







PERSONAL INFORMATION

S M KAMRUL HASAN, PhD



-  Hajee Mohammad Danesh Science and Technology University, Dinajpur 5200, Bangladesh
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-  <http://hstu.ac.bd/teacher/kamrul> <https://scholar.google.it/citations?user=3ilPdFsAAAAJ&hl=en>
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Sex Male | Date of birth 15/12/1980 | Nationality Bangladesh

WORK EXPERIENCE

- 1 March 2018 - present **Associate Professor - Full Time**
Hajee Mohammad Danesh Science and Technology University (HSTU), Department of Food Processing and Preservation, Faculty of Engineering, Dinajpur 5200, Bangladesh. www.hstu.ac.bd
 - Teaching, research and extension activities
- 1 March 2017 – 28 February 2018 **Postdoctoral Researcher - Full Time**
Free University of Bolzano, Italy, Faculty of Science and Technology, Bolzano 39100, Italy. www.unibz.it
 - Research and extension activities
- 1 January 2017 – 28 February 2017 **Associate Professor - Full Time**
Hajee Mohammad Danesh Science and Technology University (HSTU), Department of Food Processing and Preservation, Faculty of Engineering, Dinajpur 5200, Bangladesh
 - Teaching, research and extension activities
- 20 February 2016 – 23 December 2016 **Associate Professor - Full Time**
(I was in study leave from HSTU during this time for PhD)
Hajee Mohammad Danesh Science and Technology University (HSTU), Department of Food Processing and Preservation, Faculty of Engineering, Dinajpur 5200, Bangladesh. www.hstu.ac.bd
 - Teaching, research and extension activities
- 11 December 2011 – 19 February 2016 **Assistant Professor - Full Time**
(Between this time, I was in study leave from 1 March 2014 - 20 February 2016 for PhD)
Hajee Mohammad Danesh Science and Technology University (HSTU), Department of Food Processing and Preservation, Faculty of Engineering, Dinajpur 5200, Bangladesh. www.hstu.ac.bd
 - Teaching, research and extension activities
- 20 February 2008 – November 2011 **Lecturer - Full Time**
(Between this time, I was in study leave from 1 September 2009- 30 August 2011 for MS study)
Hajee Mohammad Danesh Science and Technology University (HSTU), Department of Food Processing and Preservation, Faculty of Engineering, Dinajpur 5200, Bangladesh. www.hstu.ac.bd
 - Teaching, research and extension activities
- August 2007 – 19 February 2008 **Lecturer - Part Time**
Hajee Mohammad Danesh Science and Technology University, Department of Food Processing and Preservation, Faculty of Engineering, Dinajpur 5200, Bangladesh. www.hstu.ac.bd
 - Teaching, research and extension activities

EDUCATION AND TRAINING

- January 2014 – December 2016 **PhD in Mountain Environment and Agriculture** Passed
Free University of Bolzano, 39100 Bolzano, Italy
 - Research Field: Food Technology
 - PhD Thesis Title: Reaction calorimetry as a tool for studying the quality of fresh-cut fruits and the efficacy of various preservation treatments
- September 2009 – August 2011 **Master of Science in Food Technology** Passed with 64.50% marks
Ghent University and Catholic University of Leuven (interuniversity program), Belgium

- Principal subjects: Food Chemistry and Analysis, Food Processing, Food Microbiology and Analysis, Thermal Processing of Foods, Fruits and Vegetable Technology, Biochemistry and Physiology of Crops, Food Marketing and Consumer Behaviour, Engineering properties of Biological Materials, Principle of Food Machinery, Engineering Kinetics and Transport Phenomena, Design and Management of Storage and Distribution Structures, and Statistics.
- MS Thesis Title: Edible Coatings for Pome Fruits. This research was conducted at Flanders Centre of Postharvest Technology, KULeuven, Belgium.

