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Dedicated to Professor LAZĂR DRAGOȘ on his 75<sup>th</sup> birthday

## Boundary value problems for the Stokes resolvent equations

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**Abstract** - In this paper we survey certain important results related to some boundary value problems of Dirichlet, Neumann and mixed type for the Stokes resolvent system. These properties are obtained by using the potential theory. We give existence and uniqueness results as well as boundary integral representations of classical solutions in the case of certain bounded domains.

**Key words and phrases** : Stokes resolvent equations, boundary value problems, potential theory, existence and uniqueness results.

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