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Research field
**Fluid Mechanics**

PhD title
**Study of flow between two coaxial cylinders with constant gap and temperature gradient**

**Keywords**
- Flow
- Coaxial cylinders
- Temperature gradient
- Constant gap

**Summary**

Petroleum satisfies over 30% of global energy demand. Crude oil extracted is transported for processing via maritime tankers or pipelines. In Cameroon, for instance, the crude oil is heavy, making pipeline transport challenging. One potential solution is transforming pipelines into coaxial cylindrical pipes with a constant gap, applying a temperature gradient to aid the flow of high-viscosity fluids. My project aims to explore the feasibility of this system to propose a new configuration for the manufacturing and operation of pipelines. This innovation could benefit both public and private sector stakeholders. The research will involve an exhaustive literature review, laboratory theory and practice, and numerical simulations to advance these findings.

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