July 2005 – December 2006

Master of Science in Food Technology

Passed with 75% Marks

Bangladesh Agricultural University, Mymensingh 2202, Bangladesh

- Principal subjects: Food Chemistry & Nutrition, Food Engineering, Food Science, Food Microbiology, Food Plant Design and Management, Food Process Laboratory, Food Quality Control and Packaging, Cereals science and Technology, Technology of Fruits and Vegetables Products.
- MS Thesis Title: Design and development of a domestic air blast freezer

Passed with 66.55% marks

January 2014 – December 2016

BSc in Agricultural Engineering

Bangladesh Agricultural University, Mymensingh 2202, Bangladesh

- Principal subjects : Agronomy, Soil Science, Entomology, Agricultural Economics, Chemistry, Physics, Mathematics, Computer science, Mechanics and Kinetics, Engineering drawing, Engineering Thermodynamics, Electrical Engineering and Electronics, Strength of Materials and Theory of Structure, Fluid mechanics, Hydraulics, Drainage and Irrigation Engineering, Food Plant Engineering, Refrigeration, Air conditioning and process engineering, Machine design, Material Science and cost estimation, Soil Mechanics, Ground water and wells, Agronomy, Fundamental of Food Engineering. Agricultural Machineries and Power Sources, Design of Concrete Structure.

PERSONAL SKILLS

Mother tongue(s)

Bangla

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Replace with name of language certificate. Enter level if known.					
Italian	A1	A1	A1	A1	A1
Replace with name of language certificate. Enter level if known.					

Communication skills

- Good communication skills gained through my experience as Associate Professor and Postdoctoral researcher

Organisational / managerial skills

- Chairman (Acting), Department of Food Processing and Preservation, HSTU, Dinajpur
- Leadership (currently responsible for a team of 11 people)

Job-related skills

- Research and Teaching experience more than 11 years

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user
Microsoft office, Photo edition, statistics				

- good command of Microsoft office (word, excel, power point), GimpShop
- good command of RStudio software, Design Expert, OriginPro and Little knowledge on MATLAB

RESEARCH INTEREST:

Antioxidants and natural extracts; Postharvest technology and Food preservation; Food formulation; Agro-industrial wastes, Nanotechnology

EXPERIENCE IN ACADEMIC TEACHING Courses in the last three years

Academic year 2017/2018

Semester	Course	Credit
1	Nutritional changes during food processing	2
2	Food microbiology and hygiene	3
1	Postharvest technology	2

Academic year 2018/2019

Semester	Course	Credit
1	Thermal processing of foods	2
2	Novel food processing technique	3
2	Postharvest technology	2

Academic year 2019/2020

Semester	Course	Credit
1	Nutritional changes during food processing	2
2	Food microbiology and hygiene	3
2	Meat, Fish and Poultry Processing	2

POSTGRADUATE SUPERVISION (MSc Level)

- Sabina Yasmin. Hajee Mohammad Danesh Science and Technology University (2012-2013) MSc Student; Subject area: Food Technology, Thesis discussed in 2013: "Preservation of tomato pulp".
- Md. Atikur Rahman. Hajee Mohammad Danesh Science and Technology University (2012-2013) MSc Student; Subject area: Food Technology, Thesis discussed in 2013: "Effects of peeling methods on mineral content of potato and development of potato-based biscuit".
- Md. Jinnatul Islam. Hajee Mohammad Danesh Science and Technology University (2012-2013) MSc Student; Subject area: Food Technology, Thesis discussed in 2013: "Find out an easy method for prolonging the shelf life of green mango".
- Abdirizak Ahmed Guled. Hajee Mohammad Danesh Science and Technology University (2018-2019) MSc Student; Subject area: Food Technology, Thesis discussed in 2019: "Extraction and characterization of protein from fruit by-products of jackfruit, mango and litchi seeds".
- Md. Raihan Kabir. Hajee Mohammad Danesh Science and Technology University (2019-Ongoing) MSc Student; Subject area: Food Technology: "Encapsulation of bioactive compounds in noodle through extrusion technology"
- Md. Rakibul Islam. Hajee Mohammad Danesh Science and Technology University (2019-Ongoing) MSc Student; Subject area: Food Technology: "Extraction and characterization of valuable food ingredients from fruit by-products and their application in foods".
- Ahmed Redwan Haque. Hajee Mohammad Danesh Science and Technology University (2019-Ongoing) MSc Student; Subject area: Food Technology: "Development of Biodegradable Plastics for Food Packaging".
- Md. Mehedi Hasan. Hajee Mohammad Danesh Science and Technology University (2019-Ongoing) MSc Student; Subject area: Food Technology: "Evaluation of the antioxidant, antidiabetic and anti-obesity potential of some common fruits of Bangladesh".

