Escrever e Publicar Artigos em Revistas Científicas Internacionais

Workshop de Escrita Científica

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OUTLINE

1. Types of journals and how to select a journal
2. What to publish (or investigate) and what is not worth trying to publish
3. Decisive factors for papers acceptance
4. Planning and preparation of the papers (& investigation)
5. Recommendations on drafting papers
6. How to enhance the impact of your published papers

1. Types of Journals and How to Select a Journal

1.1. TYPES OF JOURNALS/CONFERENCES

- Top scientific journals are indexed in ISI Web of Science database (http://ip-science.thomsonreuters.com/mjl/)
- Scopus/Scimago (http://www.scimagojr.com/journalrank.php) database is broader, but is also well accepted by the international scientific community
- There are other credible databases, although less wide (e.g. SciELO, Mendeley, Ulrich, etc.) in terms of geography and thematic scope, and with lower scientific reputation
- Some of the above mentioned databases include scientific conferences (in some fields, with similar or even higher reputation than journals, e.g. CORE Ranking, http://www.core.edu.au/conference-portal)

1.2. FACTORS TO CONSIDER WHEN SELECTING A JOURNAL

- The database where the journal is indexed (if possible, ISI)
- The INTERNATIONAL reputation of the journal within the field
- The Impact Factor (IF) and corresponding quartile (ISI; Scopus/Scimago)
- The topic of the paper to be submitted and its coherence with the scope of the journal (broad scope *vs.* specialized)
- The intrinsic quality we attribute to the paper
- The reviewing/publishing speed (https://www.elsevier.com/physical-sciences-and-engineering/computer-science/journals/fast-publication)
- The competence of Editorial Board members/reviewers
- The official language of the journal

2. What to publish (or investigate) and what is not worth trying to publish

2.1. What to Publish (or Investigate)

- INNOVATIVE, high quality and useful research
- Research on current/emerging topics
- Research with international interest/relevance
- Topics where you (and/or the other co-authors) have international recognition (try to become a specialist)
- Topics with wide scope (with many potential readers)
- Transverse or frontier topics (it can be good or counter-productive)
- Research that “solves” a given problem and constitutes a long-lasting reference

2.1. WHAT TO PUBLISH (OR INVESTIGATE)

- Solid and comprehensive experimental research
- Experimental research backed by/complemented with analytical and/or numerical simulation (and vice versa)
- State-of-the-art reviews with high quality, novel insights and added value/discussion (in topics where you have previously published!)

2.2. WHAT IS NOT WORTH TRYING TO PUBLISH (OR INVESTIGATE)

- Pointless research (reflect on the rationale of your research before starting it)
- Obsolete or exhausted topics
- Do not start your research without a comprehensive literature review
- Poor/mediocre research, without innovation in international terms - **Never compromise quality!**
- Results with regional interest only
- Topics with too narrow/specialized scope (only)
- Superficial research on too many topics (**do not try to become a specialist in too many topics**)
- Experimental research with few results and/or too ordinary testing

2.2. What is Not Worth Trying to Publish (or Investigate)

- Exploratory results insufficiently consolidated
- State-of-the-art reviews that are a mere “sum” of citations, without (i) in-depth discussion and (ii) identification of the way forward and of the research needs in that field/topic

3. Decisive factors for papers acceptance

3. DECISIVE FACTORS FOR PAPER ACCEPTANCE

- The intrinsic quality and **INNOVATION** of the research
- The **(written)** demonstration of such quality!
- The **formal quality** of the **manuscript** (as perceived by reviewers), in terms of:
  - Organization/structure (simple, logical)
  - Writing: style (KISS - *Keep it Short and Simple*) and quality (**impeccable** proofreading)
  - Presentation (formatting/figures/tables/references)
- Be **PRECISE/SELF-DEMANDING/ETHICAL** about everything that depends on you (be very careful with **(self-)plagiarism**)
- All co-authors must be particularly critical about the work of the other co-authors and of their own work (**be the devil's advocate**) - you need to put yourself on the readers'/reviewers'/editor's shoes

3. Decisive Factors for Paper Acceptance

- The right choice of a Special Issue
- Recognition by the peers from that specific field and/or by the Editorial Board members or reviewers (journal selection) – very difficult to gain, but very easy to lose… Do not compromise quality!
- Review journal papers
- (A little bit of) LUCK (a good paper does not necessarily get fair/careful reviewing/editorial handling…)

