**list of the corrections effected and the reason for those not effected**

**Reviewer 1:**

**1)** I would suggest correcting the title of this manuscript to emphasize that the manuscript is related to electrochemical oxidation, for example, by adding “… IrO2/Ti and RuO2/Ti electrodes. “.

**Answer**: Corrected (See the manuscript)

**2)** Page 1, Introduction, the sentence “In recent years, with the introduction of dimensionally stable anodes (DSA) by H. Beer, metal oxide…”

The authors should cite papers by H. Beer describing DSA introduction, and the authors should explain where DSAs have been introduced (for example: in the electrochemical production of chlorine and sodium hydroxide or in electrochemical treatment of wastewater, etc.).

**Answer**: Reference 8 is an article that summarizes the history of progress in

Dimensionally Stable Anodes

**3)** Page 1, Introduction, the sentence “In this range, iridium oxide and ruthenium oxide electrodes are known to have a stable geometry and a constant potential during very long periods of use.”

Could the authors explain what “a constant potential” means? These electrodes are applied under various conditions, and during wastewater treatment, different potentials or currents can be supplied to these electrodes. I suppose that the authors wanted to emphasize that these electrodes are characterized by high stability even though they are applied for a long time.

**Answer**: Corrected (See the manuscript)

**4)** Could the authors explain why they selected formic acid as a model organic compound in their investigations? Is this compound present in Abidjan wastewater, and what concentration?

**Answer**: The objective of this work is to contribute to the understanding of the oxidation mechanisms of organic pollutants in our polluted water (wastewater from the city of Abidjan) which contains a lot of chloride by analyzing cyclic voltammograms. Initially, formic acid was chosen because it has a simple mechanism of oxidation.

**5)** Page 2, 2.1. Preparation of RuO2 and IrO2 anodes – Did the authors verify the presence of IrO2 or RuO2 on the titanium substrate surface (e.g. by XPS)?

The authors should specify the geometric surface area of RuO2/Ti and IrO2/Ti electrodes applied in the experiments.

**Answer**: SEM images were presented to show that there is indeed presence of the deposit made.

The geometric surface area of RuO2/Ti and IrO2/Ti electrodes applied in the experiments is specified (See the manuscript)

**6)** Page 2, 2.2. Electrochemical measurements – I would suggest adding information about the purity degree of the chemicals applied in electrochemical measurements.

**Answer**: Corrected (See the manuscript)

**7)** Page 2, 2.3. Method of Tafel slope determination – It is not necessary to make a separate subsection with a description of Tafel slope determination. This method can be described in paragraph – 2.2.Electrochemical measurements.

**Answer**: Corrected (See the manuscript)

**8)** Page 2, 3. Results and Discussion – Did the authors remove dissolved oxygen from solutions (e.g. by purging with argon) before recording cyclic or linear voltammograms? I would suggest to compare curves recorded in solutions before and after removal of oxygen, and then conclude.

**Answer**: dissolved oxygen from solutions has not been removed

**9)** I would suggest correcting figure captions, for example: “Cyclic voltammogram of RuO2 in 1 M HClO4 …” should be “Cyclic voltammogram of RuO2/Ti electrode in 1 M HClO4 …” or “Cyclic

voltammogram recorded on RuO2/Ti electrode in 1 M HClO4 …”

**Answer**:Corrected (See the manuscript)

**10)** Page 4, oxygen evolution reactions and Page 5, chlorine evolution reactions – The authors should indicate which reaction is rds (rate-determining step) considering values of Tafel slopes determined in

acidic medium.

**Answer**: Corrected (See the manuscript)

**11)** Page 5, reactions no. 2, 4, and 5 – It is not necessary to present once again the reaction no. 2, which can be mentioned in the sentence preceding the reactions no. 4 and 5.

**Answer**: Corrected (See the manuscript)

**12)** Page 6, reactions no. 1, 2, 6, and 6 – It is not necessary to present once again the reaction no. 1, 2, and 3. The authors can write that except for the reaction no. 1, 2, and 3 the electrochemical oxidation of formic acid is possible and proceeds according to the following reaction:O3 + HCOOH → O2 + CO2 + H2O (6)

**Answer:** Corrected (See the manuscript)

**13)** Page 6 – reaction no. 6 describes so-called “deep electrooxidation” of formic acid. I think that the electrochemical oxidation of formic acid leading to mineralization of its solution is possible at higher potentials than 1.2-1.3 V. Probably, the electrooxidation of formic acid at potentials lower than 1.3 V leads to the formation of some intermediate products but not to CO2 and H2O. The authors should perform electrolyzes at potentials of 1.2, 1.3, 1.4 1.5, 2.0 and 2.5 V and check mineralization of the solution by determining TOC (total organic carbon).

Moreover, electrooxidation products of formic acid should be determined in the solutions after electrolyzes, with the application of chromatographic methods. The authors should consider the precise potential range in which the presented mechanism of formic acid electrooxidation is possible.

**Answer:** The objective of this work is to contribute to the understanding of the oxidation mechanisms of organic pollutants by voltammograms interpretation.

**14)** I suggest to record SEM micrographs of IrO2/Ti and RuO2/Ti electrodes and compare their morphology in the future. Moreover, the determination of the electroactive surface area of these electrodes in HClO4 and NaCl solution can also be exciting and can lead to important conclusions.

**Answer**: Corrected (See the manuscript)

**Reviewer 2**

**Answer**: Currently our research team are carrying out studies with a view to proposing a method of electrochemically decontaminating water. This present work will contribute to the understanding of the degradation mechanisms of organic pollutants.

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