

Biodata of Dr. A.S. Kulkarni

Dr. Anant S. Kulkarni is Associate Professor in the Department of Food Processing Technology at ADIT since 2004. He obtained M.Tech. (Food Technology) from Marathwada Agril. University in 2000 and Ph.D. (Food Processing Technology from Faculty of Food Processing Technology & BE, AAU Anand in 2009 under the able guidance of Dr. D.C. Joshi, Former Dean, FPTBE, AAU, Anand. As a researcher during his master's and Ph.D. studies he extensively worked on extraction, isolation, purification of maltodextrin & its utilization as fat replacer in processed foods and manufacturing of pumpkin powder and its utilization in various food products for the enhancement of beta-carotene and subsequently Vit A level, respectively. To his credit Dr. Kulkarni has published 20 research papers in various national and international journals, 02 books and 03 book chapters, 08 popular articles and also presented 15 research papers in various national and international symposium, conferences and seminars. His 03 talks have been broadcasted on AIR and TV as an extension activity for farmers and student. He has organized 08 conferences, workshops, STTP and FDP at state and national level.

He had been conferred upon 04 awards for his contribution in the field of research and academics. To mention, Sardar Patel University awarded him for the publication of Best Research Paper in the field of Food Processing Technology and recipient of Gujarat Association of Agril. Sciences (GAAS) Gold Medal for Best Ph.D. Thesis Research Work.

He was instrumental in starting the first chapter of AFSTI in Gujarat at Vallabh Vidynagar, Anand in 2010; he became first Secretary of AFSTI V V Nagar Chapter and served for 4 years. He also served as secretary and Treasurer of ISTE Chapter. He is associated with professional societies such as AFSTI, ISTE, Institute of Engineers (IE), Indian Society of Arid legumes and IDA. During his tenure ADIT received the Best ISTE Chapter at national level.

Dr. Anant Kulkarni was in key role as Quality Management System Coordinator to implement ISO 9001:2015 certification for the first time in India at ADIT with the support of CVM management. As an Institute partner with food industry, he has completed 03 industrial research consultancy projects and successfully transferred the technologies to food industries.

He served as member of various committees. Recently, he served on National Start up Award Committee during IFCON 2018 and Board of Studies, GTU.

Apart from regular teaching of core food processing subjects, he served as T & P Incharge for FPT Dept. He had good network with food industries of Gujarat and rest of India. As a result of

this he was succeed in achieving the 100 per cent placement of graduate Food Processing students and played vital role in bridging the gap between food industries and institute.

Achievements:

Awards:

1. Recipient of Chandubhai Patel (Vakil) Foundation, UK's Shri P.L. Patel Research Award **for the best indigenous, innovative research paper during the year 2005-06 published in the subject of Food Processing** on Dec. 15th,2008.
2. **Gujarat Association of Agricultural Sciences (GAAS) award for Best Ph.D. Thesis research work on 12.01.2012. comprising gold medal and citation.**
3. **Charutar Vidya Mandal conferred award for best Ph.D. work at 12th ADIT Annual Day on 25.04.2013.**
4. **Best Alumni Award for excellence in research and academia** on the occasion of CFT-PBN Alumni meet – 2015 at Mumbai on 28.02.2015.

Agresco Recommendations:

4 research recommendations for Ph.D. research work in Agresco at AAU, Anand in 2010-11 and Joint Agresco at NAU, Navsari in 2011-12.

1. Production technology of pumpkin powder.
2. Utilization of pumpkin powder for preparation of carotene biofortified biscuits.
3. Utilization of pumpkin powder for preparation of carotene biofortified *bhajjiya*.
4. Utilization of pumpkin powder for preparation of carotene biofortified ice-cream.

Trainings Attended:

1. Attended research training on “Sweet Sorghum juice extraction and juice analysis” at National Research Centre for Sorghum, Hyderabad, from 25th Sept. to 5th Oct. 2000.
2. AICTE sponsored training programme on “Role of biotechnology in food processing technology” attended at G.B.P.U.A. & T., Pantnagar during June 12-24, 2006.
3. Attended training programme on “HPLC, HPTLC and GAS CHROMATOGRAPHY/GC-MS” held at Sophisticated Instrumentation Centre for Applied Research & Testing (SICART) Vallabh Vidyanagar from 26.11.2007 to 28.11.2007.