4. Planning and preparation of the papers (& investigation)

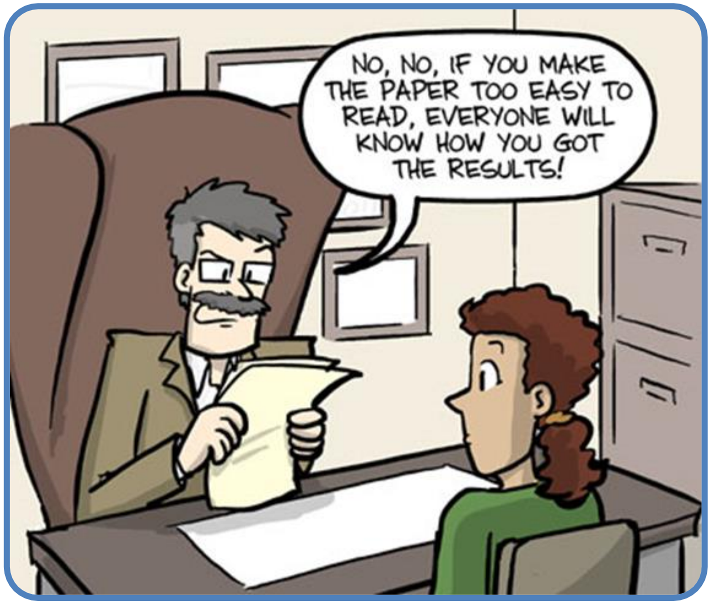
4. PLANNING AND PREPARATION OF THE PAPERS (& INVESTIGATION)

- Work as/in a team: build a team spirit with your colleagues and students
- Plan the research work and the publication of corresponding results
- Do not spend time with research work with no potential for publication
- Find your own niche (Where can you innovate? Which areas have potential? Do you have the means to "access" those areas?)
- Read/study a lot
- Review other journal papers (it is one way of studying)
- How to obtain and improve the "raw-material" for the papers?
- Set the necessary means (software; hardware; laboratory equipment)
- Do not hurry (fast results may permanently damage your reputation)

4. Planning and Preparation of the Papers (& Investigation)

- Work hard
- Work by objectives (contents and deadlines)
- Be particularly minute in the research work itself, but also in its dissemination (invest in the quality of the English writing)
- Put together a comprehensive (and coherent) research work to obtain one very good paper (*vs.* slicing a good research work in several average papers)
- "Strip mining" *versus* "salami papers"
- It is better to have less publications but high quality ones
- Avoid repetitions
- Improve continuously and learn from previous failures…
- Do not grow over-confident/lazy because of previous successes

5. Recommendations on Drafting Papers



5. Recommendations on Drafting Papers

- The **title** of the paper[1] is very important:
  - It must convey as **precisely** as possible the content of the paper (do not mislead readers)
  - It does not have to describe the content of the paper in full detail, but it must **not be too vague/broad/ambitious** – in some cases, it may be appropriate to clarify some aspects (e.g., object, methods, parameters)
  - It should be **as short as possible** (but precise) – not too long (boring…), not too short (informing…)
  - It must be **distinctive** and **appealing**

[1] https://blog.oup.com/2018/09/efficient-titles-research-articles/

TITLE

5. RECOMMENDATIONS ON DRAFTING PAPERS

- The **title** of the paper[1] is very important:

Intelligence

1 word

Annual Review of Psychology
Vol. 63:453-482 (Volume publication date January 2012)
First published online as a Review in Advance on September 19, 2011
https://doi.org/10.1146/annurev-psych-120710-100353

Ian J. Deary

Journal of the American College of Cardiology
© 2012 by the American College of Cardiology Foundation
Published by Elsevier Inc.

21+12 words...

Vol. 60, No. 25, 2012
ISSN 0735-1097/$36.00
http://dx.doi.org/10.1016/j.jacc.2012.09.018

EXPEDITED PUBLICATION

Cost-Effectiveness of Transcatheter Aortic Valve Replacement Compared With Surgical Aortic Valve Replacement in High-Risk Patients With Severe Aortic Stenosis

Results of the PARTNER (Placement of Aortic Transcatheter Valves) Trial (Cohort A)

Matthew R. Reynolds, MD, MSc,*† Elizabeth A. Magnuson, ScD,‡§ Yang Lei, MSc,‡‖ Kaijun Wang, PhD,‡ Katherine Vilain, MPH,‡ Haiyan Li, MS,‡ Joshua Walczak, MS,* Duane S. Pinto, MD,‖‖ Vinod H. Thourani, MD,¶ Lars G. Svensson, MD,# Michael J. Mack, MD,** D. Craig Miller, MD,†† Lowell E. Satler, MD,‡‡ Joseph Bavaria, MD,§§ Craig R. Smith, MD,¶¶ Martin B. Leon, MD,¶¶ David J. Cohen, MD, MSc,‡§ on behalf of the PARTNER Investigators

PRL **109,** 247606 (2012) PHYSICAL REVIEW LETTERS week ending 14 DECEMBER 2012

Orthorhombic $BiFeO_3$

2 words...

