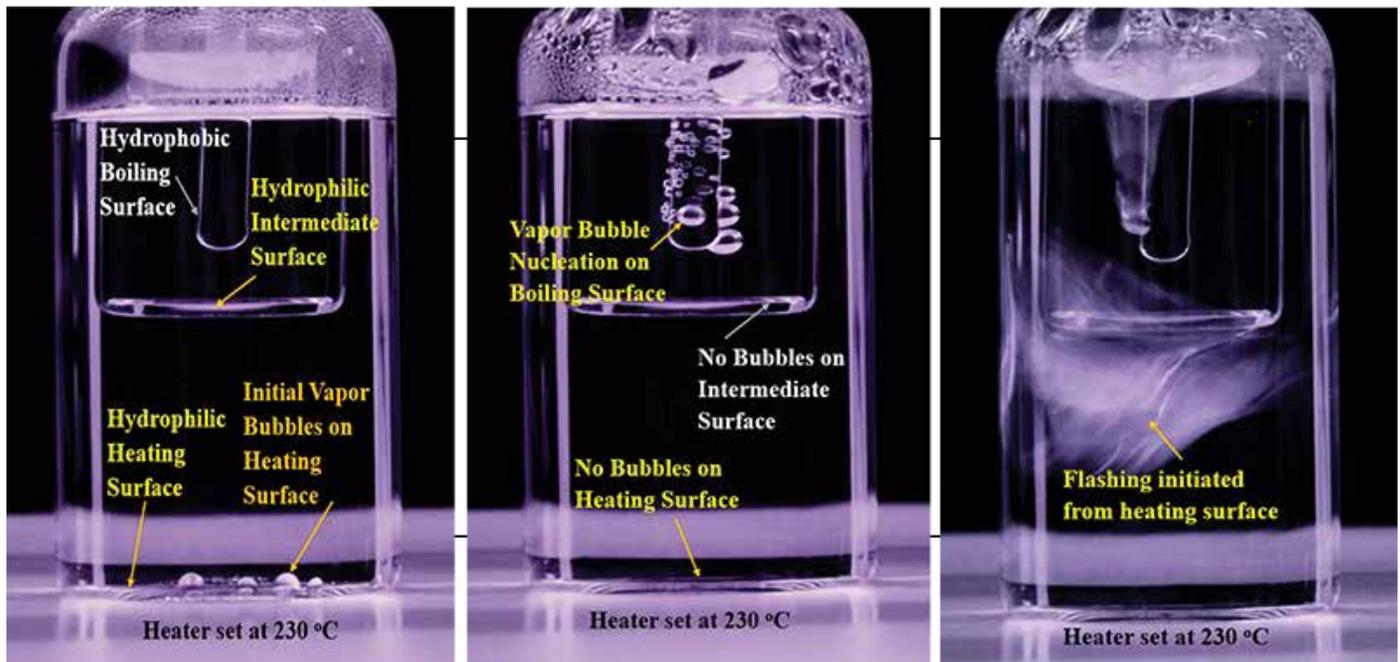

Development of Wetting and Non-Wetting Surfaces for Improved Heat Transfer Applications

Project Number 24-04



PROJECT TEAM:

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Goal

Develop, characterize, and test refrigerant-philic and -phobic surfaces, to achieve enhanced heat transfer efficiency in refrigeration systems by preventing and promoting bubble nucleation on heating and boiling surfaces, respectively

Outcomes/Deliverables

This project year aimed to deliver:

1. High-thermal conductivity low surface tension refrigerant-philic and -phobic surfaces developed and tested for improved heat transfer applications ranging from thermal power plants to refrigeration