakant	1st
		Ugyen Rinzin	2nd
		Vaghasiya Jayesh Devashibhai	3rd
		Yogendra Nagar	4th
		Prajapati Himanee Rohitkumar	1st
		Patel Krunalbhai Bharatbhai	2nd
		Patel Jaimini Sureshbhai	3rd
		Rathwa Dhruti Pankajbhai	4th
		Katiwa Diliati I alikajoliai	rui

20	Er. A. N. Nakiya	Prajapati Sakshi Mukeshkumar	1 st
		Mungalpara Bhakti Lalitbhai	2 nd
		Macwana Purviben Vinodbhai	3 rd
		Patel Rituben Umeshbhai	4 th
		Purbiya Sushilkumar Laljibhai	1 st
		Amay Attri	2 nd
		Ayaan Ishu Sinha	3 rd
		Anuj Parashar	4 th
21	Mr. R. M. Dhingani	Radadiya Rensiben Rajeshbhai	1 st
		Ratanpara Krupali Dineshbhai	2 nd
		Prajapati Snehalkumar Jashbhai	3 rd
		Thakkar Japan Jagdishbhai	4 th
		Rathod Chandrikaben Yashvantbhai	1 st
		Rathva Yuvrajsinh Vinodbhai	2 nd
		Vasava Nishitkumar Dilavarsinh	3 rd
22	Er. T. H. Bhatt	Rathva Bhaveshkumar Maheshbhai	1 st
		Patel Jimitkumar Rashmikant	2 nd
		Patel Aryankumar Hemantkumar	3 rd
		Rathod Viralbhai Nitinbhai	4 th
		Rathva Dhavalkumar Ramsingbhai	1 st
		Bhimsen Pranaykumar Amratbhai	2 nd
		Riddhi Kalola	2 nd
		Baria Krunal Bhupendrabhai	3 rd
21	Mr. R. M. Dhingani	Radadiya Rensiben Rajeshbhai	1 st
		Ratanpara Krupali Dineshbhai	2 nd
		Prajapati Snehalkumar Jashbhai	3 rd
		Thakkar Japan Jagdishbhai	4 th
		Rathod Chandrikaben Yashvantbhai	1 st
		Rathva Yuvrajsinh Vinodbhai	2 nd
		Vasava Nishitkumar Dilavarsinh	3 rd

	T	1	
22	Er. T. H. Bhatt	Rathva Bhaveshkumar Maheshbhai	1 st
		Patel Jimitkumar Rashmikant	2 nd
		Patel Aryankumar Hemantkumar	3 rd
		Rathod Viralbhai Nitinbhai	4 th
		Rathva Dhavalkumar Ramsingbhai	1 st
		Bhimsen Pranaykumar Amratbhai	2 nd
		Riddhi Kalola	2 nd
		Baria Krunal Bhupendrabhai	3 rd
23	Dr. A. Nema	Saiyad Fayazudin Vajiyodin	1 st
		Agrawal Avniben Manishkumar	2 nd
		Ajaykumar Ambaliya	3 rd
		Ahir Hardikkumar Bharatbhai	4 th
		Sankaliya Jaydipbhai Hareshbhai	1 st
		Chovtiya Jay Rasikbhai	2 nd
		Parmar Dhruvi Bhikhulal	2 nd
		Prajapati Prem Buddhisagar	4 th
24	Mr. A M Patel	Sena Vumika Nirmalprasad	1st
		Debjit Chowdhury	2nd
		Darji Tulsi Amarkumar	3rd
		Gabu Sagarbhai Bholabhai	4th
		Senta Bhagvat Naranbhai	1st
		Patawat Aehamadabbas Hasanali	2nd
		Ravrani Khushal Arvind	2nd
		Pargi Mehulkumar Navjibhai	3rd
25	Dr. Gayatri Jadeja	Shah Khanjan Amishbhai	1st
		Solanki Ami Harshadbhai	2nd
		Saliya Keyur Ganeshbhai	3rd
		Vaishali	4th
		Sindha Geetaben Ranjitsinh	1st
		Kandoliya Nikunj Kishorbhai	2nd
		Radadiya Rutvikraj Girishbhai	2nd
		Gohel Jay Rameshbhai	3rd

SRC Activities of College of Food Processing Technology & Bio Energy Year 2021-2022

1. Orientation Programme

The college admitted its 13th batch of undergraduate students and 17th batch of post graduate students for academic session of 2021-222. To acquaint new students regarding various facts of the college programme, facilities available at different laboratories, pilot plant units and Experiential Learning Unit, a one-day orientation programme was organized by Er. Mahesh A. Makwana Chairman, SRC on January 06, 2022. The introductory session was attended by all the faculty members and students whereby introduction of all the teachers and students was done along with a presentation by the Dr. R. F. Sutar, Principal and Dean of the college on Food Processing Technology in general.

The presentations by Heads of Department were done highlighting activities of each department of the college. The students were also appraised about the college/hostel's rules and regulations and different SRC and NSS activities. A visit to central library of the university was arranged where functioning of library was discussed along with rules and regulations for use of e-library and cybrary along with visit to various laboratories of the college, biodiesel plant, experiential learning unit (ELU) of the college for the first year B.Tech. (FT) students.