J. C. Yang,[1] Q. He,[2,3] S. J. Suresha,[4] C. Y. Kuo,[5,6] C. Y. Peng,[1] R. C. Haislmaier,[7] M. A. Motyka,[8] G. Sheng,[7] C. Adamo,[9] H. J. Lin,[5] Z. Hu,[6] L. Chang,[1] L. H. Tjeng,[6] E. Arenholz,[3] N. J. Podraza,[10] M. Bernhagen,[11] R. Uecker,[11] D. G. Schlom,[9,12] V. Gopalan,[7] L. Q. Chen,[7] C. T. Chen,[5] R. Ramesh,[2] and Y. H. Chu[1,*]

[1] https://blog.oup.com/2018/09/efficient-titles-research-articles/

5. Recommendations on Drafting Papers

- **A good and concise abstract is also crucial**
  - **Limit of words usually ~200**
  - **Many submitted papers are rejected in the abstract – the first step in convincing editors/reviewers about (i) relevance and (ii) innovation!** (the quality of the abstract is a very good predictor of the quality of the paper…)
  - **For many accepted papers, it will be the first/only section to be actually read (it will determine whether your paper will be downloaded by readers…)**

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https://www.wiley.com/network/researchers/preparing-your-article/how-to-write-a-scientific-abstract

5. RECOMMENDATIONS ON DRAFTING PAPERS

- **A good and concise abstract: scope/motivation, objectives/innovation, methodology and summary of main results/contributions/implications**

1. Scope/motivation **2. Objectives**

A B S T R A C T

The use of advanced composites for building rehabilitation presents several advantages when compared with traditional construction materials. When degraded building floors need to be replaced, composite sandwich panels are a potentially interesting solution, namely for buildings with load-bearing rubble masonry walls. In this paper, connection systems between composite sandwich floors and load-bearing walls are proposed, and their behaviour under vertical loading is investigated. The systems comprise steel angles anchored to the walls, serving as main supports of the sandwich panels, which are then adhesively bonded and/or bolted to the angles. These connection systems are experimentally assessed using sandwich panels made of glass-fibre reinforced polymer (GFRP) face sheets and cores of either polyurethane (PUR) foam or balsa wood, by means of flexural tests on cantilevers, which are also simulated using non-linear finite element models. The structural response of the connection systems is determined, including the rotational stiffness conferred to the floors, the strength and the failure modes. Moment–rotation relationships are obtained for the connection systems and sandwich panel types considered, which provide a wide range of rotational stiffness values, from 60 to 10,856 kNm/rad per unit width (m). These are then used to analytically estimate the short-term mid-span deflections of floors with semi-rigid connections and spans ranging between 2 m and 5 m. It is shown that some of the proposed connections allow significant floor stiffness increases compared with simply supported conditions, with reductions in total mid-span deflection of up to 65% being achieved for a span of 4 m. The results obtained for the proposed connections highlight (i) their potential benefits for fulfilling serviceability limit states and (ii) the importance of considering an adequate structural model when designing sandwich floor panels.

3. Methodology **4. Conclusions (key findings)**

5. RECOMMENDATIONS ON DRAFTING PAPERS

- This is where you actually convince the audience that your paper is really important!
- A clear presentation of (i) previous research and main gaps in the literature, (ii) idea/objectives and methodology of your research and (iii) innovation of your work with respect to the state-of-the-art

You need to convince the editors/reviewers/readers that your paper (i) addresses an interesting/unsolved problem (worth being solved) and that your paper (ii) is innovative and provides a relevant contribution!

5. RECOMMENDATIONS ON DRAFTING PAPERS

- **A good state-of-the-art: describe, as briefly as possible (i) the context/problem, (ii) what was already done (and/or is known) in this specific field (references) and, more importantly, (iii) what is missing that explains the need of your paper** (many papers neglect this…)
  - **Should not be a collection of independent paragraphs – it needs to have a clear flow and provide a critical discussion of previous work (including weaknesses, aspects not sufficiently well understood, aspects not investigated earlier)**
  - **Needs to "tell a story", from the general (research field) to the particular (aspect being addressed)**
- **Sometimes, it makes more sense to present a (longer) literature review in a separate section (*i.e.*, after the introduction section), but always highlighting the research significance**

INTRODUCTION

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Cement and Concrete Composites

journal homepage: http://www.elsevier.com/locate/cemconcomp

ELSEVIER

Influence of elevated temperatures on the bond behaviour between concrete and NSM-CFRP strips

