## Chapter 1

## Waste tyre rubber application in semi-rigid and flexible pavement

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### ABSTRACT

Increasing traffic requires durable and low-noise road surfaces. Urban residents complain about excessive traffic noise that leads to an unhealthy environment. Understanding techniques to produce durable, low-noise pavement has led to the development of rubberized concrete block pavement (RCBP) and rubberized asphalt concrete pavement (RACP). The chapter examines morphology and chemical properties of waste tyre rubber using FESEM, XRF, and TGA/DTA. Authors discuss characteristics of RCPB and RACP and conclude application of RCBP and RACP can lower traffic noise.

#### **KEYWORDS**

Waste tyre rubber; construction industry; noise pollution; low-noise pavements

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