

# Semipositone Problems on Unbounded Domains

Lakshmi Sankar

University of West Bohemia, Czech Republic

## **Abstract**

We discuss the existence and uniqueness of positive solutions of certain nonlinear eigenvalue problems on unbounded domains when the nonlinear function is negative at the origin. Such problems are referred in the literature as semipositone problems. Our existence results are obtained by the method of sub and super solutions and our uniqueness results are obtained by analyzing the properties of the solution.