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1. General introductory paragraph highlighting (i) importance of "object" for civil engineering and (ii) relevance of the problem that is investigated

1. Introduction

Since the 1980s, fibre reinforced polymer (FRP) composites have been increasingly used in civil engineering applications, in both new construction and strengthening existing structures [1]. To strengthen reinforced concrete structures carbon fibre reinforced polymers (CFRPs) are more often used, due to their high strength, elastic modulus and lightness, through either *in situ* curing systems (*e.g.*, sheets) or precured systems (*e.g.*, strips, rods, [2]). The first and most common technique of applying precured systems is bonding CFRP strips to the concrete surface to be strengthened – externally bonded reinforcement (EBR) technique [3]. More recently, a new technique has emerged - NSM, near-surface mounted - characterized by bonding strips or rods inside slits previously opened along the concrete cover. This technique provides several advantages when compared to the EBR technique, such as more efficient strengthening (due to the higher CFRP-concrete contact area and the confinement effect provided by the surrounding concrete) and better protection against environmental agents, vandalism, impact loads and exposure to high temperatures [4,5]. Although more difficult to execute, the advantages afforded by the NSM technique justify its wide and increasing use in the construction industry. For both techniques (EBR and NSM), CFRP strengthening systems are vulnerable to high temperature and fire exposure, due to the polymeric nature of their constituent materials. In fact, at elevated temperature, both CFRP composites and the epoxy adhesive used to bond them to the concrete substrate undergo a glass transition process [6–8]. In this process, the constituent materials change from a glassy state to a rubbery state, which causes a reduction of their strength and stiffness and, in addition, of the CFRP-concrete bond strength. These reductions occur when the glass transition temperature (T_g) of those materials is approached and exceeded, which typically varies from 40 °C to 80 °C for ambient cured epoxy adhesives, and from 55 °C to 120 °C [9] for pultruded CFRP strips. In some outdoor applications of reinforced concrete structures, such as roofs and bridge decks, the lower bounds of those temperature ranges can be easily attained. In buildings, there is an additional concern with the effects of fire (an accidental design load), during which those temperatures can be very quickly reached.

Despite the importance and the concerns about the behaviour of

INTRODUCTION

2. Paragraphs describing the "state-of-the-art" (previous related publications)

reinforced concrete structures strengthened with CFRP systems at elevated temperatures, the number of studies about this topic is still limited, namely about the bond behaviour between concrete and CFRP strips installed according to the NSM technique. The most relevant outcomes of previous studies in this specific field are described next, together with the aspects that still require additional research efforts and that motivated the present investigation.

Palmieri [10] carried out double-lap shear tests on concrete blocks strengthened with CFRP strips and sand coated rods, installed according to the NSM technique using an epoxy based adhesive (T_g of 66 °C, determined through thermogravimetric (TGA) and differential scanning calorimetry (DSC) tests) at temperatures between 20 °C and 100 °C (monitored in the adhesive inside the slits). The specimens were heated up to the predefined temperature for 18 hours, to assure temperature uniformity in the specimens, and then loaded up to failure. Although the results presented some differences among the different geometries of CFRP composites used, the following general conclusions were drawn: (i) the bond strength increased for the elevated temperature (50 °C) lower than the adhesive T_g and decreased for temperatures equal to or above T_g; (ii) for the maximum temperature tested of 100 °C, a significant bond strength retention was obtained - between 42% (rods) and 48% (strips) of the ambient temperature bond strength; and (iii) the failure modes changed from CFRP debonding at the concrete-adhesive interface for temperatures below T_g to debonding at the CFRP-adhesive interface with pull-out of the CFRP composite for temperatures above T_g.

Yu and Kodur [11] performed single-lap shear tests on concrete blocks strengthened with NSM-CFRP strips and rods bonded with two types of epoxy adhesives (T_gs of 82 °C and 120 °C, values indicated by the manufacturers, test methods not reported). The specimens were heated up to the predefined temperature (between 100 °C and 400 °C, monitored in the air of the thermal chamber and not in the adhesive inside the slits) and then loaded up to failure. Based on the test results, the following conclusions were reported: (i) the bond strength decreased consistently with temperature, contrarily to the study of Palmieri [10]; (ii) as expected, the adhesive with higher T_g allowed to obtain higher bond strength at elevated temperatures; and (iii) at the maximum test temperature of 400 °C the bond strength retention varied between 9% and 19% of that at ambient temperature (for specimens strengthened with CFRP strips); however, it is worth mentioning that those temperatures refer to the air inside the thermal chamber and not to the CFRP-concrete interface, and therefore the significance of the results is limited regarding the degradation of the CFRP-concrete bond with elevated temperature.