2. Technical Events

A) State Level Award:

a) The Shree Zaverchand Meghani Poem recitation competition was organised by Anand Agricultural University, Anand on 17th Sept, 2021. Ms. Mital Mesavaniya (7th sem) got third rank in competition and further represented university at state level.



b) In Gandhi Quiz organized by Gujarat Vidyapith and Doordarshan, Ahmedabad on 14-15th Nov- 2021, a team of 4th year students consists of Darshit zalariya and Japan Thakkar selected as finalist. Whereas Ms. Priyanshi Patel and Ayesha Malek (2nd Year, B.Tech) selected as Semi-finalist. Both teams represented college in Final events on 5th Jan, 2022. Team of Darshit zalariya and Japan Thakkar became state level winner in the quiz.



B) ADROIT'21: A National Technical Festival Award

World Food Day is celebrated every year around the world on 16th October, to mark the foundation day of the Food and Agriculture Organization (FAO) of the United Nations. Like every years, on the occasion of 'World Food Day', College of Food Processing Technology and Bio-Energy, Anand Agricultural University, Anand and FPTBE Alumni Association organized two days National Technical Festival "ADROIT 21" on Food Processing Technology during October 16, 2021 at Anand Agricultural University, Anand.

In this National level competition, the students of College of Food Processing Technology has bagged the different awards as mentioned below.

Sr.No	Name of the Event	Name of Students	Position
1	Food Quiz	Anil Gorbandh, M.Tech (FPT) Pavan Kumar B. V., M.Tech (FPT)	Winner
2	Feel N Find	Ritika Desai, M.Tech (FPT)	Winner
3	Poster Presentation	Mittal Prajapati, M.Tech (FPT) Hemraj Chhasatiya, M.Tech (FPT) Ishan Patel, B.Tech. (FT)	Winner
4	Ad-Making	Janvi Patel, B.Tech. (FT) Meet Macwan, B.Tech. (FT) Jay Gohel, B.Tech. (FT)	Winner
5	Photography	Sagar Gabu, B.Tech (FT)	Winner

C) Organization of ADROIT'21: A National Technical Festival

World Food Day is celebrated every year around the world on 16th October, to mark the foundation day of the Food and Agriculture Organization (FAO) of the United Nations. Like every year, on the occasion of 'World Food Day', College of Food Processing Technology and Bio-Energy, Anand Agricultural University, Anand and FPTBE Alumni Association organized one days National Technical Festival "ADROIT 21" on Food Processing Technology on October 16, 2021 at Anand Agricultural University, Anand. It is all about bringing new perspectives towards the field of Food Processing by encouraging infinite potential of budding technocrats to Conceive, Create & Conquer.

Dr. K. B. Kathiria, Honorable Vice-Chancellor, Anand Agricultural University, Anand, presided over the inaugural session and emphasized the importance of world food day and its importance and history. He highlighted the role of the university in encouraging agri and food start-ups considering food security, starvation and food spoilage issues. Guest of honour, Dr D.H. Patel, Director of Student's Welfare, Anand Agricultural University, Anand mentioned the need of overall development of students and awareness about it. Dr. R. F. Sutar, Principal and Dean, College of FPTBE, and President, FPTBE Alumni Association, Er.Mahesh A. Makwana, Chairman, SRC, College of FPTBE, Anand Agricultural University, Anand welcome and encouraged the participants for showing their new and innovative ideas.

This year, five different events, namely, Food Quiz, Feel-and-Find, Photography, Poster Presentation and Ad Making were organized for the students of the college. Students showed great enthusiasm in their participation in various events. 40 groups participated in food quiz, 82 students of our college participated in feel-and-find, 47 participants were there in photography event, 5 groups participated in Ad-making, 16 groups actively participated in poster presentation. A technical talk was also delivered by the expert speaker and alumni of the college, Mr. Viral Marathe, Senior Executive Food Technologist, Wagh Bakri Tea for the benefits of the students. In this two days National level competition, the students of College of Food Processing Technology has bagged the different awards.





















3. Teachers Day Celebration:

Like every year, Teachers' Day was celebrated in College of Food Processing Technology & Bio-Energy on September 5, 2021, where great respect and honor was showered on all the teachers of college by the students. On this occasion different games were organized by students for the faculties and they had actively participated in them.









4. Sports Events

A) Inter-collegiate events:

This year the inaugural function of Inter-collegiate sports tournament was held by College of Food Processing Technology & Bio-Energy on November 27, 2021 at college auditorium. Students of College of Food Processing Technology & Bio-Energy were participated in different Inter Collegiate competitions like Table Tennis, Volleyball, Basketball, Badminton, Chess, Cricket, Football, Kho-kho, Cultural, Literary event, etc. organized by Anand Agricultural University.





















B) Inter Collegiate Table tennis & Chess event:

In inter university table tennis competition the college of FPTBE students Modhiya Kinchit (3rd Year, B Tech) and Morvadiya Sagar (4th Year, B Tech) were selected as the team member of the Anand Agricultural University table tennis and chess team respectively.

C) Inter Collegiate Literary event:

In inter university literary competition held on Mar 14, 2022 the college of FPTBE students Drishtika Singh (1st Year, B Tech), became winner Debate segment and Onkar Shinde (3rd Year, B Tech) became winner Extempore segment.