POSTGRADUATE SUPERVISION (PhD Level)

- Md. Mokhlisur Rahman. Hajee Mohammad Danesh Science and Technology University (2020-ongoing) PhD Student; Subject area: Food Technology, Thesis title “Effect of formulation on physical, chemical and biological properties and stability of fruit juice and pumpkin sauce.”.
- Md. Mehedi Hasan. Hajee Mohammad Danesh Science and Technology University (2020-ongoing) PhD Student; Subject area: Food Technology, Thesis title “Development of New food products and Food Ingredients from guava and bael fruits”.

List of Publications

- i). Md. Raihan Kabir, Md. Mehedi Hasan, Md. Rakibul Islam, Ahmed Redwan Haque, **S. M. Kamrul Hasan** (2020). Formulation of yogurt with banana peel extracts to enhance storability and bioactive properties. *Journal of Food Processing and Preservation*, Wiley Online Library. Under review process. Impact factor: 1.405.
- ii). Md. Rakibul Islam, Ahmed Redwan Haque, Md. Raihan Kabir, Md. Mehedi Hasan, Khursheda Jahan Khushe, **S. M. Kamrul Hasan** (2020). Fruit by-products: The potential natural sources of antioxidants and α -glucosidase inhibitors. *Journal of Food Science and Technology*, Springer. <https://doi.org/10.1007/s13197-020-04681-2>. Impact factor: 1.946
- iii). Mohsen Ramezani, Giovanna Ferrentino, Ksenia Morozova, **S. M. Kamrul Hasan**, Matteo Scampicchio (2020). Clarification of Apple Juices with Vegetable Proteins Monitored by Multiple Light Scattering. *Journal of Food Science*, 85 (2), 316-323. Wiley. <https://doi.org/10.1111/1750-3841.14984>. Impact factor: 2.018
- iv). **S. M. Kamrul Hasan**, Giovanna Ferrentino, Matteo Scampicchio (2020). Nanoemulsion as advanced edible coatings to preserve the quality of fresh-cut fruits and vegetables: a review. *International Journal of Food Science and Technology*, 55, 1–10. Wiley. <https://doi.org/10.1111/ijfs.14273>. Impact factor: 2.383
- v). **S. M. Kamrul Hasan**, Matteo Scampicchio, Giovanna Ferrentino, Mosibo Omella Kongi, Lee D. Hansen (2019). Thermodynamics and Kinetics of the Fenton Reaction in Foods. *Thermochimica Acta*, 682, Elsevier. <https://doi.org/10.1016/j.tca.2019.178420>. Impact factor: 2.501
- vi). **S. M. Kamrul Hasan**, Mohammad Asaduzzaman, Vakare Merkyte, Ksenia Morozova and Matteo Scampicchio (2018). Simultaneous Kinetic and Thermodynamic – based Assay to Determine the Hydrogen Peroxide (H₂O₂) Scavenging Activity of Berry Extracts by Using Reaction Calorimetry. *Food analytical Methods*, 22(2), 432-439, Springer. <https://doi.org/10.1007/s12161-017-1014-z>. Impact factor: 2.245
- vii). M. S. H. Sarker, **S. M. Kamrul Hasan**, M. Nordin Ibrahim, N. Ab Aziz, Mohd. Salleh Punan (2017). Mechanical property and quality aspects of rice dried in industrial dryers. *Journal of Food Science and Technology*, 54 (12), 4129–4134, Springer. <https://doi.org/10.1007/s13197-017-2856-5>. Impact factor: 1.797
- viii). **S. M. Kamrul Hasan**, Lara Manzocco, Ksenia Morozova, Maria Cristina Nicoli, Matteo Scampicchio (2017). Effects of ascorbic acid and light on reactions in fresh-cut apples by microcalorimetry. *Thermochemica Acta*, 649, 63-68, Elsevier. <http://dx.doi.org/10.1016/j.tca.2017.01.008>. Impact factor: 2.501
- ix). **S. M. Kamrul Hasan**, Alberto Schiraldi, Maria Stella Cosio, and Matteo Scampicchio (2016). Food and Ascorbic Scavengers of Hydrogen Peroxide: a Reaction Calorimetry Investigation. *Journal of thermal analysis and calorimetry*, 125 (2), 729–737, Springer. DOI: 10.1007/s10973-015-5170-3. Impact factor: 2.042.
- x). Md. Farid Ahmed, Md. Zahirul Islam, Md. Sazzat Hossain Sarker, **S. M. Kamrul Hasan**, Rakib Mizan (2016). Development and Performance Study of Controlled Atmosphere for Fresh Tomato. *World Journal of Engineering and Technology*, 4, 168-175, Scientific research publishing. <http://dx.doi.org/10.4236/wjet.2016.42015>. Impact factor: 0.61
- xi). Mohammad Atikur Rahman, Mohammad Aslam Ali, **S. M. Kamrul Hasan**, Manobendro Sarker. Effects of Peeling Methods on Mineral Content of Potato and Development of Potato Based Biscuit. *International Journal of Nutrition and Food Sciences*. Vol. 4, No. 6, 2015, pp. 669-675. doi: 10.11648/j.ijnfs.20150406.21. Impact factor: 1.45
- xii). **S. M. K. Hasan**, and B. Nicolai (2014). Quality of pears with permeability of Bio-Fresh™ edible coatings. *African Journal of Food Science*, 8(8), 410 –418. DOI:10.5897/AJFS2014.1172.
- xiii). M. Asaduzzaman, M. E. Haque, J. Rahman, **S. M. K. Hasan**, M. A. Ali and M. S. Akter and M Ahmed (2013). Comparisons of physiochemical, total phenol, flavanoid content and functional properties in six cultivars of aromatic rice in Bangladesh. *African Journal of Food Science*. Vol. 7(8) pp. 198-203. DOI: 10.5897/AJFS2013.1001.
- xiv). **S. M. K. Hasan**, M. S. H. Sarker, and B. Nicolai (2013). The effect of Bio-Fresh™ edible coatings on shelf life and quality of pears. *International Journal of Agricultural Science Research*, Vol. 2(3), pp. 074-082.