Firmo et al. [4] performed double-lap shear tests on concrete blocks strengthened with NSM-CFRP strips bonded with two types of adhesives: (i) an epoxy based adhesive (T_g of 47 °C, determined through dynamic mechanical analysis (DMA) and defined based on the onset of the storage modulus curve decay); and (ii) a mixed grout with both cement and epoxy binders (T_g of 44 °C, determined similarly). In these experiments, specimens were heated up to the predefined temperature (between 20 °C to 150 °C, monitored in the adhesive inside the slits) and then loaded up to failure. The test results indicated (i) a continuous bond strength reduction with increasing temperatures, being higher in the specimens bonded with the mixed grout adhesive; (ii) the failure modes changed from cohesive (concrete shear failure) at ambient temperature to CFRP debonding in the CFRP-adhesive interface for higher temperatures; and (iii) at 150 °C, the specimens with the epoxy adhesive presented a considerable bond strength retention, between 15% and 22%.

Arruda et al. [12] pursued the previous investigation by performing numerical simulations of the double-lap shear tests conducted by Firmo et al. [4]. The authors developed 3D finite element models in which the overall behaviour of the NSM-CFRP-adhesive-concrete interaction was simulated by means of simplified bi-linear bond slip laws. The parameters of such laws were derived for each of the tested temperatures based on an inverse analysis, providing a good fit to test data.

The studies reviewed above confirm the susceptibility of NSM-CFRP strengthening systems for reinforced concrete structures at elevated temperatures. However, the information they provide about the bond behaviour at elevated temperatures is not complete and not always consistent, with the following gaps being highlighted: (i) in the experiments of Palmieri [10] the bond strength increased for elevated temperatures below T_g, while in the other studies [4,11] a continuous reduction was reported – it is possible that such increase was caused by the post-curing effects due to the quite long (18 hours) thermal soaking period; (ii) in some of the experiments reported above [10,11], relevant information was not monitored, namely the slip at the free end; (iii) test data was reported for maximum temperatures in the adhesive of only 150 °C, which is well below the decomposition temperature of epoxy (about 300 °C) – note that in the study of Yu and Kodur [11], temperatures were not measured in the adhesive; (iv) the only study that proposed a constitutive relation of the NSM-CFRP-concrete interface at elevated temperatures was that by Arruda et al. [12] – in this study, quite simple bi-linear laws were proposed and they apply for maximum temperatures of only 150 °C.

This paper aims at fulfilling the above-mentioned gaps and providing a better understanding of the bond behaviour between NSM-CFRP strengthening systems at elevated temperature. For this purpose an experimental study was first carried out, which involved single-lap shear tests in concrete prisms strengthened with NSM-CFRP strips; the tests were performed at temperatures from 20 °C to 270 °C (measured in the adhesive), much higher than the maximum temperatures tested earlier by Palmieri [10] and Firmo et al. [4], and with a comprehensive monitoring of the experimental responses, which included measuring the slip at both the loaded and free ends of the CFRP strip. The experiments were complemented by a numerical study with the purpose of defining local non-linear bond slip laws that characterise, for each tested temperature, the CFRP-adhesive-concrete interaction.

2. Experimental investigations

2.1. Experimental programme

The experimental campaign involved single-lap shear tests in concrete prisms strengthened with CFRP strips installed according to the NSM technique, using an epoxy-based adhesive, at the following eight temperatures: room temperature (20 °C), 50 °C, 70 °C, 90 °C, 130 °C, 170 °C, 220 °C and 270 °C. The maximum test temperature was set as 270 °C, since in previous studies it was demonstrated that for lower temperatures (*e.g.*, 150 °C) considerable bond strength retentions were obtained [4]. The tests were carried out in a steady-state condition, *i.e.*, the specimens were first heated up to the predefined temperature (measured in the adhesive, as detailed ahead) and then loaded up to failure. For each temperature, five specimens were tested: (i) two with eight strain gauges on the CFRP strip positioned along the bonded length; and (ii) three without strain gauges. The specimens with strain gauges aimed at assessing the axial strains in the CFRP strip along the bonded length, while the specimens without strain gauges aimed at determining the variation of the bond strength and stiffness with temperature. As explained in section 3.5, the presence of strain gauges in the bonded length compromised the adhesion between the CFRP strip and the epoxy adhesive, thus reducing the stiffness and bond strength - for that reason those results were not taken into account in the determination of both strength and stiffness of the bonded joint. To identify the different specimens, the following nomenclature was used: T20_S – test temperature of 20 °C ("T20"); specimen with strain gauges in the bonded length ("S"; the label "NS" was used for specimens without strain gauges).