D) Inter Collegiate Kabaddi and Kho-Kho Competition:

In inter university kabaddi competition held on March 15, 2022, the college of FPTBE team became runner-up. Ishan Patel (4th Year, B Tech), Jaydip Gohil (1st Year, B Tech) and Dharmendra Patel (1st Year, M Tech) were selected as the team member of the Anand Agricultural University Kabaddi team. Prakash Ramesh (1st Year, M Tech), was selected as the team member of the Anand Agricultural University Kho-Kho team.





E) Inter Collegiate Badminton Competition:

In inter university Badminton competition held on Nov 30, 2021, the college of FPTBE women's team became runner-up.





F) Inter Collegiate Athletic competition:

In inter university athletic competition held on Mar 15-16, 2022, the college of FPTBE women's team became runner-up in relay run. Ms. Riyaben Chaudhari (2nd Year, B Tech) got 3rd rank in 100 m and 200 m running events in Inter Collegiate Athletic competition. Mohit Rank (1st Year, M Tech) got 3rd rank in 400 running event.





5. Fresher's Day Celebration:

Like every year, Fresher's Day was celebrated in our college on September 25, 2021, where Newly admitted First year students gave introduction of themselves to the seniors of the college. They also showed their talents in front of all faculty members as well as senior students.









The SRC committee of the Food Processing Technology & Bio Energy for the year 2021-2022 was as under:

Patron: Dr. R.F.Sutar, Dean

Chairman: Er. Mahesh A. Makwana, Assistant Professor

General Secretary: Ms. Dhruva Patel, B. Tech 4th Year.

Staff Advisors:

No.	Name	Designation	Post and Activities in SRC
1	Dr. R.F. Sutar	Principal & Dean	President
2	Er. M.A. Makwana	Asstt. Professor	Chairman (SRC)
3	Dr. K. V. Vala	Asstt. Professor	Co-Chairman (SRC)
4	Dr. N.M. Chavda	Asstt. Professor	Advisor, Literary Activities
5	Dr. Amee Ravani	Asstt. Professor	Advisor, Social Gathering
6	Dr. R.B. Modi	Asstt. Professor	Advisor, Cultural Activities
7	Er. A.N. Nakiya	Asstt. Professor	Advisor, Indoor Games
8	Dr. A. Nema	Asstt. Professor	Advisor, Outdoor Games
9	Er. T.H. Bhatt	Asstt. Professor	Advisor, College Magazine

Student Representatives:

No.	Name	Semester	Assigned SRC Activities/Duties	
1	Dhruva Patel	4th year B.Tech	General Secretary	
2	Disha Boricha	4th year B.Tech	Lady Representative	
3	Axay Dangar	4th year B.Tech	Boy's Representative	
4	Ishan Patel	4th year B.Tech	Class Representative/ Indoor Games Sec.	
5	Randheer Parmar	3 rd year B.Tech	Class Representative/Athletics	
6	Kunal Baria	3 rd year B.Tech	Outdoor Games Secretary	
7	Priya Parmar	3 rd year B.Tech	Cultural Secretary/Literary Secretary	
8	Jayesh Vagasiya	3 rd year B.Tech	College Magazine Secretary	
9	Vandana Parva	2 nd year B.Tech	Class Representative/ Social gathering	
10	Niyati Parmar	1st year B.Tech	Class Representative/Fine arts	
11	Shiv Patel	2 nd year M.Tech	Class Representative (PG)	
12	Paresh Bhoi	1st year M.Tech	Class Representative (PG)	

Table 45 Activities carried out under NSS

S. N.	Name of activity	Date	Venue	Activities carried out	
1	Covid-19 Awareness	May 21, 2021	Online	Poster prepared for awareness	
2	World Environment Day	June 5, 2021	Online	Introduction about the NSS activities	
3	Orientation programme	June 5, 2021		Plantation and poster	
4	World Food Safety Day	June 7, 2021	Online	Awareness through Poster	
5	International day of YOGA	June 21, 2021	Online		
6	Plantation Drive	June 23, 2021	At home	After first rain	
7	Plantation Drive	July 16, 2021	FPTBE	As per ICAR directive HAR MED PAR PED" by staff	
8	Corona awareness and Vaccination by student	June 28, 2021	Online at home	Posters and vaccine taken by volunteers	
9	Fit India Freedom Run Certificate	August 12, 2021	Online	All the volunteers registered and got certificate	
10	Fit India	August 13, 2021	Online	Poster competition on the theme of FIT INDIA	
11	Fit India Run	Sept 30, 2021	FPTBE	Run from college to Jagnath temple and back	
12	Angdaan Pledge	Sept 17, 2021	FPTBE	76 student took pledge	
13	International peace day	September 21, 2021	Online	Student prepared videos	
14	Participation in Gandhi quiz	Nov 14, 2021 January 5, 2022	Online by Gujarat Vidyapith and Akashvani	5 Team (Ten Student) participated and one team (2 student) stood first in final round.	
15	NSS Day celebration	September 24, 2021	FPTBE	Various activities like poster presentation, cleanliness, plantation organized for student	
16	Gandhi Jayanti Celebration	October 02, 2021	FPTBE	Book reading on Gandhili and recitation of Gandhiji's favourite hymn. Pledge taken for swadeshi things to be used.	
17	Thalassemia Screening Test, Blood donation camp	Oct 12, 2021	FPTBE	Thalassemia Screening Test (47 students) and Counselling Camp, Blood donation camp. Total 56 units of blood were collected	

