

For a given convex body we try to find the shortest possible set (optionally admitting some prescribed properties) meeting all lines meeting the given body. The size of the covering set is measured by the Hausdorff 1-dimensional measure  $\mathcal{H}^1$ . In the first chapter there is given an introduction to the problem. In the second chapter we discuss the upper bound for the minimal covering set. In the third chapter we discuss the existence and properties of the minimal covering. In the fourth chapter we show some lower bounds for the size of a covering. In the fifth chapter we study some related topics and a generalization of the problem.