

VOLUME 5

PREFACE

2019
December

The climate is in crisis.
Evidence is absurdly overwhelming
with blizzards, droughts, fires, floods, hurricanes,
and volcanoes; natural processes of Mother Earth are
metastasizing like a tumour at peak angiogenesis. The catalyst is humanity.
Neo-colonialism fuelled by the climate crisis is the largest threat to all of humanity.
Should humanity dismiss the calls to action, billions of people will suffer and die.

The University of Manitoba spent seven million dollars on fossil fuel products, according to 2017 documents on campus sustainability. Solutions include solar panel integration on the Fort Garry campus infrastructure. Although realistic, these solutions are not enough to reverse carbonic emissions. Humanity must protect, restore, and fund solutions to the climate crises. Solutions must protect trees, food, and natural water sources. Solutions must restore or maximize areas to capture carbon and self-sustain diverse ecosystems. Funding climate crises solutions is necessary in every human capacity worldwide, through any means possible.

Proceedings of Manitoba's Undergraduate Science and Engineering Research Journal is a platform that reflects a critical moment in undergraduate endeavors. Volume 5 of PMUSER Journal follows a three-fold value system; provide open access to undergraduate research, assist in recognition of researchers for their disciplined work, and further overall undergraduate participation and development of research publications. Despite adversity, Volume 5 presents Manitoba's thriving innovation on the frontiers of undergraduate research.