18	Cleanliness Drive	14-10-2021	FPTBE	College classroom, auditorium and premise	
19	Cleanliness Drive	23-10-2021	Respective hostel	Boys hostel and girls hostel	
20	Cleanliness Drive	12-12-2021	AAU Campus	Campus cleaning	
21	Campus Ambassador	Nov 22, 2022	FPTBE	Student representative nominated for planning of NSS activities	
22	Orientation lecture	20-11-2021	FPTBE	To brief about the NSS and its role in national building	
23	Constitutional Day	26-11-2021	FPTBE	Pledge at the college and online by me and students. Online certificates issued to all, who took pledge.	
24	Plastic free campaign	11-12-2021	Anand city	Awareness rally in Anand city	
25	Plastic free campaign	11-12-2021	Public places of Anand city	Plastic collected from public places (Railway station and bus station)	
26	Plastic free campaign	12-12-2021	FPTBE & Campus	Plastic collection from campus and college premise	
27	About the NSS activities: orientation with 1st year students	18-12-2021	FPTBE	Students explained about the NSS, its importance and other by Prog Off (NSS) at college	

Prevention of Ragging in the College

The anti-ragging committee has been formed for prohibition of ragging in the college. The anti-ragging committee works as per the norms and directives of Hon'ble Supreme court. During the reporting period, no incident of ragging was observed in the college.

Table 46 Anti-Ragging Committee

1	Dr. S.S. Kapdi, Professor & Head, Dept. of Bioenergy	Chairman
2	Dr. A.K. Sharma, Professor (Food Engineering) & Hostel Rector Member	
3	Dr. S.H. Akabari, Associate Professor & Head, Dept. of Food Plant Operations	Member
4	Er. M. A. Makwana, Assistant Professor & Chairman, Student's Representative Council	Member
5	Er. A. N. Nakiya, Assistant Professor & Assistant Rector (Boys)	Member
6	Dr. Amee Ravani, Assistant Professor & Assistant Rector (Girls)	Member
7	Dr. N.M. Chavda, Assistant Professor & Coordinator (UG Academic)	Member
8	Dr. K. V. Vala, Assistant Professor & NSS Programme Officer	Member
9	Mr. Dip Dhankecha, Student (M.Tech., FPT & BE, III Semester)	Member
10	Ms. Ritika Desai, Student (M.Tech., FPT & BE, III Semester)	Member
1	Dr. S.S. Kapdi, Professor & Head, Dept. of Bioenergy	Chairman

Students' Discipline Committee 2021-22

1	Dr. S.S. Kapdi, Professor & Head, Dept. of Bioenergy	
2	Dr. S.H. Akabari, Associate Professor & Head (Dept. of Food Plant Operations) & Academic In-Charge	
3	Er. M. A. Makwana, Assistant Professor & Chairman, Student's Representative Council	Member
4	Er. A. N. Nakiya, Assistant Professor & NSS Programme Officer	Member
5	Dr. G.P. Tagalpallewar, Assistant Professor & Coordinator of Placement Cell	Member
6	Dr. A.M. Patel, Assistant Professor (Food Safety and Testing) & Librarian	Member
7	Dr. Anurag Nema, Assistant Professor & Assistant Rector (Boys)	Member
8	Dr. Amee Ravani, Assistant Professor (Dept. of Food Plant Operations)	Member
9	Dr. B.H. Joshi, Associate Professor & Head (Food Quality Assurance) & Hostel Rector	Member Secretary

"Care Taker Committee"

(A) Rector

- 1. Dr. A. K. Sharma (Rector Hostels)
- 2. Mr. A. N. Nakiya (Assistant Rector, Boy's Hostel)
- 3. Dr. Amee Ravani (Assistant Rector, Girl's Hostel)

(B) Faculty Members

- 1. Dr. S.S. Kapdi (Prof. & Head, Bioenergy Department)
- 2. Dr. R.V. Prasad (Prof. & Head, FQA Department)
- 3. Dr. H.G. Bhatt (Assoc. Prof. & Head, FST Department)
- 4. Dr. H. Pandey (Assoc. Prof. & Head, FPT Department)
- 5. Dr. S.H. Akbari (Assoc. Prof. & Head, FPO Department)
- 6. Dr. S. Dutta (Assoc. Prof. & Head, FBM Department)
- 7. Dr. B.H. Joshi (Assoc. Prof., FQA Department)
- 8. Dr. D.B. Patel (Assistant Prof., FBM Department)
- 9. Mr. R.B. Modi (Assistant Prof., FPT Department)
- 10. Mr. G. P. Tagalpallewar (Assistant Prof., FPT Department)
- 11. Dr. H.P. Sharma (Assistant Prof., FPT Department)
- 12. Mr. J. K. Momin (Assistant Prof., FPT Department)

Table 47: Committee members of the Women Cell/ Gender Committee

1	Dr. Amee V. Ravani	Assistant Professor	Chairperson
2	Dr. Gayatri Jadeja	Assistant Professor	Member
3	Mrs. Minaxi Prajapati	Assistant Professor	Member
4	Dr. Swati Anadani	Senior Research Assistant	Member

Computer cell

A well-equipped computer cell having internet connectivity has been established in the college. The practical classes of U.G. & P.G. students for computer applications are conducted. Besides this, the facilities are also utilized by the students for their research data analysis, reviewing research articles, preparation of presentations, etc. Presently, the cell is having 26 computers with licensed operating system softwares like Office, Turbo C compilers, etc.