2.2. Materials

The concrete prisms were cast with ready mixed concrete produced

3. (Short) Paragraph summarizing research needs/gaps identified

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INTRODUCTION

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2. Experimental investigations

2.1. Experimental programme

The experimental campaign involved single-lap shear tests in concrete prisms strengthened with CFRP strips installed according to the NSM technique, using an epoxy-based adhesive, at the following eight temperatures: room temperature (20 °C), 50 °C, 70 °C, 90 °C, 130 °C, 170 °C, 220 °C and 270 °C. The maximum test temperature was set as 270 °C, since in previous studies it was demonstrated that for lower temperatures (*e.g.*, 150 °C) considerable bond strength retentions were obtained [4]. The tests were carried out in a steady-state condition, *i.e.*, the specimens were first heated up to the predefined temperature (measured in the adhesive, as detailed ahead) and then loaded up to failure. For each temperature, five specimens were tested: (i) two with eight strain gauges on the CFRP strip positioned along the bonded length; and (ii) three without strain gauges. The specimens with strain gauges aimed at assessing the axial strains in the CFRP strip along the bonded length, while the specimens without strain gauges aimed at determining the variation of the bond strength and stiffness with temperature. As explained in section 3.5, the presence of strain gauges in the bonded length compromised the adhesion between the CFRP strip and the epoxy adhesive, thus reducing the stiffness and bond strength - for that reason those results were not taken into account in the determination of both strength and stiffness of the bonded joint. To identify the different specimens, the following nomenclature was used: T20_S – test temperature of 20 °C ("T20"); specimen with strain gauges in the bonded length ("S"; the label "NS" was used for specimens without strain gauges).

2.2. Materials

The concrete prisms were cast with ready mixed concrete produced

3. (Short) Paragraph summarizing research needs/gaps identified

4. (Short) Paragraph describing (i) objectives and (ii) approach

This paper aims at fulfilling the above-mentioned gaps and providing a better understanding of the bond behaviour between NSM-CFRP strengthening systems at elevated temperature. For this purpose an experimental study was first carried out, which involved single-lap shear tests in concrete prisms strengthened with NSM-CFRP strips; the tests were performed at temperatures from 20 °C to 270 °C (measured in the adhesive), much higher than the maximum temperatures tested earlier by Palmieri [10] and Firmo et al. [4], and with a comprehensive monitoring of the experimental responses, which included measuring the slip at both the loaded and free ends of the CFRP strip. The experiments were complemented by a numerical study with the purpose of defining local non-linear bond slip laws that characterise, for each tested temperature, the CFRP-adhesive-concrete interaction.

5. RECOMMENDATIONS ON DRAFTING PAPERS

- **A clear but succinct description of the experimental study:**
  - Main goals
  - Test programme/series (correlation with objectives of research)
  - Materials
  - Specimen preparation
  - Test setup
  - Equipment, instrumentation
  - Procedure, relevant standards

NOTE: Avoid providing too long descriptions, especially of methods described in test standards and/or of "conventional" techniques

The description of the methods has to enable comprehensive assessment of your work and replicability

5. RECOMMENDATIONS ON DRAFTING PAPERS

- A clear but succinct description of the numerical study:
  - Main goals
  - Software
  - Geometry of the object
  - Types of (FE) elements
  - Mesh size
  - Boundary conditions
  - Material properties (measured and/or assumed)
  - Type(s) of analysis(es)
  - Mesh sensitivity study
  - Validation/calibration
  - Further investigations (e.g., parametric studies)

5. RECOMMENDATIONS ON DRAFTING PAPERS

- **A clear but succinct description of the analytical study:**
  - Problem statement, main goals
  - Presentation of theory/formulation (clear definition of all variables – sometimes adding a nomenclature may be useful)
  - Underlying assumptions/hypotheses
  - Field of validity
  - Validation (comparison with experimental/numerical data or other established analytical models)
  - Further investigations (e.g., parametric studies)

The ultimate goal of numerical/analytical studies should not be (only) to simulate the object (experiments), but to provide a better understanding of the phenomena

5. RECOMMENDATIONS ON DRAFTING PAPERS

- Results and discussion *vs.* Results + Discussion (separate sections)
- An interesting/thorough/deep analysis and discussion of results:
  - (i) clear and concise presentation/identification and explanation of main trends (for each relevant parameter)
  - (ii) increasing levels of depth/complexity (the "discussion"…)
  - (iii) benchmarking with literature review
  - (iv) cross-analysis of results from different tests (whenever applicable)
  - (v) comparison of experimental data with numerical/analytical predictions and/or code provisions
- Provide high-quality figures and tables (design, legibility, coherence, completeness, not overloaded with information)

