

PhD POSITIONS in Cold plasma and UV-LED based surface sanitation technologies – University of Alberta

Summary

Dr. Roopesh's Food Safety and Sustainability Engineering lab, Department of Agricultural, Food & Nutritional Science at the University of Alberta (Edmonton, Alberta, Canada) seeks highly motivated and outstanding individuals in atmospheric cold plasma and UV-LED based surface sanitation process characterization and evaluation. There are 2 PhD positions available with an anticipated start date of June 1, 2023.

The successful candidates will conduct research at the University of Alberta in following areas:

- Plasma activated air/water/bubbles and mist characterization and evaluation.
- Plasma reactive species stability and their interaction with microbial biofilms and meat carcasses.
- Microbial biofilm inactivation on surfaces and pipelines
- Design and development of cold plasma and UV-LED based surface sanitation devices and processes.

Candidate profile

The position requires students with interdisciplinary experience in engineering and microbiology. The candidates will work with a multidisciplinary research team including graduate students and postdoctoral fellows. The candidates will have the opportunity to work closely with industry partners and food microbiologists at the University of Alberta and Agriculture and Agri-Food Canada (AAFC).

Preferred qualifications:

- Masters in Food Process Engineering, Biological and Agricultural Engineering, Food Microbiology or related areas.
- Strong engineering/microbiology skills.
- Candidates with experience in cold plasma and microbiology research will be preferred.
- Demonstrated record of research productivity with a strong track record of high-impact peer-reviewed publications.
- Competency with statistical analysis and data processing.
- Excellent verbal and written communication skills, interpersonal skills, and ability to work in a highly collaborative, multidisciplinary, dynamic, and diverse team environment.
- Ability to work independently and collaboratively in interdisciplinary research project.

To Apply: Please e-mail your detailed academic CV, contact information of three references, unofficial transcripts, and a cover letter to roopeshms@ualberta.ca.

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University of Alberta

Email: roopeshms@ualberta.ca

Research group website: <https://foodsafetyengineering.ualberta.ca/>

Preferred starting date: June 1, 2023

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.