VIII. TRAINING AND PLACEMENT

The details about the In-plant trainings given to the students by different food processing and related organisations as well as the placement of outgoing students through campus interviews are given in this section. Also, the details about the year wise graduates passed out and their placements since the inception of the college are given hereunder. Dr. Suresh R. Bhishe and Dr. Govind P. Tagalpallewar, Department of Food Processing Technology worked as the In-charge, Training and Placement Cell.

Table 47: Details of In-plant trainings of 8th semester students during 2021-22

Sr. No.	Name of Organization	No. of Students
1	Amul Dairy, Anand.	4
2	Amulfed Dairy, Gandhinagar	2
3	Ayoni Foods Pvt.Ltd., Rajkot	2
4	Austin Foods and Beverages Pvt. Ltd., Anand	3
5	AzafranInnovacionLtd., Ahmedabad	2
6	CALF Laboratory-NDDB, ANAND	2
7	ITC Life Science and Technological Center, Bengaluru	2
8	DudhsagarDairy, Mehsana	1
9	Global Gourmet Private Limited, Vadodara	1
10	Green Fibre Foods (India) Pvt. Ltd., Navasari	1
11	Hindustan coca cola beverage Pvt. Ltd.,Goblej	2
12	Jayant Snacks and beverages, Rajkot	1
13	Maharaja dehydration pvt. Ltd., Mahuva	1
14	Mirtillo International, Mumbai	2
15	Parle Products Pvt. Ltd., Bhuj	2
16	Parle Biscuits Pvt. Ltd., Maharashtra	2
17	Patanjali Ayurved Ltd., Haridwar	2
18	Surat District Cooperative Milk Producer Union Ltd., Surat	2
19	Vadilal Industries Limited, Gandhinagar	1
20	Vivan Dairy, Junagadh	2
	Total	37

Table 48 Number of students recruited through campus interviews (2021-22)

Sr.	Name of Ouganization	No. of Candida	tes offered Job
No.	Name of Organization	U.G.	P.G.
1	National Dairy Development Board, Anand (Gujarat)	2	
2	Rajguru Dehydration, Mahuva (Gujarat)	1	
3	Mahi Foods, Mahuva (Gujarat)	1	
4	BDCMPUL, Banas Dairy, Palanpur	2	
5	Heefy Foods Pvt. Ltd., Vadasar, Aahmedabad (Gujarat)	1	
6	Jubilant Food Works Limited, Indore	1	
7	Nestle India, Sanand (Gujarat)	2	
8	RPA Foods, Motaborasara (Gujarat)	1	
9	Five star Dehydration Pvt. Ltd., United Foods, Talaja (Gujarat)		1
10	Revelation Biotech, Hyderabad		1
11	1 Parle, Bhuj		1
12	Post office		1

Table 49 : Year wise placement of graduates and post-graduates

	No of graduates	Placement				
Year	No. of graduates / post graduates passed	Private firm	SAU	Bank / Semi Govt. / NGO	Self Em- ployed	Higher studies
2010	5	2	-	-	-	2
2011	6	4	2	-	-	-
2012	7	5	-	-	-	-
2013	34	15	-	-	1	17
2014	38	28	-	-	1	6
2015	42	26	-	-	3	6
2016	41	28	-	-	2	7
2017	40	19	-	-	2	15
2018	43	25	-	-	2	11
2019	52	18	6	1	1	10
2020	45	17	-	2	4	18
2021	47	25	-	3	2	12

IX. PASSED OUT STUDENTS

Table 50: Passed out under graduate students (2021-22)

