

English Language Editing & Substantive Editing / Rewriting

1. ORIGINAL VERSION: As observed in the figure, the addition of dolomite remarkably influenced the solution pH, TAN, and PO₄-P removal efficiencies. Fig. 2a demonstrates that, when no dolomite was added in the electrolysis process, the solution pH rapidly decreased from 7 at the beginning to around 3 at the end of reaction; however, when the dolomite was dosed from 5 to 15 g/L, the solution pH increased with an increase in the dolomite dosage and was maintained at the range of 6–7 during 240 min. Fig. 2b reveals the change in the TAN-removal efficiency with the dolomite addition and the electrolysis time. It can be seen from the figure that TAN-removal efficiency increased with an increase in the dolomite dosage and the electrolysis time. In addition, the PO₄-P removal efficiency in the electrolysis process is described in Fig. 2c, which indicates that the addition of dolomite (5–15 g/L) could result in a PO₄-P-removal efficiency of 20–25%, whereas PO₄-P removal was not observed without dolomite addition. Fig. 2d shows the average current densities of the electrolysis system at the dolomite dosage ranging from 0 g/L to 15 g/L. From the figure, it was observed that the addition of dolomite could obviously decrease the electrolysis current density, which meant that the addition of dolomite can significantly improve the current application efficiency.

OUR EDITING: As evident in Fig. 2 the addition of dolomite remarkably influenced the solution pH, TAN, and PO₄-P removal efficiencies. Fig. 2a demonstrates that when no dolomite was added to the electrolytic process, the solution pH rapidly decreased from the initial 7 to around 3 at the end of the reaction. However, when the dolomite dose was added, from 5 to 15 g/L, the solution pH increased as the dolomite dosage increased and hovered in the 6–7 range for 240 min. Fig. 2b reveals the change in the TAN removal efficiency in response to the dolomite addition and the electrolysis time. The Fig. shows that the TAN-removal efficiency increased as the dolomite dosage and the electrolysis time increased. Besides, the PO₄-P removal efficiency in the electrolysis process is described in Fig. 2c, which shows that the addition of dolomite (5–15 g/L) could achieve a PO₄-P-removal efficiency of 20–25%, whereas no PO₄-P removal was observed when no dolomite was added. Fig. 2d reveals the average current densities of the electrolysis system for the dolomite dosage ranging from 0 g/L to 15 g/L. From this Figure, it was clear that the addition of dolomite could visibly lower the electrolysis current density, which indicated that the addition of dolomite could significantly improve the efficiency of the current application.

2.ORIGINAL VERSION: In addition to tackling fatigue through working hours and rest periods of seafarers, which would be the working conditions on board, it is also necessary to analyze the environmental conditions in which this work takes place and which can To cause the appearance of fatigue in the case of extreme conditions of temperature, noise, vibrations, etc.

OUR EDITING: In addition to tackling fatigue through their working hours and rest periods, the seafarers faced uncomfortable working conditions on-board; it is therefore warranted that the environmental conditions of the work place be analysed to identify and eliminate the sources of conditions that induce fatigue, such as extreme temperatures, noise and vibrations.

3. ORIGINAL VERSION: Besides of the predators and rains, the physiological disorders, entomopathogenic fungus and parasitoids also caused mortality, although these last three factors caused low mortalities to the aphid. The physiological disorders over the molting caused mortality only in the last instar (4th instar) of *A.gossypii*. The death of insects by physiological disorders over the molting are associated to nutritional quality and phytochemicals from plant defense, and thus the cotton plant phytochemicals may be related to the deaths of *A. gossypii* by this factor (Semeão et al. 2012a, b; Rosado et al. 2014). It has been reported that the gossypol in the cotton plants cause mortality to *A. gossypii* but many varieties of this crop have tiny concentration of the gossypol, and because of this occur low mortalities of the aphid (Cai et al. 2004).

OUR EDITING: Besides the predators and rains, the physiological disorders, entomopathogenic fungus and parasitoids also induced mortality, although these last three factors caused low aphid mortality. The physiological disorders during the molting caused mortality only in the last instar (4th instar) of *A.gossypii*. The insect death through physiological disorders during the molting are linked to the nutritional quality and phytochemicals from plant defense and thus the cotton plant phytochemicals could be related to the *A. gossypii* deaths by this factor (Semeão et al., 2012a, b; Rosado et al., 2014). It has been reported that the gossypol present in the cotton plants induced mortality in the *A. gossypii* individuals; however, many varieties of this crop have a minimal concentration of the gossypol, because of which there is low aphid mortality (Cai et al., 2004).

4. ORIGINAL VERSION: The geochemical analyses for HM data treated to get the results of the geochemical statistics and proved maps of the geochemical anomalies for study elements. The statistical treatment of the HM data resulted shows in **Table 2**. Two threshold values was adoption of value (Threshold 1 = mean + 2 SD) and (Threshold 2 = median + 2 SD) respectively; the background values were equal to the mean value (**Rose, et. al., 1979**). The data shows the value of the detection limits as assumed of the minimum value of the analyzed element and the statistical parameters then computed on this assumption and drawing the maps of geochemical anomalies **Figure 4**. The thresholds 1 and 2 for Fe₂O₃ = 45.46 & 51.00, TiO₂ = 17.97 & 14.27, Au = 19.84 & 17.04, As = 60.60 & 51.20, Sn = 83.60 & 70.80, Zn = 696.70 & 544.00, Cu = 50.60 & 44.20, Pb = 95.87 & 89.80, Bi = 35.50 & 39.89, Li = 10.30 & 10.42, Be = 4.50 & 3.60, Y = 46.5 & 47.5, Nb = 98.98 & 90.1, La = 28.35 & 26.55, Ce = 76.4 & 78.6, Mo = 14.17 & 12.30 respectively (**Table 2**).

