

Raymond Mushabe



Motivation: I am glad to have been nominated to be elected to the institute's board to represent temporary academic staff at the department of physics and technology, University of Bergen. from spring this year until summer 2025. I look forward to presenting the views and crucial matters from the group that I am presenting to the board. Once put into office, I will make sure that the group's opinions are heard, discussed and necessary actions taken aboard. As a temporary staff of foreign origin, I share most or similar views and needs as the group I will represent. Therefore, I will also air out my personal suggestions to the board that are for the common good.

Personal info: I am a second-year doctoral candidate within the reservoir physics group at the department of physics and technology, University of Bergen. I am originally from Uganda where I did my bachelor degree in petroleum geoscience before I travelled to Norway to pursue a MSc degree in reservoir engineering and petrophysics at NTNU. I currently conduct my doctoral research within the Centre for sustainable subsurface resources (CSSR under WP2). The research focusses on short-cycle (hours/days/months) energy storage in porous media, where subsurface hydrogen storage at the Norwegian continental shelf is the key topic. I experimentally quantify hydrogen flow and distribution in porous media at the core by combining traditional core flooding tests with modern in-situ visualization methods (MRI and PET). The focal area is the microbial activity effect on the efficiency of cyclic hydrogen storage operations. Therefore, microbial growth and hydrogen consumption are thoroughly studied and quantified.