SR. No.	Uni Reg. No	Name of the student
1	3070917001	ARMIBEN RAJUBHAI SOLANKI
2	3070917002	ARPIT NILESHBHAI PATEL
3	3070917003	BHIMANI MONIKABEN RAMESHBHAI
4	3070917004	BHUT SUMITKUMAR NAGJIBHAI
5	3070917005	CHAKRAVARTI HEENABEN PRAVINBHAI
6	3070917008	GAMIT NIPUNBHAI JITENDRABHAI
7	3070917010	GORIYA KESHUR LAGDHIRBHAI
8	3070917011	KEZANG WANGMO
9	3070917012	MADALIYA MEET DINESHBHAI
10	3070917013	MAKWANA JAY ANILBHAI
11	3070917014	MECWAN SELVIN BHAVESHKUMAR
12	3070917015	MISTRY HARDI BALVANTBHAI
13	3070917016	PATEL ABHI DILIPKUMAR
14	3070917017	PATEL BHAVIK PARESHBHAI
15	3070917018	PATEL DHRUVKUMAR KIRITBHAI
16	3070917019	PATEL DHRUVKUMAR ROHITBHAI
17	3070917020	PATEL DIVITABEN JAYESHKUMAR
18	3070917021	PATEL JIGAR GIRDHARBHAI
19	3070917022	PATEL ROSHANKUMAR GOVINDBHAI
20	3070917026	RANPURA ASHISH ASHOKBHAI
21	3070917027	RAVAL NIRMALBHAI CHANDUBHAI
22	3070917028	ROBIN SINGH PAHADIA
23	3070917029	SAIYED SAHILMAHAMMAD MUSTAKALI
24	3070917030	SANGAY WANGCHUK
25	3070917031	SAPRA AKASHKUMAR VIPULBHAI
26	3070917032	SATHWARA KAIVAL PRAFULKUMAR
27	3070917033	SHINGALA RUTVIK KANTIBHAI
28	3070917034	SOJITRA JAY RAJESHBHAI
29	3070917035	TEJASWINI SHARMA
30	3070917037	VADHIYA KISHANKUMAR PUNJABHAI
31	3070917038	VALA PAYALBEN MANUBHAI
32	3070917039	VALIYA DARSHANKUMAR PUNABHAI
33	3070917040	YESHI YANGCHEN

34	5070918001	GOHIL HARPALSINH BHARATSINH
35	5070918002	GOSWAMI XEETEEJ DEEPAKBHAI
36	5070918004	UNADKAT HARDIK HARESHBHAI
37	5070918005	VACHHANI MUDRIKA MAGANLAL
38	07-0252-2016	BARIA PIYUSHKUMAR MANSINH
39	07-0259-2016	DHAMASANA KISHANKUMAR RAMESHBHAI
40	07-0283-2016	RATHVA SHAILESHBHAI KHUMANBHAI

Table 51: Passed out post graduate (M. Tech.) students (2021-22)

Seat No.	Uni Reg. No	PG program	Name of the student	
1	2070919002	M. Tech. (FPT)	BHALARA YASH	
2	2070919003	M. Tech. (FPT)	DHOLU UTTAMKUMAR	
3	2070919004	M. Tech. (FPT)	MOLAKATHALA J REDDY	
4	2070919005	M. Tech. (FPT)	NIAMCHA LOWANG	
5	2070919007	M. Tech. (FPT)	PATEL ARPIT	
6	2070919008	M. Tech. (FPT)	PAVITRA HAGDE	
7	2070919009	M. Tech. (FPT)	THEBA TABBU	
8	2070918004	M. Tech. (FPT)*	KADAM ROHIT SUDHIR	
9	2070918007	M. Tech. (FPT)	SARVADE SHILA KAILAS	
10	2070918008	M. Tech. (FPE)	SHALINI SINGH	

^{*} Indicates – In service candidates.

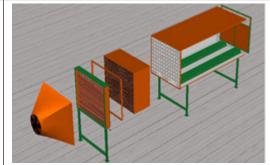
Table 52: Passed out post graduate (Ph. D.) students (2021-22)

1	1070919001	Ph.D.(FPT)	NEHA KHARKWAL
2	1070918001	Ph.D.(FPT)	BUTTI PRABHAKAR
3	1070918002	Ph.D.(FPT)	MANISH TIWARI

Research Recommendations

1. Design and development of two-stage evaporative cooling system for transport of fruits and vegetables

The design of two stage evaporative cooling system developed by Anand Agricultural University, Anand for fixing on vehicle for transport of fruits and vegetables is recommended for scientific community and entrepreneurs. This system maintains 25±2°C temperature and relative humidity above 60% inside the enclosed vehicle body during transit.



2. Osmotic drying of mango slices

The entrepreneurs and fruit processors interested in production of osmotically dehydrated mango slices are advised to use processing technology developed by Anand Agricultural University. The technology involves processing steps including selection of ripe *Kesar* and *Rajapuri* mangoes, washing, peeling, slicing, steeping in sugar syrup, followed by vacuum drying up to 15%(wb) moisture content. The product so prepared is acceptable and can be stored upto 180 days in 200 gauge HDPE pouches at ambient (30°±2°C) temperature.



3. Development of Fruit Beverage with Lactose Hydrolyzed Milk Solids

The entrepreneurs and food processors interested in production of fruit beverage with lactose hydrolyzed milk solids are advised to adopt the production technology developed by Anand Agricultural University, Anand. The technology involves blending of milk:whey ratio 4:1 (80% milk, 20% whey) with addition of Beta D-galactosidase enzyme concentration 5.01 U/g of lactose, incubating it at 34°C for 203 min and then heating at 65°C for 10 min. This is followed by addition of sapota pulp 8% and sugar at 9.5% and the beverage is heated at 72°C for 15s and then packing in glass bottles. The product so prepared is having highly sensory acceptable quality. The product can be stored in glass bottles for 12 days at 7°±2°C.



4. Production Technologies for Value Added Products from Pumpkin Seeds

The entrepreneurs and food processors interested to prepare pumpkin seed spread are advised to adopt the production technology developed by Anand Agricultural University, Anand. The technology involves dehulling of whole pumpkin seed, roasting, addition of salt, hydrogenated vegetable oil, sugar, spice (cinnamon, ginger powder) mix and packing in glass jars. The product so prepared has high sensory score, good consistency, optimum adhesiveness and cohesiveness. The product can be stored up to 90 days at 30°±2°C.



