



# NADIA AKTER MOKTA

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## CAREER AND DESTINY

The aspiration of my academic and professional development is to dedicate to build up career where I can devote my Knowledge, thought power, ability, experience and patience.

## EXPERIENCE

**Scientific Officer (Physics) at Bangladesh Atomic Energy Regulatory Authority**, Ministry of Science & Technology, Government of the People's Republic of Bangladesh

**Time Period:** Jun'21 to Present

**Teaching Assistantship** (Department of Physics) at **Bangladesh University of Engineering and Technology (BUET)**

**Time Period:** Apr'19 to Jun'21

**Technical Officer (Physics)** at Daffodil International University

**Time Period:** Jan'19 to Aug'19

**Research Student** at Secondary Standard Dosimetry Laboratory (SSDL), Institute of Nuclear Science and Technology, Bangladesh Atomic Energy Commission, Savar, Dhaka.

## EDUCATION

**Master of Philosophy (M.Phil.);** Biophysics Research Laboratory; Department of Physics  
Bangladesh University of Engineering and Technology (BUET)

Result: CGPA 3.83 out of 4.00

**Research Keywords:** Biophysics, Biomedical Physics

**Master of Science (M.S.) with Thesis; Physics;** University of Chittagong; 2015

Result: CGPA 3.90 out of 4.00

**Merit Position:** 1st

**Research Keywords:** Medical Physics

**Bachelor of Science (B.Sc.) Honours; Physics;** University of Chittagong; 2014

Result: CGPA 3.56 out of 4.00

**Merit Position:** 3<sup>rd</sup>

**Higher Secondary Certificate (H.S.C.); Science;** Cantonment Public School & College, Mymensingh; 2009

Result: GPA 4.50 out of 5.00

**Secondary School Certificate (S.S.C.); Science;** Habirbari Union Sonar Bangla High School; 2007

Result: GPA 4.69 out of 5.00

## PUBLICATION

4. Mohammad Abu Sayem Karal, Md. Kabir Ahamed, **Nadia Akter Mokta**, Marzuk Ahmed and Shareef Ahammed; Influence of cholesterol on electroporation in lipid membranes of giant vesicles; *European Biophysics Journal (Springer Nature)*, 49 (2020) DOI: doi.org/10.1007/s00249-020-01443-y [I.F. 2.527]
3. Mohammad Abu Sayem Karal, Urbi Shyamolima Orchi, Md. Towhiduzzaman, Md. Kabir Ahamed, Marzuk Ahmed, Shareef Ahammed, **Nadia Akter Mokta**, Sabrina Sharmin and Malay Kumar Sarkar; Electrostatic effects on the electrical tension-induced irreversible pore formation in giant unilamellar vesicles; *Chemistry and Physics of Lipids (Elsevier)* 231, 104935 (2020) DOI: doi.org/10.1016/j.chemphyslip.2020.104935 [I.F. 2.536]
2. Mohammad Abu Sayem Karal, Urbi Shyamolima Orchi, Md. Towhiduzzaman, Md. Kabir Ahamed, Marzuk Ahmed, Shareef Ahammed, **Nadia Akter Mokta**, Sabrina Sharmin and Malay Kumar Sarkar; Influence of cholesterol on electroporation in lipid membranes of giant vesicles; *Chemistry and Physics of Lipids (Elsevier)*, 231, 104916 (2020). DOI: doi.org/10.1016/j.chemphyslip.2020.104916 [I.F. 2.536]
1. [First author] **Nadia Akter Mokta**<sup>1</sup>, Md Shakilur Rahman<sup>2\*</sup>, Tanjim Siddiqua<sup>2</sup>, Santunu Purohit<sup>1</sup>, Md Kawchar Ahmed Patwary<sup>3</sup>, Akm Moinul Haque Meaze<sup>1</sup> and Humayara Ferdous  
Effective Point of Measurement (EPOM) of Some Ionization Chambers for High Energy Photon Beam Dosimetry used in Radiotherapy for the Treatment of Cancer Patient, BIOMEDICAL, Journal of Scientific & Technical Research, ISSN: 2574 -1241, DOI:10.26717/BJSTR.2019.21.00353  
<https://biomedres.us/pdfs/BJSTR.MS.ID.003539.pdf>, <https://biomedres.us/>