4. Attended one month UGC sponsored 20th Orientation Programme at UGC Academic Staff College, Sardar Patel University during 11.11.2013 to 08.12.2013.
5. Attended two weeks AICTE sponsored summer school on “State of the Art Technologies in Food Engineering” at A D Patel Institute of Technology, New V V Nagar during 10.08.2015 to 21.08.2015.
6. Attended three weeks UGC sponsored 37th Refresher Course on ICT Application and Soft Skills (ID) at UGC- Human Resource Development Centre (UGC-HRDC), Sardar Patel University during 07.09.2015 to 27.09.2015.
7. Attended KIA workshop on parenting by Prof.Mahendra Chotalia, organized by H.M. Patel Career Development Centre at H.M. Patel Career Development Centre , V V Nagar, o on 25.10.2018.
8. Attended KIA workshop on Team Creativity @ Workplace by Prof.Nikhil Zaveri, organized by H.M. Patel Career Development Centre at H.M. Patel Institute of English Research and Training, V V Nagar on 26.10.2018.
9. Attended KIA workshop on domain knowledge (Round – II) on Food and Chemical Engineering organized by H.M. Patel Career Development Centre at H.M. Patel Career Development Centre , V V Nagar, o on 18 & 25.06.2019.

Contribution as subject expert:

1. Invited to deliver expert talk on “ ISO 22000, GMP,GHP” for the Food Safety Officers on 16.11.2011 organized by FSSAI, Ministry of Health, Govt. India at AMUL Dairy Anand.
2. Delivered expert talk on “Quality of dehydrated food products” at Model Training Programme organized by AAU, Anand on 02.01.2012.
3. Delivered expert lecture on “Traceability issues in Agribusiness” during ICAR sponsored Summer School on “Agribusiness & Marketing Information System”, organized at International Agri-Business Management Institute (IABMI), AAU, Anand on 20.07.2013.
4. **Peer reviewer for “NAIP- Development of e-courses for B.Tech. (Agricultural Engineering)”.**
5. Delivered expert talk on “ Value addition of banana” during Banana Festival at Bharuch organized by NABARD, Rotary Club of Bharuch and NGO Farm Bridge at J P Arts and Science College, Bharuch as an extension activity for farmers on 23.02.2014.
6. Expert lecture on “Value addition of fruits and vegetables” during Training-cum-coaching program for ICAR NET Examination at College of Food Processing Technology and Bioenergy, Anand Agri. University, Anand during the year 2013,2014,2015,2016,2017 and 2018.

7. Delivered expert talk on “Technological aspects for production of papain from papaya” during training programme for entrepreneurs”, under Swadeshi Science Movement, Kerala, DST funded i-STED project, organized by Faculty of Food Processing Technology and Bio energy, AAU, Anand on 21.11.2018.

Seminar / Expert talks organized:

1. Organizing Secretary for ISTE Regional Seminar on “XXI Century : Priorities in Technical and Higher Education” in collaboration with ISTE Gujarat Section and GTU on 03.08.2011 at A D Patel Institute of Technology, New V V Nagar. 427 delegates participated across the country.
2. Successfully organized one day workshop on “Entrepreneurship Development” sponsored by Ministry of SME, Govt. of India for BE (FPT) students on 08.10.2010.
3. Organizing Secretary for National Seminar on “Gujarat: Opportunities in Food Processing” sponsored by The Institution of Engineers, ISTE, and AFST(I) on 18-19, April 2015 at A D Patel Institute of Technology, New V V Nagar. 160 delegates participated across the country.
4. Organized more than four expert talks by renowned food industrialists and food technologist for BE (FPT) students.
5. Organized Two weeks National Level Faculty Development Programme on “Entrepreneurship Development” sponsored by Gujarat State Biotechnology Mission (GSBTM), DST and NSTEDB during 05.03.2018 to 17.03.2018 at A D Patel Institute of Technology, New V V Nagar. 28 participants participated across Gujarat and Maharashtra state.