5. Technology for Development of Ready- to-Rehydrate Type of Kidney bean

The entrepreneurs and food processors interested in production of ready-to-eat and rehydrate type kidney beans are advised to adopt the production technology developed by Anand Agricultural University, Anand. The technology involves various processing steps including soaking, cooking and dehydration. The product so prepared is acceptable and can be stored upto 184 days in aluminium laminated pouches at ambient (30°±2°C) temperature.



6A. Thermally treated clarified wood apple juice

The entrepreneurs and food processors interested in production of thermally treated clarified juice from wood apple fruit are recommended to use the technology developed by Anand Agricultural University, Anand. This technology involves clarification using centrifugation and bentonite treatment with thermal processing of wood apple juice at 85°C temperature for 4 minutes for preservation. Clarified wood apple juice (Thermally treated) can be stored safely up to 135 and 165 days at ambient (30±2°C) and refrigerated (7±2°C) temperature, respectively.



6B. Non-thermally treated clarified wood apple juice

The entrepreneurs and food processors interested in production of non-thermally treated clarified juice from wood apple fruit are recommended to use the technology developed by Anand Agricultural University, Anand. This technology involves clarification using centrifugation and bentonite treatment with gamma irradiation processing of wood apple juice at 1 kGy dose for preservation. Clarified wood apple juice (Gamma irradiated) can be stored safely up to 150 and 195 days at ambient (30±2°C) and refrigerated (7±2°C) temperature, respectively.



7. Standardization of Process Parameters for the Development of Partially Defatted Peanut.

The entrepreneurs and oilseeds processors, interested in production of partially defatted whole peanut are recommended to use the technology developed by Anand Agricultural University. Defatted peanut so produced has 31% fat and 36% protein content. The process involves roasting after defatting for removal of unpleasant odor and can be stored upto 21 days in HDPE zip pouch.

8. Effect of Low Frequency Ohmic Heating on Recovery of Carrot Juice

The entrepreneurs and food processors interested in the production of carrot juice are advised to use ohmic heating processing technology developed by Anand Agricultural University, Anand. The ohmically processed carrot juice was stable and acceptable upto 28 days of storage under refrigerated condition at $7\pm2^{\circ}$ C as compared to conventionally heated carrot juice which was stable and acceptable upto 14 days under the same refrigerated condition.



9. Production of Premium Quality Powder with Maximum Retention of Essential Oil Using Cryogenic Grinding of Cinnamon

Entrepreneurs and agro-processing units involved in grinding of spices are advised to use the technology of cryogenic grinding developed by Anand Agricultural University for superior quality cinnamon powder with higher retention of essential oil.

For higher retention of essential oil, the cryogenic grinding of cinnamon at temperature of -80°C, sieve size of 0.8 mm and feed rate of 10 kg/h is recommended.

10. Cold Milling of Flax seed for extraction of Omega-3 Rich Oil

The entrepreneurs and oil seed processors interested in production of superior quality flax seed oil are advised to use technology developed by Anand Agricultural University, Anand. The technology for production of omega-3 fatty acid rich flaxseed oil involves steps like moisture conditioning of flax seeds, followed by microwave roasting, oil extraction using hydraulic press extractor. Flaxseed oil can be stored for 120 days in amber colour HDPE bottle at ambient temperature (30°±2°C).





11. Technology for Production of Superior Quality Cinnamon Essential Oil Using Super Critical Fluid Extraction

Entrepreneurs and Agro-processing units involved in production of superior quality of cinnamon essential oil are advised to use the supercritical fluid extraction technology developed by Anand Agricultural University. This technology involves use of carbon dioxide supercritical fluid extraction at controlled pressure of 283 bar and temperature of 70 °C which yields 8.72% cinnamon essential oil. The process also yields 11.7% cinnamaldehyde and 0.19% Eugenol in the essential oil

12. Study on co-digestion of potato processing effluent with cattle dung for biogas production

Effluent of potato flakes producing industry can be used for biogas production as per the study conducted at Anand Agricultural University, Anand. After 10 days HRT period for co-digestion of the effluent with cattle dung, biogas is produced which contains 59.67 % methane. The digested slurry contains 1.99% N, 1.43% P and 1.34% K. Treatment of the effluent not only gives good quality fuel in one fourth time in comparison to only cattle dung digestion but also produce the best quality manure for crop production



13. Development of high fiber cookies using tomato pomace

A satisfactory high fiber cookie can be prepared by adding 10% Tomato Pomace Powder using technology developed by Anand Agricultural University. The product duly packed in aluminum foil will have safe storage life of about two and half months. The bakery industry and entrepreneurs interested in production of high fiber cookies are advised to follow the same.

14. A Development of high fiber bakery products viz. bun, cookie, bread and cake using *Madhuka Indica* flowers

A satisfactory high fiber cookie can be prepared by adding 17.5% Mahuda Flower using technology developed by Anand Agricultural University. The product duly packed in aluminum foil will have safe storage life of about three months. The bakery industry and entrepreneurs interested in production of high fiber cookies are advised to follow the same.

