

AJATSHATRU BALAJI

Curriculum Vitae

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EDUCATION	PhD, Department of Meteorology, University of Reading (est. 2028) Thesis: Atmospheric Sedimentation of Non-Spherical Dust Particles; Developing knowledge for improvement of models
	MSc. (Research), Physics & Atmospheric Science, Dalhousie University (2025) Thesis: Seasonal Variability of Wave-generated Sea-spray Aerosol over an Estuarine Fjord
	BSc. (Hons.), Ocean Sciences, Memorial University of Newfoundland (MUN) (2022) Thesis: Drivers of Ice-Nucleation in North Atlantic Surface Waters
RESEARCH EXPERIENCE	MSCA Doctoral Research Fellow, Controlled-environment dust analogue sedimentation (2025-28) <i>Department of Meteorology, University of Reading</i>
	Graduate Researcher, Tank-generated sea-spray aerosol production (2023-25) <i>Aerosol and Cloud Processes Group, Dalhousie University</i>
	Laboratory Manager, Aerosol Processes Group, Dalhousie University (2023-25)
	NSERC Student Investigator, Mussel trace metal geochemistry, Babechuk Group, MUN (2022)
	Honours Student, Cold-stage marine aerosol ice nucleation (2021-22) <i>Marine Biogeochemistry Lab, MUN</i>
	NSERC Student Investigator, Remote sensing of subtidal kelp: COBEL, MUN (2021)
AWARDS & SCHOLARSHIPS	Marie Skłodowska-Curie Actions Doctoral Fellowship, Horizon Europe (2025-28)
	Nova Scotia Graduate Scholarship (Master's) (2023-24)
	Department of Physics Graduate Fellowship, Dalhousie University (2023)
	Lou Visentin Award, Faculty of Science, MUN (2023)
	Science Undergraduate Research Award (equiv. to NSERC USRA) (2021, 22)
	International Undergraduate Academic Award, MUN (2020, 21)

FIELDWORK	AZOMP/ADOCCS Research Cruise, <i>Labrador Sea</i>	(Apr-May 2025)
	Bedford Basin oceanographic surveys, <i>Nova Scotia</i>	(Mar 2024-Apr 2025)
	Cross-province river sediment survey, <i>Newfoundland</i>	(July 2022)
	Fjord surveys, <i>Bonne Bay, Canada</i>	(May 2022)
	Benthic ecological remote sensing, <i>Newfoundland</i>	(Jun-Aug 2021)
	Olive Ridley conservation, <i>Bay of Bengal</i>	(2015, 16)
CONFERENCES	Balaji, A. et al. (2024) ‘On Sea-spray Aerosol Variability over an Estuarine Fjord’. <i>American Geophysical Union Annual Meeting</i> , Washington, D.C.	
	Balaji, A. and Chang, R.Y.W. (2024) ‘On Wave-generated Sea Spray Aerosol in the Bedford Basin’. <i>Conference of Dalhousie Oceanography Graduate Students</i> , Halifax.	
	Balaji, A., Gagnon, P., Aued, A. W. and Ang, Z. X. (2022). ‘Use of low-frequency SONAR data and wave exposure index to map subarctic kelp cover.’ <i>Scientific Endeavours in Academia</i> , St. John’s.	
EXPERTISE & SKILLS	Controlled-environment experiments of planetary processes Ship/boat-based research campaigns Research laboratory management In-situ atmospheric measurements (SMPS, APS, CCNC, ACSM, FDM) Seawater physiochemistry Computation: GIS, Image processing, Python, R SCUBA (PADI): AOW, Dry Suit, Nitrox Languages: English, German (A1-A2), Japanese (N4), Russian	
TEACHING EXPERIENCE	Guest Lecture, Binomial Statistics, <i>Dalhousie University</i>	(Nov 2024)
	Teaching Assistant, PHYC 2150, Physics Tools: Experiment <i>Dalhousie University</i>	(Fall 2024)
	Teaching Assistant, PHYC 1320, Physics in and Around You II <i>Dalhousie University</i>	(Winter 2024,25)
	Teaching Assistant, CHEM/OCEA 4952: Atmospheric Chemistry <i>Dalhousie University</i>	(Fall 2023)
	High School Teacher, IGCSE Chemistry <i>Vruksha Cambridge International School, Chennai</i>	(Fall 2022)
OUTREACH/ COMMUNITY SERVICE	President, <i>Dalhousie Physics Graduate Society</i>	(2024-25)
	Graduate Student Mentor Program, <i>Dalhousie University</i>	(2024)
	Science Demonstrator, <i>Physics Discovery Days, Dalhousie University</i>	(2023)
	Sustainability Representative, <i>Curtis Hall, MUN</i>	(2019-20)