PROFILE

MD. ABUL KASHEM AZAD Principal Scientific Officer (PSO) Leather Research Institute (BCSIR) Nayarhat, Savar, Dhaka-1350, Bangladesh. Cell # +8801552330665, +8801715014460 E-mail: kashem.bcsir@gmail.com https://scholar.google.com/citations?user=ZinmdJAAAAAJ&hl=en https://orcid.org/0009-0006-5331-6158 https://www.researchgate.net/profile/Abdul-Kashem-Azad

FIELD OF SPECIALIZATION

Leather Processing Technology of all Types of Leather (Raw to finish including wet-processing, re-tanning, dyeing and fat-liquoring)

CURRENT JOB POSITION

19.12.2019 - Present	Principal Scientific Officer (PSO)
15.07.2007 - 18.12.2019	Senior Scientific Officer (SSO)
06.04.1999 - 14.07.2007	Scientific Officer (SO)

PREVIOUS JOB EXPERIENCE

01.02.1997 - 05.04.1999	Bay Tanneries Ltd, Hazaribugh, Dhaka. As a Leather Technologist.
01.08.1995 - 20.12.1996	Bengal Leather Complex, Hazaribugh, Dhaka. As a Part-time Leather Technologist.
02.02.1994 - 15.07.1995	Samata Leather Complex, Hazaribugh, Dhaka. As a Part-time Leather Technologist.

EDUCATION

Secondary School Certificate	Rangpur Zilla School Rajshahi Board	1 st Division, Star Marks
Higher Secondary Certificate	Rajshahi Govt (Old) College Rajshahi Board	1 st Division
B.Sc in Leather Engineering	Dhaka University	1st Class (2nd Position)

DEVELOPED PROCESSES ACCEPTED BY BCSIR

2006	Manufacture of Anti-wrinkle agent and its application in leather processing.
	Md. Abul Kashem Azad, Akhtar Hossain, Ariful Hai Quadery, Dr. Dipankar Chakraborty and Sujit Kumar Banik. সুত্র নং সচি/গউবি/৬২-৫৩৫/২০০৫/৯১৪ তারিখ্ণ ১৫/০৫/২০০৬
2008	Preparation of ammonium chrome alum from chrome shaving dust and spent chrome liquor.
	Dr. Madhu Sudan Saha, Dr. Dipankar Chakraborty, Md. Abul Kashem Azad and Sujit Kumar Bonik. সূত্র নং সচি/গউবি/৬২-৬৪৬/০৮/৯৯৮ তারিখ্ণ ২৯/০৭/২০০৮
2008	A process for the production of synthetic tanning agent from napthalene and its application in leather processing.
	Ariful Hai Quadery, Akhtar Hossain, Md. Abul Kashem Azad and Sujit Kumar Banik. সূত্র নং সচি/গউবি/৬২-৬২১/০৭/১৩৪৭ তারিখ্ণ ২০/০৮/২০০৮
2008	A Process for the preparation of protein filler as a retanning agent for leather processing
	Ariful Hai Quadry, Akhtar Hossain, Dr. Dipankar Chakraborty, Md. Abul Kashem Azad and Sujit Kumar Banik সূত্র নং সচি/গউবি/৬২-৬৩১/০৭/১৩৪৬, তারিখ্ঞ ২০/০৮/২০০৮
2010	A process for the preparation of tanning agent based on glutaraldehyde and its application in leather processing.
	Ariful Hai Quadery, Dr. Dipankar Chakraborty and Md. Abul Kashem Azad.
	ন্দ্রব্রনং সচি/গউবি/৬২-৭৪৫/০৯/১১৬০ তারিখ্য ০১/০৩/২০১০
2020	Preparation of water soluble fat-liquoring agent from Karanja seed oil (Pongamia pinnata L.) for leather Processing.
	Ariful Hai Quadery, Md. Tushar Uddin, Md. Abul Kashem Azad, Murshid Jaman Chowdhury. সুত্র নং ৩৯.০২.০০০০.০৪৩.৩৭.৭৯১.১৯/২৪০ তারিখঃ ২৮/০১/২০২০
2022	Development of technology for manufacturing flame retardant leather. Md. Abul Kashem Azad, Shimul Chakma and Akhtar Hossain. সুত্র নং ৩৯.০২.০০০০.০৪৩.৩৭.৩৯৪.১৯/১২৩২ তারিখঃ ১৯/০১/২০২২
2022	A process development for improvement of leather's grain cracking strength. Md. Abul Kashem Azad and Nasifa Akter
	সুত্র নং ৩৯.০২.০০০০.০৪৩.৩৭.৮৫৮.২১/১০১০ তারিখঃ ২৯/০৯/২০২২