List of Publications

- xv). M.S.H Sarker, **S.M.K. Hasan**, M.G. Aziz, M.T. Islam, S.M.R. Azam, S. Roy, and M.N. Ibrahim (2012). Effect of processing treatments on nutritional quality and shelf life of green chili (*Capsicum annuum* L.) powder. *Pertanika Journal of Tropical Agricultural Science (JTAS)*-35 (4): pp. 855-864. <https://www.cabdirect.org/cabdirect/abstract/20123405526>.
- xvi). M.A. Ali, **S.M.K. Hasan**, M.S. Mahomud and M.A. Sayed (2012). Processing and Storage of Instant Cooked Rice. *Bangladesh Res. Pub. J.* 7(3): pp. 300-305.
- xvii). **S.M.K. Hasan**, M.A. Hossain, M.J. Hossen, J. Roy and M.S.H. Sarker (2010): Preparation of biscuit from jackfruit seed flour blended with wheat flour. *The Agriculturist: A scientific Journal of Krishi foundation*. ISSN: 1729 – 5211. Vol. 8, No. 1, pp. 10-18.
- xviii). M. A. Ali, **S. M. K. Hasan** and M.N. Islam (2008): Study on the period of acceptability of cooked rice. *Journal of Bangladesh Agricultural University*. Vol.6, No. 2, pp. 401-408.
- xix). **SMK Hasan**, MN Islam and MSH Sarker (2008): Design and Development of a domestic Air Blast Freezer. Published in *International Journal of Bioresearch*, Vol. 5, No 6, pp. 28-35.

