



## SOUTH AFRICAN ROAD FEDERATION

*presents a 1-day virtual seminar on*

### PAVEMENT REHABILITATION BY COLD RECYCLING / BITUMEN STABILISATION

On

Thursday 8<sup>th</sup> June 2023

#### **PRESENTERS**

**Dave Collings**  
**André Greyling**

**VIRTUAL via MS Teams**

**Delegates can claim  
1 ECSA CPD point**

#### **Course Description**

The challenges faced by Road Authorities in South Africa are not different from most other countries; everyone is facing budget constraints coupled with a steady decline in the quality of their road network. For South Africans, the challenge is acute because the size of their road network ranks 9<sup>th</sup> in the world whilst their GDP fall below the median. Stated differently, South Africa is facing a bigger challenge than most countries due to the finances available to maintain and improve their vast road network. This is perhaps the primary reason for South African engineers to be at the forefront of innovative solutions to address the growing pothole pandemic.

Thanks to the advent of large recycling machines, reusing the material in existing pavements has become common practice on most rehabilitation projects worldwide, a practice that offers significant cost benefits. However, it is the development of bitumen stabilised material BSM technology that offers far greater benefits due to the enhancement of material properties, allowing BSM layers to play a greater role in load spreading coupled with a drastic reduction in moisture sensitivity, thereby boosting cost savings.

This proudly South African technology was born some forty years ago when Adriaan Bergh applied bitumen emulsion to address premature failures on a highway. Early successes attracted the research and development efforts needed to grow this technology to where it is today, used on all continents (except the cold one), all thanks to South African innovation. The latest developments of this technology were captured in the 3<sup>rd</sup> Edition of the Technical Guideline TG2, sponsored by SABITA and published in 2020. The objective of the seminar is to assist practitioners to utilise this publication to evaluate bitumen stabilised material as an option for pavement rehabilitation and upgrading projects.

#### **Course Content**

- Characteristics of bitumen stabilised materials (BSM)
- Bitumen stabilizing agents (bitumen emulsion and foamed bitumen)
- Appropriate materials for stabilizing with bitumen emulsion and / or foamed bitumen

- Pavement investigations required for all rehabilitation projects (with a focus on *in situ* recycling)
- Laboratory mix designs for determining the optimal addition of bitumen, active filler and the properties / characteristics of the treated material, using innovative tests
- Designing appropriate pavement structures that include BSM layers
- Constructing pavement layers using BSM, both *in situ* recycling and in plant treatment
- Surveys and tests required for controlling quality during and after construction.

#### **Who should attend?**

All delegates will be expected to have a basic understanding of construction materials, design concepts relevant to pavement rehabilitation and have worked on road construction sites.

#### **Cost per delegate including VAT**

<b>SARF Members</b>	<b>R3 300</b>
<b>Non-Members</b>	<b>R3 900</b>

***Interested delegates should register on-line:***

[www.sarf.org.za](http://www.sarf.org.za)

***Closing date: Friday 2<sup>nd</sup> June 2023***

***Terms and conditions apply***

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