

Special Issue on
**Cold Techniques and Materials for Sustainable Pavement
Construction and Rehabilitation**

CALL FOR PAPERS

A growing social awareness of the importance of a circular economy is pushing the development and application of sustainable construction and rehabilitation technologies for transportation infrastructures. In this context, cold recycling of asphalt pavements and cold surfacing have been recognized worldwide as efficient, low-energy, and low-emission techniques.

Currently, researchers and scholars are proposing innovative approaches to cold recycling and surface treatments in terms of selection of constituent materials, proportioning and production and construction technology. The goal is extremely ambitious: to produce paving mixtures or pavement structures at ambient temperatures with the same performance as traditional ones. Moreover, the development of colored asphalt mixtures for surface courses may play a significant role in improving functional and environmental issues as well as in moderating the urban heat island (UHI).

This special issue encourages the submission of original research articles covering the topic of cold asphalt paving technologies and cold pavements for roads and airfields, with a special emphasis on the role of cold recycling and surface treatments, the combined use of bituminous and cementitious binders, colored and cold pavements, and the application of new generation additives and binders. Since the development of cold paving techniques, binders and mixing design concepts have mostly been driven by successful field applications. Review articles which describe the current state of the art are also encouraged.

Potential topics include but are not limited to the following:

- ▶ Laboratory studies on chemical and physical properties of cold mixtures
- ▶ Structural design of pavements including cold mixtures
- ▶ Case studies considering the use of cold technologies
- ▶ Integration of cold technologies into the pavement management system
- ▶ Monitoring and prediction of the performance of cold technologies
- ▶ Life cycle assessments for pavements with cold mixtures
- ▶ New design and management concepts for the construction or maintenance of pavements including environmental impact assessments
- ▶ New generation binders for cold applications
- ▶ Clear binders and colored pavements
- ▶ Techniques and materials addressed to mitigate the urban heat island effect (UHI)

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/amse/ctmpr/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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