

Sustainable Resources' Database: the demise of the concept "residue"

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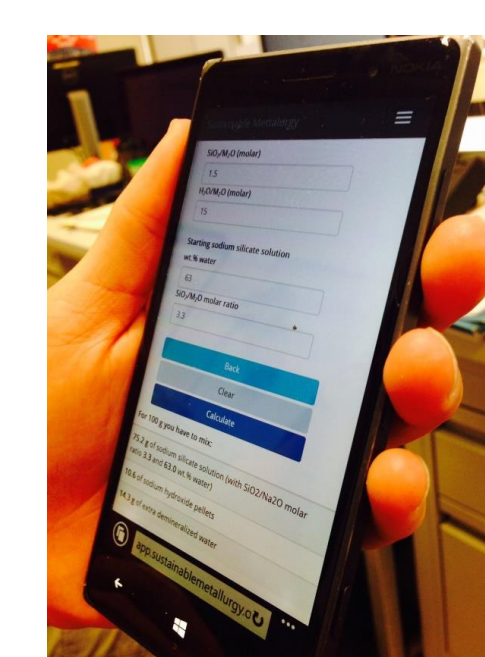
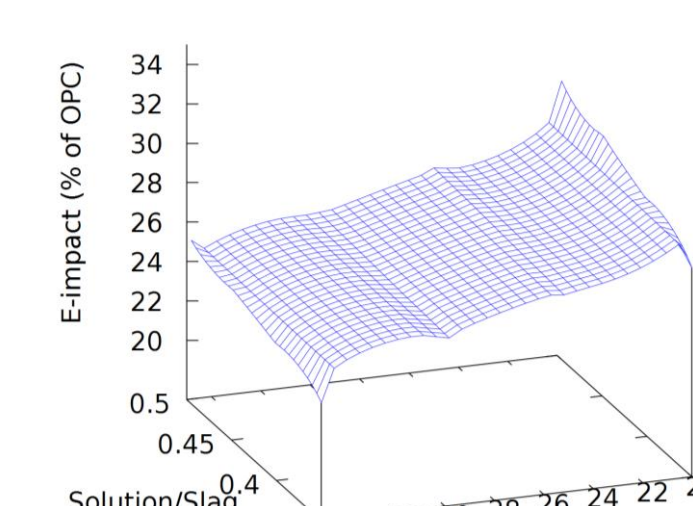


ABSTRACT

The Sustainable Resources' Database (SReDat) provides a central pool of information on industrial residues, considering their characterization, industry of origin, location and properties. It is part of the galaxy of sustainable resources, the SReWay, an online platform which is currently still under development. This poster will lead you through this galaxy, showing the working tools and future opportunities.

INTRODUCTION

The wide range of industrial residues, which have several ranges of chemistries and mineralogies, depending on the location and industry of origin, complicates the formulation of generic processing routes and valorisation strategies. Therefore, efforts are put towards the digitalization of residue valorization, more recently enthused by the European commission, who have put digitalization high on the agenda. The Sustainable Resources' Database, SReDat, was designed to meet this need, to provide a central pool of data on the characterization and properties of industrial residues and to make a "web-based one-stop source" of information on sustainable, mostly secondary, resources. SReDat, being part of a wider platform, the SReWay, is the first critical step. After this database, the SReWay online platform will contain all calculation tools necessary to engineer the SReDat residues in a useful product.



www.sreway.info/sredat/

Want to get involved?
Try uploading your slag!

Tired of calculating what amount of solution and pellets to mix?
Try this!

SReDat

1. Register with your email address (don't worry, you will not receive emails from us, it is just to track who is uploading)
2. Secondary Resources Database > Add new Secondary Resource
3. Provide a Resource Name and category
4. Fill in all detail you want to disclose
5. Press Add Secondary Resource

When uploading experimental data, make sure it is in csv format, or txt with the two columns separated by a comma. Provide the description of the methodology in order that we and future users can estimate the precision and accuracy of the data.

SReTools

The tools that are incorporated in the SReWay have a large variety of objectives. Currently working examples are the calculation of the viscosity of a melt using a selection of viscosity models or the derivation of the hydroxide pellets to mix with water and waterglass to obtain an aimed composition of sodium silicate solution.

www.sreway.info/sretools/activating-solution-paste-calculations

Examples of other modules coming up

- ✓ A database of inorganic polymer or cementitious pastes, relating mixtures with properties
- ✓ A tool to estimate the cementitious phases present after a high temperature treatment

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