- **14. B** A satisfactory high fiber cupcake can be prepared by adding 15% Mahuda Flower using technology developed by Anand Agricultural University. The bakery industry and entrepreneurs interested in production of high fiber cookies are advised to follow the same.
- **14.C** A satisfactory high fiber bread can be prepared by adding 5% Mahuda Flower using technology developed by Anand Agricultural University. The bakery industry and entrepreneurs interested in production of high fiber bread are advised to follow the same.
- **14. D** A satisfactory high fiber cake can be prepared by adding 10% Mahuda Flower using technology developed by Anand Agricultural University. The bakery industry and entrepreneurs interested in production of high fiber cake are advised to follow the same.
- **14.** E A satisfactory high fiber bun can be prepared by adding 7% Mahuda Flower using technology developed by Anand Agricultural University. The bakery industry and entrepreneurs interested in production of high fiber cake are advised to follow the same.

15. Development of value added product containing Green Wheat (*Ponk*) and Chickpea hola (*Ponk*)

- **Part A:** 1. Farmers, Entrepreneurs and Agro-processing units involved in product development are advised to use the following technology for making Green Wheat (*Ponk*).
- The wheat earhead should be roasted in oven at 200°C for 20 minutes.
- The ponk should be dried under shadow for 30 minutes and then can be stored up to 6 months in airtight container at room temperature.
- 2. Farmers, Entrepreneurs and Agro-processing units involved in product development are advised to use the following technology for making Chickpea hola (*Ponk*).
- The chickpea pod should be roasted in oven at 200°C for 20 minutes.
- The ponk should be dried under oven at 100° C for 1 hour and then can be stored up to 4 months in airtight container at room temperature.
- **15 Part B:** 1. Recommendation proposed for making Jadariyu:

Farmers, Entrepreneurs and Agro-processing units involved in product development are advised to use 70gm wheat *ponk* flour, 30gm chickpea *ponk* flour, 40ml milk, 50gm ghee and 40gm sugar combination to make healthy value added Jadariyu and can stored up to 15 days in airtight container at room temperature.

- 2. The entrepreneurs interested in the production of khakhara are advised to use following combination for making value added khakhara.
- Green wheat *ponk* flour @ 70% should be incorporate with 30 g wheat flour for the development of value added green wheat *ponk* khakhara and can be stored up to 75 days at room temperature if packed in airtight container.
- Chickpea *ponk* flour @ 35% should be incorporate with wheat flour for the development of value added chickpea *ponk* khakhara and can be stored up to 45 days at room temperature if packed in airtight container

(ii) Recommendations for Scientific Community

1. Study on decontamination of pesticides in selected Spices, vegetable and fruits using γ -irradiation, UV radiation and Ozonation Techniques

The scientific community interested in degradation of pesticide in green chili are advised to use ozonized water for 15 minutes @ 30 g/hr. This enables reduction in Ethion (93%), Profenophos (91.10%), Quinalphos (91.02%), Imidacloprid (76%) and Acetamiprid (63%).

2. Metagenomic based microbial diversity study of dairy effluent treatment plants

The samples from dairy effluent plants collected from various sources like influent, anaerobic digester, aeration tank and final treated effluent showed significant differences in the type of microbiota. The predominant phyla in dairy effluent samples are Firmicutes, Proteobacteria, Planctomycetes, Bacteroidetes, and Chloroflexi. The *Streptococcus, Veillonella, Blastopirellula*, and *Thauera* were found to be the core microbiome at the genus level.

3. Evaluation of Combined Effect of Gamma Irradiation and Edible Coating on Shelf-Life of Sapota Fruit

Scientists interested in enhancement of shelf-life of sapota fruits Cv. Kalipatti. are advised to use the combination of irradiation and edible coating technology developed by Anand Agricultural University. This technology enables the shelf life of 13 days with minimum physiological weight loss (19.85%), retention of the firmness of fruits (0.20 N) and ascorbic acid (8.82 mg/100)

4. Performance Evaluation of Feed Forward Neural Network for Detection of Boric Acid Adulteration in Wheat Flour using FTIR Spectra

Feed forward artificial neural networks (learning rate 0.02, momentum 0.9) can be successfully used to detect boric acid adulteration in wheat flour at 2% and above levels using FTIR spectra with 90% correct identification.

5A. Decontamination Effect of DBD Plasma on Selected Microorganisms

The scientific community interested in non-thermal decontamination techniques is recommended to adopt DBD plasma treatment to decontaminate food born micro-organisms *S. typhi*, *E.coli*, *E. aerogens* and *S. aureus*. At 5 kV power for 24 minutes treatment of atmospheric cold plasma, the decontamination effect can be 2 to 3 log reduction (log CFU/g).

5B. Decontamination Effect of UV-C on Selected Microorganisms

The scientific community interested in non-thermal decontamination techniques is recommended to adopt UV-C treatment to decontaminate food born micro-organisms *S. typhi*, *E.coli*, *E. aerogens* and *S. aureus*. At 3 cm distance and 60 minutes of UV-C exposure treatment, the decontamination effect can be 3 to 5 log reduction (log CFU/g)