5. RECOMMENDATIONS ON DRAFTING PAPERS

- **The sequence of the text must be perceived as logical and be helpful to the readers – you need to "tell an (interesting) story", making the readers'/reviewers' task as easy as possible** (e.g., long description of test setup/results, followed by reference to illustrative Figure, which should be cited at the beginning of that paragraph…)
- **Avoid providing dubious/speculative explanations - you do not have to explain EVERYTHING (including obvious/trivial results)**
- **When obvious results need to be presented, identify them accordingly (e.g., "*As expected, (…)*" or "this result is logical, as (…)")**
- **When a (relevant) result cannot be explained and further research is needed, this needs to be acknowledged and this is not a problem! (e.g., "*further research is needed to (…)*")**

5. Recommendations on Drafting Papers

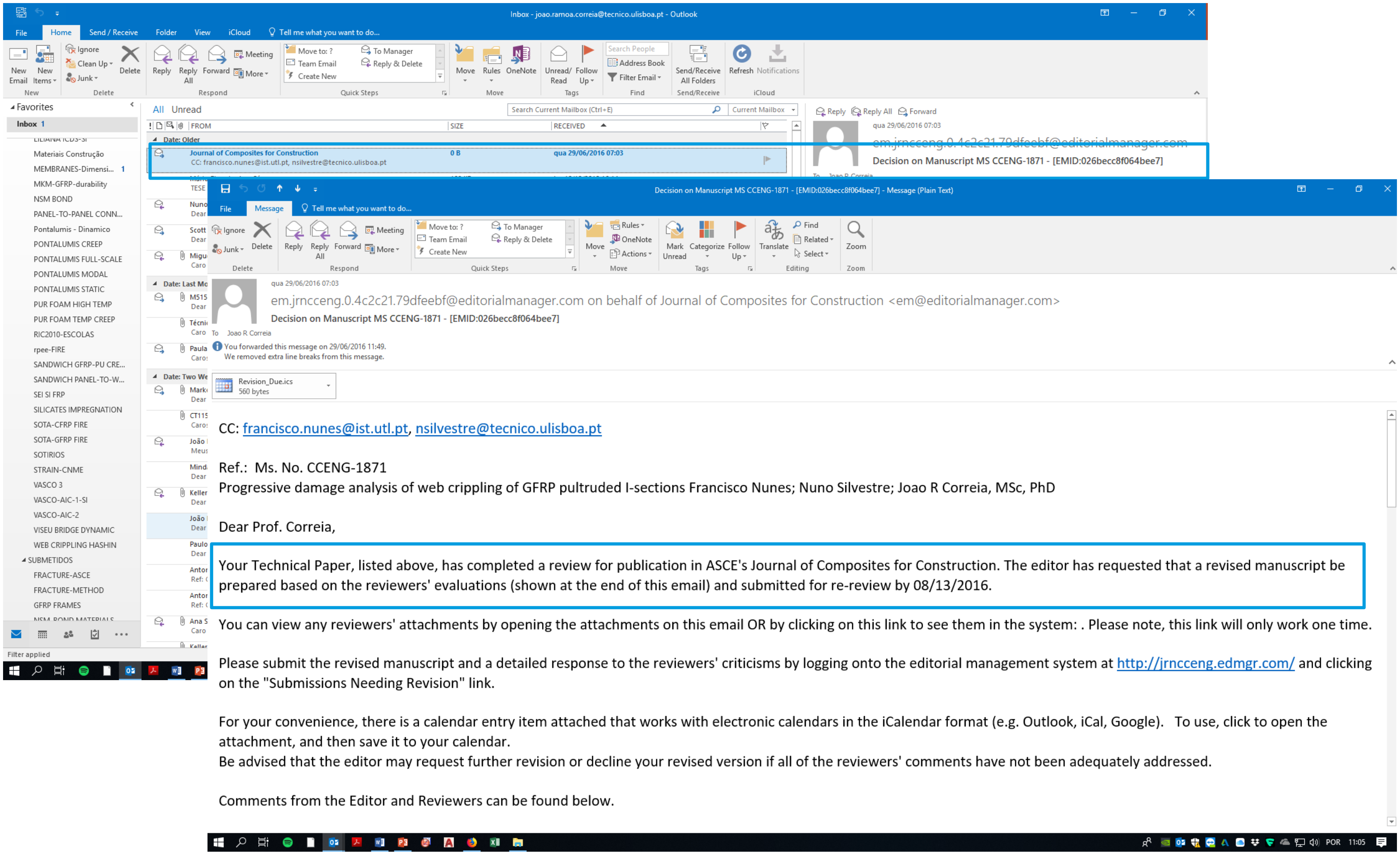
- **Whenever applicable, clearly state/acknowledge the weaknesses, limitations or field of validity of your results/models (e.g., "*for the range of parameters investigated, (…)*"; "*the model presented is valid for (…)*") - this is not only honest, but it will also give you extra credits/credibility in the eyes of the Editors/Reviewers/Readers**

