Nadeesha Kumari Athukorala

Temporary Demonstrator, Department of Molecular Biology and Biotechnology, Faculty of Science, University of Peradeniya, Peradeniya, Sri Lanka

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EDUCATION

University of Peradeniya, Sri Lanka *2017 Jan – 2021 Jun*

BSc Four-year Honors Degree in Molecular Biology and Biotechnology, Faculty of Science, University of Peradeniya, Sri Lanka. **GPA 3.91 out of 4.00 (First Class Honor), 2021.**

Key courses followed in BSc: *Molecular Genetics, Biochemistry, Molecular Developmental Biology, Virology, Molecular Phylogenetics, Quantitative Genomics and Molecular Breeding, Enzymology, Recombinant DNA Technology, Molecular Cell Biology, Bioinformatics, Molecular Immunology, Biotechnology, Advanced Microbiology, Analytical Chemistry, Biochemistry and Molecular Biology Laboratory, Human Resource Management, Vertebrate Diversity, and Invertebrate Diversity.*

Girls' High School, Kandy, Sri Lanka *2012 - 2014*

General Certificate of Education, Advanced Level, English medium, 2015 (exam for university entrance): Biology-B (very good pass > 65%), Chemistry-B and Chemistry-B. **Z-score: 1.5226.**

Vision International School, Kandy, Sri Lanka *2000 - 2011*

General Certificate of Education, Ordinary Level, English medium, 2011 (quantifying examination for Advanced Level): distinctions (> 75%) for all nine subjects: English Language, Sinhala Language and Literature, Mathematics, Science and Technology, History, Religion, English Literature, Agriculture and Food Technology and Geography.

RESEARCH EXPERIENCE

Engaged in undergraduate research project: Identification of a lipolytic *Trichoderma* sp. and characterization of its crude extracellular lipase and secured **4.00 out of 4.00 GPA** under the Supervisor of Prof. P. Samaraweera, Department of Molecular Biology and Biotechnology, Faculty of Science, University of Peradeniya, Sri Lanka. [Thesis, Poster]

SKILLS

Molecular Biology

- DNA extraction
- PCR amplification
- Agarose and Polyacrylamide Gel Electrophoresis
- Spectroscopy
- Culturing and maintaining fungi
- Protein extraction, purification and SDS-PAGE

Bioinformatics:

- Analyzing and retrieving molecular data
- Phylogenetic analysis

Computer Skills

- Skilled in using MS office package
- Successfully completed the Computer Science for Academic Purpose course conducted by English Language Teaching Unit of the Faculty of Science, University of Peradeniya, Sri Lanka (2016)
- Data analysis using the statistical packages SAS and Minitab

English Language Proficiency

- Successfully completed the two-year Certificate Course on English for Academic Purposes, conducted by the English Language Teaching Unit, Faculty of Science, University of Peradeniya (2017-2018)
- Conducted the BSc Honors program in English (2017-2021)

- School education and all the examinations were followed in English medium (2000-2014)

Other Courses: Successfully completed course on Research Data Management and Sharing, an online course authorized by The University of North Carolina at Chapel Hill and The University of Edinburgh (2021)

PROFESSIONAL EXPERIENCE

Temporary Demonstrator (July 29, 2021 - Present), Department of Molecular Biology and Biotechnology, Faculty of Science, University of Peradeniya, Sri Lanka.

Nature of duties

- Conducting practical classes for undergraduates
- Marking the lab reports and assignments
- Supporting administrative activities of the Department

PUBLICATIONS

Abstracts in conference proceedings

Athukorala, N.K. and Samaraweera, P. (2021). Identification of a lipolytic *Trichoderma* sp. and characterization of its extracellular lipase. Proceedings of the Postgraduate Institute of Science Research Congress, Postgraduate Institute of Science, University of Peradeniya, Sri Lanka (**accepted**) [PDF, Poster]

Journal papers under review

Athukorala, N.K., Rajapakse, S., Sooriyapathirana, S.D.S.S. A combination of carrier erythrocytes and artificial nanoparticles as a promising approach for drug delivery: a review. International Journal of Nanoparticles.

Book Chapters

*First-eleven authors have contributed equally – Each of them can be considered as the first co-author.
**These five authors have contributed equally – Each of them can be considered as the second co-author.

***Athukorala, N.K.**, *Karunathilaka, K.M.H.L., *Gunatilake, K.S., *Gunawardane, M.H.M.I.M., *Chandrasekara, T.M., *Thilakarathne, B.A.A.S., *Piyawardana, M.D.S.D., *Perera, A.Y.P., *Makuldeniya, M.W.M.T.U.G., *Sunilrathne, V.S., *Suriyaarachchi, H., **Warallanda, W.G.A.P., **Nathali, W.W.W.M.L., **Rathnayake, P.G.R.G., **Salih, R., **Thivya, B., Sooriyapathirana, S.D.S.S. (2021). Principles and applications of genetics. – Chapter 2. In Sooriyapathirana, S.D.S.S. (Ed.), Genetics, Molecular Genetics and Biotechnology (A textbook in Sinhala Language). ISBN 978-955-41753-7-2. pp. 25-89. (In Press)

