Amit Baran Das

Assistant Professor Dept. of Food Engineering & Technology Tezpur University

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Educational Details:

- 1. **PhD** (pursuing) in **Chemical Engineering** from **Indian Institute of Technology**, Guwahati, Assam, India
- 2. **M.S in Food Engineering** from **Indian Institute of Technology,** Kharagpur, West Bengal, India
- 3. M. Tech. in Food Engineering and Technology from Sant Longowal Institute of Engineering And Technology
- 4. B.Tech in Food Technology from West Bengal University Of Technology, Kolkata, India

Areas of interest

- 1. Extrusion Technology
- 2. Food Process Modeling
- 3. Health Foods & Nutraceuticals

Published in International Journal

- 1. **Amit Baran Das**, G. Singh, S. Singh, Charanjit. S. Riar (2010). Effect of acetylation and dual modification on physico-chemical, rheological and morphological characteristics of sweet potato (*Ipomoea batatas*) starch, Journal of Carbohydrate Polymers available 80 (3),725-732.
- 2. **Amit Baran Das,** P.P.Srivastav (2011). Acylamide in Snack foods, Toxicology mechanism and method 22(3), 163–169.
- 3. Duyi S, Deka C. S. and **Das B. A.** (2015) "Phytochemical and antioxidant profile of pigmented and non-pigmented rice cultivars of Arunachal Pradesh, International Journal of Food Properties http://dx.doi.org/10.1080/10942912.2015.1055761.
- 4. Duyi S, Deka C. S. and **Das B. A.** (2015) Evaluation of physical, thermal, pasting and mineral characteristics of pigmented and non-pigmented rice cultivars Journal of Food Processing and Preservation (DOI: 10.1111/jfpp.12594).
- 5. **Amit Baran Das**, P.P.Srivastav (2015) Fuzzy logic approach for process optimization of Gluten free pasta. Journal of Food Processing and Preservation (DOI: 10.1111/jfpp.12662).
- 6. Parul, Montu Ramchiary, Duyi Samyor, **Amit Baran Das** (2016) Study on the phytochemical properties of Pineapple Fruit Leather processed by Extrusion cooking. LWT- food science and technology (accepted).
- 7. Sangeeta Gope, Duyi Samyor, Atanu Kumar Paul, **Amit Baran Das** (2016), Effect of alcohol-acid modification on physicochemical, rheological and morphological properties

- of glutinous rice starch, International Journal of Biological Macromolecules, http://dx.doi.org/10.1016/j.ijbiomac.2016.09.057
- 8. Sarmah, K., Pandit, G., **Das, A. B.,** Sarma, B., & Pratihar, S. (2016). Steric Environment Triggered Self-Healing CuII/HgII Bimetallic Gel with Old CuII–Schiff Base Complex as a New Metalloligand. Crystal Growth & Design (accept).
- 9. **Amit Bara Das**, VV.Goud, V. V., Chandan Das, (2017). Extraction of phenolic compounds and anthocyanin from black and purple rice bran (Oryza sativa L.) using ultrasound: A comparative analysis and phytochemical profiling. Industrial Crops and Products DOI: 10.1016/j.indcrop.2016.10.041.
- 10. Laishram Basantarani, **Amit Baran Das** (2017) Effect of thermal pre-treatments on physical, phytochemical and antioxidant properties of black rice pasta, Journal of Food Process Engineering (accept).
- 11. Duyi Samyor, **Amit Baran Das**, Sankar Chandra Deka (2017) Pigmented rice a potential source of bioactive compounds: A review, International Journal of Food Science & Technology (accept).
- 12. **Amit Baran Das**, V. V. Goud & Chandan Das (2017) Extraction and characterization of phenolic content from purple and black rice (Oryza sativa L) bran and its antioxidant activity. Journal of Food Measurement and Characterization (accepted).
- 13. Thangsei Nengneilhing Baite, **Amit Baran Das** (2017) Extraction of glycyrrhizin from licorice using single screw extruder: process kinetics and stimulus response modeling. Separation Science and Technology (accepted).
- 14. **Das, A. B.,** Goud, V. V., & Das, C. (2018). Adsorption/desorption, diffusion, and thermodynamic properties of anthocyanin from purple rice bran extract on various adsorbents. Journal of Food Process Engineering, 41(6), e12834.
- 15. Samyor, D., Deka, S. C., & **Das, A. B**. (2018) Effect of extrusion conditions on the physicochemical and phytochemical properties of red rice and passion fruit powder based extrudates. Journal of Food Science and Technology, 1-11.
- 16. **Das, A. B.**, Goud, V. V., & Das, C. (2018). Microencapsulation of anthocyanin extract from purple rice bran using modified rice starch and its effect on rice dough rheology. International Journal of Biological Macromolecules.
- 17. Chatterjee, G., Das, S., Das, R. S., & **Das, A. B.** (2018). Development of green tea infused chocolate yoghurt and evaluation of its nutritive value and storage stability. Progress in Nutrition, 20(1-S), 237-245.
- 18. Amit Baran Das, Suvendu Bhattacharya (2018) Characterization of the batter and glutenfree cake from extruded red rice flour. LWT- food science and technology

Articles Published in Proceedings of National Conference / Journal

1. **Amit Baran Das** (2009). **Nanotech for food**. Section: Agriculture and Biotechnology (AB13) page: 80-82. 7th All India Peoples Technology Congress, February 6-7, Science city, Kolkata, India. (Organized by FOSET and Department of Science and Technology Govt. of West Bengal)