## JOURNALS UNDER REVIEW

2. Mohammad Abu Sayem Karal, Md. Kabir Ahamed, Urbi Shyamolima Orchi, Md. Towhiduzzaman, Marzuk Ahmed, Shareef Ahammed, **Nadia Akter Mokta** and Muhammad Samir Ullah; Investigation on the critical tension of electroporation in anionic lipid vesicles; *European Biophysics Journal (Springer Nature)*, (2020). EBJO-D-20-00107.
1. [Jointly first author] Mohammad Abu Sayem Karal, **Nadia Akter Mokta**, Victor Levadny, Marina Belaya, Marzuk Ahmed, Md. Kabir Ahamed, and Shareef Ahammed; Estimation of bending modulus of cholesterol-rich membranes using the size distribution of self-assembled vesicles; *Physical Review E (American Physical Society-APS)*

## CONFERENCES

3. **Nadia Akter Mokta**, Marzuk Ahmed, Shareef Ahammed, Md. Kabir Ahamed and Malay Kumar Sarkar; Estimation of Bending Modulus of Cholesterol-rich Membranes Using the Size Distribution of Self-Assembled Vesicle: (PP-11) *International Conference on Physics, Organized by BAEC*, Dhaka, Bangladesh, 05-07 March, 2020 (Poster Presentation), page. 129
2. **Nadia Akter Mokta**, Marzuk Ahmed, Md. Kabir Ahamed, Shareef Ahammed, Malay Kumar Sarkar, Mohammad Abu Sayem Karal; Estimation of Bending and Elastic Modulus of Cholesterol Containing Membranes using Size Distribution of Self-Assemble Vesicles (CP-22) *International Conference on Physics in Medicine, Organized by BAEC, BMPA and BMPT-DU*, Dhaka, Bangladesh, 06-07 February, 2020 (Oral Presentation), page. 49

1. **N. A. Mokta**, M. K. Sarkar, M. Ahmed, M. K. Ahamed, S. Ahammed and M. A. S. Karal;  
Effects of Cholesterol on the Size Distribution and Average size of Giant Unilamellar Vesicles (Abstract-PP-47)  
**National Conference on Electronics and Informatics, Organized by BEIS and BAEC**, Dhaka, Bangladesh, 04-05  
December, 2019 (Poster Presentation), page. 95

## CO-CURRICULAR INVOLVEMENT

*Sr. Assistant President [2014-15]* Gazipur Student Welfare Association, University of Chittagong

*Secretary [2013-14]* Gazipur Student Welfare Association, University of Chittagong

## AWARD

2019 *Acknowledgement of M.Phil* **Prime Minister's Education Assistance Trust Fellowship**  
Government of the People's Republic of Bangladesh

2016 *Acknowledgement of B.Sc. Honours CGPA* **National Science and Technology Fellowship**  
Ministry of Science and Technology, Government of Bangladesh

## LANGUAGE

*Mother Tongue* Bangla  
*Second Language* English- Reading, Writing, Listening and Speaking  
*Medium of Instruction* English in M.S. and B.Sc. Honours studies  
Bangla in H.S.C. and S.S.C. studies

## COMPUTER

*Office* Microsoft Word, Excel and PowerPoint, Internet Application

## PERSONAL DETAILS

*Father* Md. Abdul Baten  
*Mother* Mst. Baby Akter  
*Date of Birth* 15 Nov'1992  
*Nationality* Bangladeshi by birth  
*National ID* 8701527346  
*Sex* Female  
*Marital Status* Married  
*Religion* Islam  
*Blood Group* O+ve  
*Permanent Address* Village- Habirbari, Post Office- Habirbari, Post Code-2240, Police Station- Bhaluka,  
District- Mymensingh

## REFERENCE

**Dr. Mohammad Abu Sayem Karal**

B.Sc. (Hons) and M.S. (Dhaka University), M.Phil. (BUET), PhD in Biophysics (Japan)

Professor, Founder and Group Leader of Biophysics Research Laboratory

Department of Physics, Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, Bangladesh

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Website: <https://asayem221.buet.ac.bd/>

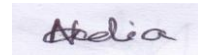
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## PROCLAMATION

I hereby declare that all the information provided above truly and fairly describes myself.



Signature