Review 1

Open Review

(x) I would not like to sign my review report
( ) I would like to sign my review report

English language and style

( ) Extensive editing of English language and style required
( ) Moderate English changes required
(x) English language and style are fine/minor spell check required
( ) I don’t feel qualified to judge about the English language and style

<table>
<thead>
<tr>
<th>Does the introduction provide sufficient background and include all relevant references?</th>
<th>Yes</th>
<th>Can be improved</th>
<th>Must be improved</th>
<th>Not applicable</th>
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<th>Is the research design appropriate?</th>
<th>Yes</th>
<th>Can be improved</th>
<th>Must be improved</th>
<th>Not applicable</th>
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<th>Are the methods adequately described?</th>
<th>Yes</th>
<th>Can be improved</th>
<th>Must be improved</th>
<th>Not applicable</th>
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<th>Are the results clearly presented?</th>
<th>Yes</th>
<th>Can be improved</th>
<th>Must be improved</th>
<th>Not applicable</th>
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<th>Are the conclusions supported by the results?</th>
<th>Yes</th>
<th>Can be improved</th>
<th>Must be improved</th>
<th>Not applicable</th>
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Comments and Suggestions for Authors

The paper is within the scope of the journal. It deals with an interesting and current topic of using copper waste material to improve resistance of concrete against corrosion. The paper is worth publishing after addressing some minor issues:

1. Authors shouldn’t give the full commercial names of the used equipment or materials.

   Response: I receive your advice,
   Line 58: “The copper tailing were obtained from Ruichang City, Jiangxi province” delete Ruichang City
   Response: delete Ruichang City
   Line 62: “The cement used was Jiangxi Conch 42.5 ordinary Portland cement” delete Jiangxi Conch
   Response: delete Jiangxi Conch
   Line 63: “The gravel used was 5–16 mm continuously graded gravel from Anyi county, nanchang” delete from Anyi county, nanchang
   Response: delete from Anyi county, nanchang

2. A particular apparatus/material should be described in brief (giving its key characteristics) and, if needed, referred to literature with a thorough description of such an apparatus/material (e.g. line 90, line 97, line 99 etc.).
Response: thank for your advice

Line 90 “a PS-3002D galvanost was used to conduct the constant-current accelerated corrosion test with a current of 4 mA.”
Response: delete PS-3002D

Line 97 “An electrochemical workstation from Zahner E, Germany was used for the electrochemical testing”
Response: delete from Zahner E, Germany

Line 99 “electrode foil tape was 26PH made in SchottScienceLine, Germany and steel bar in the reinforced”
Response: delete made in SchottScienceLine, Germany

3. Granulometric properties of all used materials (especially of copper tailing) should be given in detail. While discussing this topic in the paper Authors may find the following publication useful: Katzer, J. (2012) ‘Median diameter as a grading characteristic for fine aggregate cement composite designing’, Construction and Building Materials, 35. doi: 10.1016/j.conbuildmat.2012.04.050.

Response: Figure 3(a) shows that particle size range of copper tailing is 0-48.1μm and the mean particle size (d_m) and hummel modulus (m_H) of it has 9.0μm and 22.54 based on the research of Katzer, J. [24]; the particle size range of cement is 0-100μm and the mean particle size (d_m) and hummel modulus (m_H) of it has 27.3μm and 22.54. The mean particle size (d_m) of copper tailing is 0.33 times of cement. The hummel modulus (m_H) of copper tailing is 0.67 times of cement. The maximum particle size of copper tailing is 0.48 times a of cement. Therefore, copper tailing can be filled in the pores of ordinary Portland cement [25-28].

4. Table 2: What does “stone” mean? Do Authors mean “coarse aggregate”? Table 2: Instead of “Mpa”, there should be “MPa”. Table 3: Instead of “mg/L”, there should be “mg/dm3”.

Response: yes, I use stone for coarse aggregate. In my article, I have already modified the stone into coarse aggregate of table 2.

Table 2: Instead of “Mpa”, there should be “MPa”.

Response: yes, I have already used MPa instead of Mpa in Table 2.

Table 3: Instead of “mg/L”, there should be “mg/dm3”.

Response: yes. I will follow your advice and modify Table 2: mg/L to mg/dm3.

Date of this review
27 Aug 2019 15:26:58