Consultancy:

- i. Consultant for Onion **and Garlic Dehydration Plant**, Panchmahal Dairy, Godhra during 2005-2007.
- ii. Consultant for TIBO Speciality Food Pvt. Ltd., Mumbai for **enhancement of quality and shelf life of dalwada** during 02.04.2013 to 09.12.2013.
- iii. Consultant for Akashganga Food Pvt. Ltd. V V Nagar for Development of Hot Extruded Snack Food Products during 2013-14.

Extension Activities:

- Editor of wallpaper “Computer Era” published half yearly during a period of 1994 – 1998.
- Two Radio talk on **Agro processing and Post harvest Technology for Fruits & Vegetables** broadcasted by AIR, Parbhani station.
- Arranged entrepreneurship development training for rural youths at ADIT.
- Co-organizer in **World Food Day Celebration** at Faculty of Food Processing Technology and Bio energy, AAU, Anand during 2012 & 2013.

List of Publications:

- I) D.B.Wankhede, M.M. Antwal, Syed Ismail, **A.S. Kulkarni** and H.B. Patil (2000) "Use of sorghum starch maltodextrin as Fat Replacer in Low Calorie Foodstuffs" International Sorghum and Millet News Letter (ISMN) **(41)** : 56.
- II) D.B. Wankhede, I. Syed, **A.S. Kulkarni**, P.M. Ganorkar (2002) "Studies on value added products from Sorghum , Production kinetics, Mimetic attributes and an assessment of Sorghum maltodextrin and carboxymethyl derivative as fat replacer in cookies and toffees" Value added Products: Opportunities for agro industrial units : 147 – 152.
- III) **A.S. Kulkarni**, D.B. Wankhede, H.M. Syed, S.Ismail (2003) "Studies on Isolation and Characterization of Starch from two varieties of Mothbean " Advances in Arid Legumes Research. Indian Arid Legumes Society. 318-323.
- IV) S.Ismail, D.B. Wankhede, **A.S. Kulkarni**, H.M. Syed (2003) "The Effect of Germination on the Changes in Protein, Free Amino Acid and In-vitro Digestibility of Mothbean and Horsegram". Advances in Arid Legumes Research. Indian Arid Legumes Society. 315 – 317.
- V) **A.S. Kulkarni**, H.B. Patil, C.G. Mundada (2005) "Studies on effect of pretreatment on quality of dehydrated Bitter gourd (*Mimordica charantia*) L.). ADIT Journal of Engineering . **2(1)** : 31 – 33
- VI) **A.S. Kulkarni**, D.C. Joshi "Post Harvest Processing of Banana-Prospectus and Constraints" Journal of Engineering and Technology, Saradar Patel University Journal of Engineering & Technology. **Dec. 2006**
- VII) **A.S. Kulkarni**, H.B. Patil. (2006)"Effect of various treatments on nutritional functionality of Cowpea (*Vigna unguiculata*)" ADIT Journal of Engineering . **3(1)**: 63-65.
- VIII) **A.S. Kulkarni**, D.C. Joshi (2013).Effect of replacement of wheat flour with pumpkin powder on textural and sensory qualities of biscuit. International Food Research Journal. **20(2)**:587-591.