List of Conferences

- i). Md. Rakibul Islam, Md. Raihan Kabir, Ahmed Redwan Haque, Md. Mehedi Hasan, Md. Mostafa Kamal, **S. M. Kamrul Hasan** (2019). Fruit by-products: The potential sources of antioxidants for food, feed and pharmaceuticals products. 5th International Conference on Engineering Research and Education, School of Applied sciences & Technology, Shahjalal University of Science and Technology (SUST), Sylhet, Bangladesh. Date: 25-27 January 2019
- ii). Md. Raihan Kabir, Ahmed Redwan Haque, Md. Mehedi Hasan, Khursheda Jahan Khuse, Samia Rahman, Md. Rakibul Islam, **S. M. Kamrul Hasan** (2019). Healthy foods development through novel sustainable processing and formulation. 5th International Conference on Engineering Research and Education, School of Applied sciences & Technology, SUST, Sylhet, Bangladesh. Date: 25-27 January 2019.
- iii). **S. M. Kamrul Hasan**, Md. Rakibul Islam, Maruf Ahmed, Md. Sazzat Hossain Sarker (2018). Fruit by-products as underutilized sources of minerals and antioxidants. 3rd Young Scientist Congress, 2108. Bangladesh Academy of Sciences, Dhaka, Bangladesh. Date: 14-15 September 2018.
- iv). M. S. H. Sarker, G. C. Roy, M. A. Hossain, and **S. M. Kamrul Hasan** (2018). Drying and quality characteristics of aromatic rice dried by two stage drying technique. 1st International Conference on Challenges for Future Agriculture, 2018. *Progressive Agriculturists*. Bangladesh Agricultural University, Mymensingh-2202, Bangladesh. Date: 27–28 January 2018.
- v). **S. M. Kamrul Hasan**, Alberto Schiraldi and Matteo Schampicchio. Calibration-Free Reaction Calorimetry for Monitoring Food Reaction. XX workshop on the developments in the Italian PhD research on food science Technology and biotechnology, September 23rd-25th, 2015, Perugia, Italy, (Poster Presentation).
- vi). **S. M. Kamrul Hasan**, Alberto Schiraldi, Maria Stella Cosio and Matteo Schampicchio. Food and Ascorbic Scavengers of H₂O₂: a Reaction Calorimetry Investigation. 12th Mediterranean Conference on Calorimetry and Thermal Analysis. June 17th -19th 2015 in University of Girona, Spain, (Poster Presentation).
- vii). **S. M. Kamrul Hasan** and Matteo Schampicchio. Antioxidant capacity of food bioactives by reaction calorimetry. XIX workshop on the developments in the Italian PhD research on food science Technology and biotechnology. September 24th-26th, 2014, Bari, Italy (Poster Presentation).
- viii). Marco Mason, **S. M. Kamrul Hasan**, Lara Manzocco, Tanja Mimmo, Stefano Cesco, Alexandra Ignat, Maria Cristina Nicoli and Matteo Scampicchio. Comparison of dipping treatments and pulsed light on fresh cut apples by microcalorimetry. The XLIII Annual Meeting of the European Society for New Methods in Agricultural Research 3rd- 6th September 2014, Free University of Bolzano, Bolzano, Italy.

Honours and awards

- Awarded by VLIRIOUS Scholarship, Belgium for MS in Food Technology
- Awarded by Free University of Bolzano, Italy for PhD in Mountain Environment and Agriculture

Memberships

- Member of the Bangladesh Society of Agricultural Engineers
- Member of the Bangladesh Food Technologists Welfare Society
- Member of the Bangladesh Society of Food Engineers and Technologists

**Research Projects as
Principal Investigator**

- i). Title: “**Encapsulation of Nutraceuticals with Green Technologies**” funded by BANBEIS, Ministry of Education, The People’s Republic of Bangladesh.
- ii). Title: “**Processing for value addition of underutilized local fruits and vegetables**” funded by Bangladesh Academy of Sciences and United States Department of Agriculture jointly, Bangladesh
- iii). Title: “**Conversion of fruits and vegetables wastes into valuable ingredients for food and pharmaceuticals products with eco-friendly technologies**” funded by the Ministry of Science & Technology, Bangladesh.
- iv). Title: “**Development of New Edible Coatings and Its Application on Fresh Fruits and Vegetables for Improving their Quality, Safety and Shelf Life**” funded by University Grants Commission Bangladesh.
- v). Title: “**Investigation of Bioactive Compounds and their Functional Properties In Bangladeshi Jujube Fruits**” funded by Institute of Research and Training (IRT), Hajee Mohammad Danesh Science and Technology University, Dinajpur-5200, Bangladesh.

International training

- i). 8th International advanced course on reaction kinetics in food science, The Graduate School VLAG, in co-operation with the Food Quality and Design Group of Wageningen University and Research, Netherland – October 20-24, 2014.
- ii). Summer School and Workshop in Calorimetry and Thermal Analysis, Lyon, France - June 22 - 27, 2014.

Referees**1. Prof. Dr. Md. Sazzat Hossain Sarker**

Professor and Chairman
Dept. of Food Engineering and Technology
Faculty of Engineering
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University (HSTU), Dinajpur-5200, Bangladesh
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2. Prof. Matteo M. Scampicchio

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Date: 30.09.2020

S. M. Kamrul Hasan