PREFACE

In many applications in engineering and technology related to nuclear energy, fossil energy, electric power generation, refrigeration, electronic chips cooling boiling heat transfer plays a key role in the design of equipment. Enhancements in boiling heat transfer processes are vital and could make these typical industrial applications much more efficient.

Various techniques for enhancement of the boiling heat transfer have been proposed and studied. The developments in nanofluid technologies have widened the scope of use of nanofluids as boiling heat transfer media as the exhibit better boiling characteristics that enhance heat transfer.

The literature reveals that pool boiling studies with nanofluids on vertical surfaces is limited and also data with nanofluids tungsten oxide is not available in open literature. The trouble has been taken up to obtain experimental data on pool boiling heat transfer of two nanofluids on three different surface materials in vertical position.

The experimental setup has been devised for data gathering in nucleate pool boiling regime. The information is analyzed and discussed.