

are nowadays required for estimating the optimum asphalt content.

The second article is by Abende *et al.* (2021). In this article the attention is on glass recycling, in particular on waste glass. Waste glass represents about 5% of domestic waste. As an example, in 2013, 11.54 Mt of waste glass was generated in the USA (US EPA, 2015). It leads Abende *et al.* to study the production of durable concrete by incorporating waste glass as a partial replacement of fine aggregates or Portland cement. They classify the waste glass in their investigation as glass powder or crushed glass aggregates.

The article is rich in data and shows that the properties of concrete can be enhanced through this waste glass, but only up to a point.

The third article takes us, with a most interesting approach, into the world of predictive models. Here Islam (2021) focuses on the prediction of shear strength of SFRC beams. He has compiled a database based on 21 existing experimental studies going back from 2010 until 1972, resulting in data of 222 beams. Based on past investigations, it is shown that a significant gain in the shear strength of SFRC beams can occur due to an increase in compressive strength, the ratio of the tensile reinforcement, the amount of fibres and a decrease in the beam's span-depth ratio. However, existing models often under- or overestimate the shear capacity of SFRC beams when compared to experimental data.

Hence, Islam suspects room for improvement and uses a genetic algorithm to come up with a better predictive model. Read his article to see how and where these types of models can improve predictions.

The last article of this issue remains in the modelling area. Azizi *et al.* (2021) investigate the shear strengthening of

steel-plate girders using CFRP composites. They report both on the experiments and on the model verification. In the research, 11 specimens with different arrangements of composite strips on the web of the plate girders were investigated.

Please read their story and learn that the location and arrangement of the CFRP plates on both sides of the web do have an influence.

We hope that with this issue of *Construction Materials* we have brought you a nice selection of interesting topics. Please note that we do publish our most recent articles online in the ICE Virtual Library: look in the 'Ahead of Print' section under the 'Volumes and Issues' heading on the *Construction Materials* page.

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