OUR EDITING: The geochemical analyses for HM data were evaluated to obtain geochemical statistics and maps of the geochemical anomalies for the study elements. The results of the statistical treatment of the HM data is shown in **Table 2**. Two threshold values was the adoption of value (threshold 1 = mean + 2 SD) and (threshold 2 = median + 2 SD), respectively; the background values were equal to the mean value (**Rose et al., 1979**). The data showed the value of the detection limits, as assumed to be the minimum value of the analyzed element, and the statistical parameters were computed on this assumption to draw the maps of

geochemical anomalies (**Figure 4**). The thresholds 1 and 2 for 45.46 and 51.00 for Fe₂O₃, 17.97 and 14.27 for TiO₂, 19.84 and 17.04 for Au, 60.60 and 51.20 for As, 83.60 and 70.80 for Sn, 696.70 and 544.00 for Zn, 50.60 and 44.20 for Cu, 95.87 and 89.80 for Pb, 35.50 and 39.89 for Bi, 10.30 and 10.42 for Li, 4.50 and 3.60 for Be, 46.5 and 47.5 for Y, 98.98 and 90.1 for Nb, 28.35 and 26.55 for La, 76.4 and 78.6 for Ce, 14.17 and 12.30 for Mo, respectively (**Table 2**).

5. ORIGINAL VERSION: The evidence of risk association among living in high altitude could be an important key stone in the efficacy of anti-neoplastic therapy in Andean patients, and can be an important factor to optimize resources of public health in cancer screening; however, a more detailed study of molecular pathways and other risk factor are needed in the population included in this study.

OUR EDITING: The evidence of the risk of living at a high altitude could be an important key in the efficacy of anti-neoplastic therapy in Andean patients, and could be a significant factor in optimizing resources of public health in cancer screening; however, a more detailed study of molecular pathways and other risk factors is needed in the population included in this study.

6. ORIGINAL VERSION: The participants were the students, aged 18– 35 years and also the workers who were familiar with office computer in which the experiment was carried out. Each participant was entitled to a meal after the experimental study, to increase their motivation and especially to encourage them to seriously perform the tests. It was noticed that all participants successfully completed the experimental sessions. During the visiting hours, CO₂ monitor, displayed a high CO₂ concentration. Insulation due to clothing was always the most difficult factor to be estimated in climate type. In particular, the range varies from 0.36 to 1.45 clo, with an average of 0.78 clo for Yaoundé, and between 0.45 and 1.37 clo with an average of 0.67 clo for Douala. All the experimental protocols had to be approved by the administration staffs.

OUR EDITING: The participants included students aged 18– 35 years and workers who were familiar with the use of office computer used in the experiment. Each participant was entitled to a meal after the experimental study to increase their motivation and, especially, to encourage them to seriously perform the tests. It was noticed that all participants successfully completed the experimental sessions. During the visiting hours, the CO₂ monitor displayed a high CO₂ concentration. Insulation due to clothing was the most difficult factor to be estimated in the climate type. In particular, it varied from 0.36 to 1.45 clo (average 0.78 clo for Yaoundé) and between 0.45 and 1.37 clo (average 0.67 clo for Douala). All of the experimental protocols were approved by the administration staffs.

7. ORIGINAL VERSION:

The 3D Coragraf-incorporated PLGA microsphere (MS) scaffold was examined using Fourier transmission infrared (FTIR) spectroscopy, Energy dispersive spectroscopy (EDS), and scanning electron microscopy (SEM) and micro-computer tomography (micro-CT). The FTIR pattern of the Coragraf with and without PLGA showed almost similar spectra which indicated no new chemical interaction between

the CORAGRAF and the microsphere. EDS results also confirmed that the phase purity of the Coragraf with or without PLGA showed no new elements. The mastersizer analysis confirmed that the microsphere size was approximately 400 μm . SEM analysis which showed typical spindle-shaped and elongated fibroblast morphology of stromal cells. Confocal images and Alamar blue assay results after 7 days viability was not affected. ELISA confirmed that there was no initial burst of growth factor from the microsphere while a PDGF-BB controlled release was observed at different time points in the scaffold. Alizarin staining showed positive staining with concomitant release of osteocalcin and ALP on day 7 when compared to its control.

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The 3D-CORAGRAF incorporated PLGA microsphere (MS) scaffold was examined using Fourier Transmission Infrared (FTIR) spectroscopy, Energy Dispersive Spectroscopy (EDS), and Scanning Electron Microscopy (SEM) along with micro-computer tomography (micro-CT). The FTIR pattern of the CORAGRAF with and without the PLGA revealed almost similar spectra which indicated no new chemical interaction between the CORAGRAF and the microsphere. The EDS results also confirmed that the phase purity of the CORAGRAF with or without the PLGA showed no new elements. The Mastersizer analysis confirmed that the microsphere size to be approximately 400 μm . The SEM analysis showed the typical spindle-shaped and elongated fibroblast morphology of the stromal cells. Confocal images and Alamar Blue assay results after seven days showed that the viability was not affected. ELISA confirmed the absence of any initial burst of growth factor from the microsphere, while a PDGF-BB controlled release was observed at different time points in the scaffold. Alizarin staining showed positive staining with the concomitant release of osteocalcin and ALP on day 7 when compared with the control.