- 2004 Use of magnesium sulphate and boric acid to reduce ecologically unfavoured ammonium sulphate as deliming agent in leather processing. D. Chakraborty, P. Ahmed, A.K. Azad and S. I Chaudury. Bangladesh Journal of Scientific and Industrial Research. (BJSIR), ২০০৪,৩৯(১-২), ৭১-৭৬
- 2008 Studies on the tanning with glutaraldehyde as an alternative to traditional chrome tanning system for the production of chrome free leather. *Dipankar Chakraborty, Ariful Hai Quadery & M. Abul Kashem Azad.* Bangladesh Journal of Scientific and Industrial Research. (BJSIR), 2008,43(4), 553-558
- 2014 Development of hair-save unhairing method using organic thio compounds in pretanning stages of leather production. *Ariful Hai Quadery, Md. Tushar Uddin, Md. Abul Kashem Azad, Murshid Jaman Chowdhury, Amal Kanti Deb and Md. Nazmul Hassan.* International Journal of Scientific & Engineering Research,December-2014. Vol. 5, Issue 12, PP 376-382
- 2015 Fatliquor preparation from Karanja seed oil (Pongamia pinnata L.) and its application for leather processing.
 Ariful Hai Quadery, Md. Tushar Uddin, Md. Abul Kashem Azad, Murshid Jaman Chowdhury, Amal Kanti Deb and Md. Nazmul Hassan.
 IOSR Journal of Applied Chemistry, Jan. 2015,Vol. 8, Issue 1 Ver. I, PP 54-58 https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1062.4259&rep=rep1 &type=pdf
- 2019 Alkali Enzymatic Extraction of Keratin Protein from Chicken Feather Waste in Bangladesh. *M. Nur-E-Alam, N. Akter, S. Chakma, K. Fatema, A. K. Azad, M. Jaman Chowdhury, M. Abu Sayid Mia* Iranian (Iranica) Journal of Energy and Environment 10(4): 235-241, 2019 http://www.ijee.net/article_97321_db8f3ade793cd05aa5787dd54ab8e0e7.pdf
- 2020 Enzyme-Accelerated Acid Hydrolysis of Untanned Proteinaceous Waste from Tanning Industry. Md. NUR-E-ALAM, Nasifa AKHTER, Kanish FATEMA, Md. Abul Kashem AZAD, Shimul CHAKMA, Md. Anwar Arfien KHAN Textile and Leather Review. 2020. https://doi.org/10.31881/TLR.2020.13
- 2020 Acid Hydrolysis of Untanned Proteinous Wastes from Tannery Industry in Bangladesh. Md. Nur-E-Alam, Nasifa Akhter, Kanish Fatema, Md. Abul Kashem Azad, Shimul Chakma, Md. Anwar Arfien Khan. Journal of Scientific and Innovative Research 2020; 9(3): 83-86 <u>http://www.jsirjournal.com/Vol9_Issue3_01.pdf</u>
- 2024 Impact of Polyvinyl Alcohol for bio-adhesives preparation from tannery solid waste and its application in leather products industry. *N. Akter, S. Chakma, K. Fatama, M. N. Alam and M. A. K. Azad** Bangladesh J. Sci. Ind. Res. 59(1), 07-16, 2024 DOI: <u>https://doi.org/10.3329/bjsir.v59i1.70040</u>

CONFERENCE PAPERS

- 1. Yead Mahmud, Md. Abdur Razzaq, Md. Abul Kashem Azad, "An Investigation to Assess Sustainability in the Footwear Sector of Bangladesh Regrading Lining Leather", International Conference on Environmental Protection for Protection for Sustainable Development (ICEPSD-2022), 2-4 September, 2022, pp-207, Forest and Environmental Affairs Sub-Committee, Bangladesh Awami Leage.
- 2. Md. Abul Kashem Azad, Tushar Uddin, Kanish Fatama, Md. Abdur Razzaq, "Improvement of Cleaner Technology by Producing Metal Free Eco-leather", International Conference on Environmental Protection for Protection for Sustainable Development (ICEPSD-2022), 2-4 September, 2022, pp-184, Forest and Environmental Affairs Sub-Committee, Bangladesh Awami Leage.
- 3. Nasifa Akter, Md. Anwar Arfien Khan, Md. Abul Kashem Azad, Md. Nur -E-Alam, Kanish Fatema, Murshid Zaman Chowdhury, Shimul Chakma "Extraction Of proteinous Substance from wastes of Tanning and Poultry Industry" International Conference on Environmental Protection for Protection forSustainable Development (ICEPSD-2022), 2-4 September, 2022, pp-104, Forest and Environmental Affairs Sub-Committee, Bangladesh Awami Leage.
- 4. Maliha Masturat Khan, Md Abul Kashem Azad "Extraction and use of henna leaves (Lawsonia inermis) in dyeing of leather: A new strategy for environment friendly leather processing practices" BCSIR Congress 2022, 1-3 December 2022, pp-191, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh.
- 5. Shimul Chakma, Md. Nur-E-Alam, Kanish Fatama, Nasifa Akter, Md. Abul Kashem Azad "Nanotechnology: A step forward for environmentally sustainable leather processing" BCSIR Congress 2022, 1-3 December 2022, pp-190, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh.
- 6. Md. Abul Kashem Azad, Nasifa Akter "Improvement of leather's grain cracking strength by using neats foot oil" BCSIR Congress 2022, 1-3 December 2022, pp-188, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh.
- 7. Nasifa Akter, Md. Abul Kashem Azad, Md. Nur-E-Alam, Kanish Fatema, Murshid Zaman Chowdhury "Extraction of keratin protein from wastage of poultry industry" BCSIR Congress 2022, 1-3 December 2022, pp-403, Bangladesh Council of Scientific and Industrial Research (BCSIR), Bangladesh(Oral presentation.

LEASED-OUT PROCESS

Manufacture of Anti-wrinkle agent and its application in leather processing.

Akhtar Hossain, Ariful Hai Quadery, Dr. Dipankar Chakraborty, Md. Abul Kashem Azad and Sujit Kumar Banik.

A Process for the preparation of protein filler as a retanning agent for leather processing .

Ariful Hai Quadry, Akhtar Hossain, Dr. Dipankar Chakraborty, **Md. Abul Kashem Azad** and Sujit Kumar Banik. পদ্ধতিটি B. S. International, 400 kawla Namapara, Dakhin Khan, Dhaka, কে লীজ প্রদান করা হয়েছে।

পদ্ধতিটি B. S. International, 400 kawla Namapara, Dakhin Khan, Dhaka, কে লীজ প্রদান করা হয়েছে।