- 2. **Amit Baran Das** (2009). **Nanotechnology for food**. National Conference on Engineering for Food and Bio-Processing, 27th February-1st March, G. P. Pant University of Agriculture and Technology, Pantnagar, India. Page no. 32-34.
- 3. **Amit Baran Das**, C.S.Riar, K.Prasad (2009). **Nanotechnology: state of art**. National Conference on Innovative Development in Engineering Application, March 26-27, Bhai Gurdas Institute of Engineering and Technology, Sangrur, India. Page no 24-27.
- 4. **Amit Baran Das**, P.P.Srivastav (2011). **By products of fruits and vegetables as functional ingredients in snack products**. All India Peoples Technology Congress, march 6-7, West Bengal University of Technology, Kolkata, India. (Organized by FOSET) page no 11.
- 5. **Amit Baran Das**, B. Srivastav (2013) **Dehumidified air drying characteristics of blanched sliced potato.** 7th international food convention NSURE-healthy foods, December, Central food technological research institute, Mysore page no C-10.
- 6. Duyi Samyor, **Amit Baran Das** and S.C.Deka (2013) **Physical properties and engineering properties of red rice of Arunachal Pradesh.** 7th international food convention NSURE-healthy foods, December, Central food technological research institute, Mysore page no B-107
- 7. Amit Baran Das, Chandan Das (2014) Effect of pH on phenolic content and absorbance of black and red rice extract in acetone extract, Annual chemical engineering symposium 29-30th march. Indian Institute of Technology Guwahati, Page No 39.
- 8. **Amit Baran Das** (2008). **Traceability in food chain.** National seminar on food safety and quality, October 20-21, Guru Jambheshwar University of Food Science and Technology, Hisar, India. Page no 249.
- 9. **Amit Baran Das**, P.P.Srivastav (2011). **By products of fruits and vegetables as functional ingredients in snack products**. All India Peoples Technology Congress, march 6-7, West Bengal University of Technology, Kolkata, India. (Organized by FOSET) page no 11.
- 10. Duyi Samyor, Danielle Calderwood, **Amit B. Das**, Sankar C.Deka and Brian D. Green (2016) Pigmented red rice (*Oryza sativa L) contains dipeptidyl peptidase-4 (DPP-4) inhibitory activity which can be incorporated into a healthy cereal product, 1st International conference on Food Bioactive and Health 13-15 September 2016 programme in Norwich, United Kingdom.
- 11. Duyi Samyor, **Amit B. Das** and Sankar C. Deka (2016). Presented a poster entitled as "Effect of passion fruit (Passiflora edulis Sims.) powder on dynamic oscillatory rheological properties of gluten free red rice (Oryza sativa L) dough. 2nd *Young Investigator Meeting, Cambridge, 16th September 2016, United Kingdom.
- 12. Das, A. B., Goud, V. V., & Das, C. (2014) Effect of pH on phenolic content and absorbance of black and red rice extract in acetone extract, Annual chemical engineering symposium 29-30th March. Indian Institute of Technology Guwahati, Page No 39.
- 13. Das, A. B., Goud, V. V., & Das, C. (2015) Ultrasound-assisted extraction of anthocyanin from pigmented rice bran, 68th Annual Session of Indian Institute of Chemical Engineers, 27-30 December. Indian Institute of Technology Guwahati, India.

14. Das, A. B., Goud, V. V., & Das, C. (2017) Microencapsulation of anthocyanin from purple rice bran using modified starch, Future Perspective of Bioresource Utilization In North - Eastern Region (IJBS-17). Indian Institute of Technology Guwahati, India.

Book and Book chapter

- 1. Duyi Samyor, Amit Baran Das, and Sankar Chandra Deka (2019), Value Addition of Underutilized Crops of India by Extrusion Cooking Technology, Innovative Food Science and Emerging Technologies, Chapter 19. Apple
- 2. Amit Baran Das, V.V. Goud, Chandan Das (2018) Phenolic Compounds as Functional Ingredients in Beverages, Additionally added ingredients and enrichment of beverages, volume 14. Elsevier
- 3. S. Gope, A.B. Das, M.K. Hazarika, D.C. Baruah, H.K. Lahkar Post-harvest Handling and Solar Drying of Banana for Rural Area of Assam, Trends and Innovations in Food Processing Technology, NIPA publisher
- 4. Duyi Samyor, Sankar Chandra Deka, Amit Baran Das Effect Of Passion Fruit Powder on Rheological Properties of Gluten Free Dough, Trends and Innovations in Food Processing Technology, NIPA publisher
- 5. Parul, Amit Baran Das Rheological Properties of Extrudate Pineapple Fruit Leather, Trends and Innovations in Food Processing Technology, NIPA publisher

Short-term course

1. Two week faculty development program on Microsoft office "Saksham" held on September, 2013 organized by Tezpur University and Microsoft

Conference Attended:

- 1. **19th Indian Convention of Food Scientists and Technologists on Health Food** held on 31st December 2007 to 2nd January 2008, IIT Kharagpur.
- 2. Food Processing & Nutraceuticals Derived from Natural Sources for Wellness Of Heart held on 6th July, 2009, Indian institute of Chemical Engineering, Jadavpur University.

Patent

1. Low cost single screw extruder for third generation snacks- 0696/KOL/2013

Sponsored Research Project

Sl.No	Title	Duration Fun	nding Agency
1	Studies on development of cereal based	2013-15 Mol	FPI, New Delhi
	functional breakfast food from the		
	underutilized crops of North-East India		

Professional Affiliation:

- Life Member: Forum of Scientist Engineer & Technologist (FOSET), Kolkata, India.
- Life Member: Association of Food Scientists and Technologists (AFST), Mysore, India (AFST/LM/2017/TEZ/1803).
- Life Member: The Indian Science Congress Association (L34102)