***Athukorala, N.K.**, *Karunathilaka, K.M.H.L., *Gunatilake, K.S., *Gunawardane, M.H.M.I.M., *Chandrasekara, T.M., *Thilakarathne, B.A.A.S., *Piyawardana, M.D.S.D., *Perera, A.Y.P., *Makuldeniya, M.W.M.T.U.G., *Sunilrathne, V.S., *Suriyaarachchi, H., **Mahathanthrige, H.T., **Senanayaka, S.G.M.S.D., **Rathnayake, P.G.R.G., **Salih, R., **Thivya, B., Sooriyapathirana, S.D.S.S. (2021). Molecular genetics. – Chapter 3. In Sooriyapathirana, S.D.S.S. (Ed.), Genetics, Molecular Genetics and Biotechnology (A textbook in Sinhala Language). ISBN 978-955-41753-7-2. pp. 91-171. (In Press)

***Athukorala, N.K.**, *Karunathilaka, K.M.H.L., *Gunatilake, K.S., *Gunawardane, M.H.M.I.M., *Chandrasekara, T.M., *Thilakarathne, B.A.A.S., *Piyawardana, M.D.S.D., *Perera, A.Y.P., *Makuldeniya, M.W.M.T.U.G., *Sunilrathne, V.S., *Suriyaarachchi, H., *Ranatunga, R.A.S., **Jayasundara, E.J.M.I.K., **Rathnayake, P.G.R.G., **Salih, R., **Thivya, B., Sooriyapathirana, S.D.S.S. (2021). Techniques of genetic engineering – recombinant DNA technology. – Chapter 4. In Sooriyapathirana, S.D.S.S. (Ed.), Genetics, Molecular Genetics and Biotechnology (A textbook in Sinhala Language). ISBN 978-955-41753-7-2. pp. 173-238. (In Press)

Athukorala, N.K., Chandrasekara, T.M., Gunawardane, M.H.M.I.M., Mahathanthrige, H.T., Jayasundara, E.J.M.I.K., Sooriyapathirana, S.D.S.S. (2021). Structure and function of proteins. – Chapter 5. In Sooriyapathirana, S.D.S.S. (Ed.), Genetics, Molecular Biology and Biotechnology (A textbook in Sinhala Language). ISBN 978-955-41753-7-2. pp. 239-255. (In Press)

Chandrasekara, T.M., **Athukorala, N.K.**, Gunatilake, K.S., Senanayaka, S.G.M.S.D., Warallanda, W.G.A.P., Sooriyapathirana, S.D.S.S. (2021). Genetic basis of mutations, importance, and applications. – Chapter 11. In Sooriyapathirana, S.D.S.S. (Ed.), Genetics, Molecular Genetics and Biotechnology (A textbook in Sinhala Language). ISBN 978-955-41753-7-2. pp. 423-446. (In Press)

Thilakarathne, B.A.A.S., Karunathilaka, K.M.H.L., **Athukorala, N.K**., Salih, R., Rathnayake, P.G.R.G., Sooriyapathirana, S.D.S.S. (2021). DNA fingerprinting. – Chapter 7. In Sooriyapathirana, S.D.S.S. (Ed.), Genetics, Molecular Genetics and Biotechnology (A textbook in Sinhala Language). ISBN 978-955-41753-7-2. pp. 281-320. (In Press)

AWARDS

University Award for the Academic Excellence (2019/2020) on the basis of the results of the examinations in BSc (Honors) in Molecular Biology and Biotechnology, University of Peradeniya, Sri Lanka.

PROFESSIONAL PRESENTATIONS

Identification of a lipolytic *Trichoderma* sp. and characterization of its crude extracellular lipase. Poster presented at the Science Undergraduate Research Symposium, Faculty of Science, University of Peradeniya, Sri Lanka, 2021. [Poster]

PROFESSIONAL TRAINING

Independent study and seminar presentation on "A combination of carrier erythrocytes and artificial nanoparticles as a promising approach for drug delivery" and secured 4.00 out of 4.00 GPA at the Department of Molecular Biology and Biotechnology, Faculty of Science, University of Peradeniya. [PDF, Poster]

ATTENDED WORKSHOPS

Current Status and Future Prospects of Pharmaceutical Industry in Sri Lanka. Conducted by the Postgraduate Institute of Science Board of Study in Biomedical Sciences, 2021.

EXTRA-CURRICULAR ACTIVITIES

- Member of Molecular Biology Association at Faculty of Science, University of Peradeniya (2017-21)
- Member of Zoologists' Association at Faculty of Science, University of Peradeniya (2017-2019)
- Member of school western band (Vision International School, 2004-2008)

RESEARCH INTERESTS

I am interested in microbiology, developmental biology, immunology, reproductive biology, and biochemistry. Has an interest in exploring novel biocatalysts with industrially demanding properties.

REFEREES

Prof. P. Samaraweera
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Dept. of Molecular Biology & Biotech.,
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