- IX) **A.S. Kulkarni**, D.C. Joshi (2013). Studies on selected physico-chemical properties of pumpkin. Asian Journal of Dairy and Food Research 32(2):126-129.
- X) P.M. Ganorkar, **A.S. Kulkarni** (2013). Studies on preparation and functional properties of carboxymethyl starch from sorghum. International Food Research Journal. 20(5): 2205-2210.
- XI) **A.S. Kulkarni**, D.C. Joshi (2013). Nutritional, sensory and textural qualities of *bhajjiya* supplemented with pumpkin (*Cucurbita maxima*) powder. International Food Research Journal. 20(5): 3237-3241.
- XII) A.A. Kulkarni, **A.S. Kulkarni** (2013). Present education system boon or bane. International Multidisciplinary Journal of Applied Research. 1(5) Part II:28-29
- XIII) **A.S. Kulkarni**, D.C. Joshi (2014). Influence of storage temperature on chemical and microbial quality of carotene rich pumpkin powder. International Journal of Agriculture, Environment & Biotechnology. 7 (July): 421-426.
- XIV) **A.S. Kulkarni**, D.C. Joshi, G.P. Tagalpallewar (2014). Biosensors for food and dairy industry. Asian Journal of Dairy and Food Research 33(4):292-296.
- XV) **A.S. Kulkarni** (2017). Traditional Foods – Indian Heritage. V Vidyanagar. 19 (9) :24-25.
- XVI) **A.S.Kulkarni**, Mamta Patel (2017). Studies on Development of Protein Fortified Banana-Cactus Pear Mixed Fruit Bar. Chemical Science Review and Letters. 6 (23): 1803-1809.
- XVII) **A. S. Kulkarni**, D. C. Joshi, G. P. Tagalpallewar and K.M. Gawai (2017). Development of Technology for the manufacture of pumpkin ice cream. Indian Journal of Dairy Science. 70(6): 701-706.
- XVIII) Nihir Soni, **A.S.Kulkarni** and Luv Patel (2018). Studies on development of protein cookies. International Journal of Chemical Studies. 6(6): 439-444.
- XIX) H. W. Deshpande, S. D. Katke1 and **A. S. Kulkarni** (2019). Process standardization and quality evaluation of yogurt fortified with noni juice.

International Journal of Current Microbiology and Applied Sciences.
8(10): 179-186. ISSN: 2319-7706.

- XX) A.R. Tapre, R.K. Jain and **A.S. Kulkarni** (2019). Effect of enzymatic treatment and ripening stages on physico-chemical parameters of clarified banana juices. Chemical Science Review and Letters.8(31), 155-160. ISSN 2278-6783.

Popular articles in local language

- a. Food industry – Present status & future prospectus
- b. Genetic modified foods
- c. Bakery – A boon to unemployed youths
- d. Banana processing
- e. Guar and its application
- f. Two Radio Talks

Book / Book Chapters Publication:

1. **A.S. Kulkarni**, D.C. Joshi (2014). “Production of pumpkin powder and its value addition” ISBN: 9783639661736 published by Scholars’ Press. Germany.
2. **A.S. Kulkarni**, D.B. Wankhede (2014). “Production technology of sorghum starch maltodextrin and its utilization as fat replacer in food products” ISBN: 9789383241583 published by Archers and Elevators Publishing House. India.
3. **A.S. Kulkarni**, G.P.Tagalpallewar (2016). “Basic concepts of functional foods and nutraceuticals” In: Innovative Approaches, Value Addition in Dairy products and Future prospectus in Dairy Industry. ISBN: 9788193170441 published by AAU,Anand.
4. **A.S. Kulkarni**, G. P. Tagalpallewar (2018). “High pressure processing of foods”. In: “Fundamentals of Food Engineering and Applications” ISBN: 9789387296145 published by Brillion Publishing, India.

Papers presented in Seminar/ Workshop/ Symposium/ Summer & Winter School

- I. D.B.Wankhede, M.M. Antwal, Syed Ismail, **A.S. Kulkarni** and H.B. Patil. Studies on assessment of Sorghum Starch maltodextrin(s) as fat replacer in low calorie cookies and papaya toffees. VIII Vasanttrao Naik Memorial National Seminar on Sorghum under different Agro-ecological systems and it’s industrial utilization. March 1 – 2, 2000 at Nagpur.

- II. **A.S. Kulkarni**, D.C. Joshi (2010). Studies on enhancement of carotene content in *Bhajjiya* by adding pumpkin powder. National seminar on value addition of agricultural produces and current status of small scale food processing units. Organized by MPUAT, Udaipur, 18-19.02.2010.
- III. **A.S. Kulkarni**, D.C. Joshi (2012). Production technology of pumpkin powder. National seminar on “New horizons in vegetable production”, Organized by Gujarat Association of Agricultural Scientist (GAAS), Ahmedabad. 12.01.2012.
- IV. A.A. Kulkarni, **A.S. Kulkarni** (2013). Present education system –boon or bane. A paper presented at NAAC sponsored National Seminar on Empowering educational system through quality enhancement and capacity building of teachers and students on 6 - 7 December 2013 organized by N.V. Patel College of Pure and Applied Sciences, V.V. Nagar, Anand.
- V A S Kulkarni (2014) “Value addition of banana” delivered expert talk during Banana Festival at Bharuch organized by NABARD, Rotary Club of Bharuch and NGO Farm Bridge at J P Arts and Science College, Bharuch as an extension activity for farmers on 23.02.2014.
- VI **A S Kulkarni**, D C Joshi (2014) “ Influence of storage temperature on chemical and microbial quality of carotene rich pumpkin powder” Paper presented in National Symposium on “Microbial Biotechnology: Advances and Future Trends 2014” at N V Patel College of Pure & Applied Sciences on Wednesday, 26th Feb. 2014.
- VII A S Kulkarni (2015). “Traceability in food supply chain” Delivered expert talk during Summer School on “State of the Art Technologies in Food Engineering, sponsored by AICTE, New Delhi and organized by ADIT during 10-21, Aug. 2015.
- VIII **A S Kulkarni**, D C Joshi (2016). “Quality Characteristics and Storage Stability of Pumpkin Powder” Paper presented in 29th National Convention of Agricultural Engineers. Theme: Agro-Tech Industries: Status, Scope and Strategies for Food Security at AAU on 21.02.2016.
- IX **A S Kulkarni** (2016). “Entrepreneurship: Quality perspective”. Delivered expert talk during four weeks workshop on “Entrepreneurship Development” sponsored by EDI, Gandhinagar at ADIT, 26.08.2016.

- X **A S Kulkarni**, G P Tagalpallewar and D C Joshi (2016) “Studies on development of carotene biofortified ice cream and its quality evaluation” Paper presented in International Conference on “Neutraceuticals and Functional Foods – Challenges and Opportunities” organized by ISAB, Kanpur and AAU, Anand held at AAU, Anand on 6-8.12.2016.
- XI G P Tagalpallewar, **A S Kulkarni** and D C Joshi (2016) “Studies on development of SCFE carotenoids biofortified cookies and its quality evaluation” Paper presented in International Conference on “Neutraceuticals and Functional Foods – Challenges and Opportunities” organized by ISAB, Kanpur and AAU, Anand held at AAU, Anand on 6-8.12.2016.
- XII **A S Kulkarni** (2017) “Research Scopes in Horticulture” Delivered expert TV talk in SANDHAN (All Gujarat Integrated Classroom, BISAG, Dept of Education- Govt. of Gujarat on 14.03.2017.
- XIII B M Thakkar, **A S Kulkarni**, Gupta P R and Mehta D N (2017) “Studies on effective utilization of watermelon rind”. Paper presented in National Conference on “Non Thermal Technologies for Improvement of Safety and Quality of Foods” organized by College of Food Processing Technology and Bioenergy, AAU Anand on 18.03.2017.
- XIV G P Tagalpallewar, R B Modi, **A S Kulkarni** and D C Joshi (2018) “Production technology of super critical fluid extraction (SCEFs) of carotenoids from vacuum dried pumpkin powder and storage stability”. Paper presented in 52nd Annual Convention of ISAE and National Seminar on “Doubling Farmer’s Income Through Technological Interventions” organized by Indian Society of Agril. Engineers and AAU, Anand at AAU, Anand on 6-8 Jan. 2018.
- XV **A S Kulkarni** and G P Tagalpallewar (2018) “Food Industry: Growth driver of India”. Paper presented in International Conference on “Emerging Global Economic Situation: Impact on Trade and Agribusiness in India”. Jointly organized by CVM’s Bhikabhai Jivabhai Vanijya Mahavidyalaya, Anand and Agro-Economic Research Centre, SPU, V V Nagar, Anand at Bhikabhai Jivabhai Vanijya Mahavidyalaya, Anand on 28-29 Sept. 2018.