5. RECOMMENDATIONS ON DRAFTING PAPERS

- **Provide interesting and brief conclusions, useful but not speculative:**
  - **Do not repeat previous descriptions already included in previous sections** (goals, parameters investigated, methods, etc.)
  - **Clearly identify the novelty/contributions of your paper**
  - **Elaborate on your conclusions, do not just repeat text from the main body of the paper**
  - **Avoid referring to already well-known results** (these are not conclusions, but rather the confirmation of previous findings!) If you want to include such information, acknowledge that it is not new (e.g. "*confirming previous findings (…)*")

REVISED VERSION

5. RECOMMENDATIONS ON DRAFTING PAPERS



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Dear Prof. Correia,

Your Technical Paper, listed above, has completed a review for publication in ASCE's Journal of Composites for Construction. The editor has requested that a revised manuscript be prepared based on the reviewers' evaluations (shown at the end of this email) and submitted for re-review by 08/13/2016.

You can view any reviewers' attachments by opening the attachments on this email OR by clicking on this link to see them in the system: . Please note, this link will only work one time.

Please submit the revised manuscript and a detailed response to the reviewers' criticisms by logging onto the editorial management system at http://jrncceng.edmgr.com/ and clicking on the "Submissions Needing Revision" link.

For your convenience, there is a calendar entry item attached that works with electronic calendars in the iCalendar format (e.g. Outlook, iCal, Google). To use, click to open the attachment, and then save it to your calendar.
Be advised that the editor may request further revision or decline your revised version if all of the reviewers' comments have not been adequately addressed.

Comments from the Editor and Reviewers can be found below.

REVISED VERSION

5. RECOMMENDATIONS ON DRAFTING PAPERS

- **A correct/collaborative attitude regarding the comments made by the reviewers/editors:**
  - **Be thankful/positive for the Reviewers' inputs** (even when critical)
  - **Reply (kindly…) to all comments raised by the reviewers**
  - **Clearly identify and explain (in an organized and structured manner) the changes that were made (or not) in the manuscript following their remarks; don't just answer "*Agreed and Revised*".**
  - **Do not take too much time to submit a revised version** (there is a risk that reviewers no longer remind your paper / their remarks)
  - **Make the reviewers'/Editor's task as easy as possible**
  - **Do not compromise quality (e.g. suggestions you disagree)**

(keep your anger/frustration under control and never annoy a reviewer/editor…)

REVISED VERSION

5. RECOMMENDATIONS ON DRAFTING PAPERS

REVIEWER #2

Remark made by reviewer	**Remark #1:** The boundary condition is defined according to the status before fire exposure. Would it change during the fire exposure, especially for the rotation constrains due to the softening of GFRP materials at the ends.
Clear **reply** to reviewer's remark and general explanation of changes prompted by remark	**Reply:** The question raised by the Reviewer is relevant. Indeed, if the supports are directly exposed to fire and the GFRP material next to the supports heats up to the glass transition temperature, it is possible that the rotation constrains are changed due to material softening. In real applications, this can occur if the supports are not protected with an explicit fire protection system or other constructive layers (e.g., suspended ceiling and/or raised floors). Please note that in our study this problem should not be relevant as the supports were kept at ambient temperature. In any case, we added a comment in Section 3.2 (when describing the boundary conditions of the FE model) drawing the attention of the readers to this aspect.
Detailed action / changes in manuscript (the reviewer/editor do not need to read the manuscript)	**Action:** In Section 3.2, Paragraph 1, the following footnote was added when describing the null rotations imposed on the left end of the columns: "*Note that during the fire resistance tests, the supports of the GFRP columns were kept at ambient temperature; therefore, these boundary conditions should not change during the entire fire exposure. If the supports had been directly exposed to fire, the heating of the GFRP material next to the supports could cause changes in the rotation constrains due to material softening (in real applications, this can be prevented using fire protection systems, suspended ceilings and/or raised floors).*"

Proofs

5. Recommendations on Drafting Papers

- Be very careful and meticulous in reviewing the **proofs of your accepted paper** (in some cases, you'll be asked to reply in 48 hours – if you need more time, inform the publisher!)
  - **Do not compromise quality!**

6. How to enhance the impact of your published papers

6. How to Enhance the Impact of Your Published Papers

- One high quality paper has MUCH MORE citations than several poor/average quality papers
- Publish in the right journals (Impact Factor/notoriety; field of expertise; language; web accessibility; speed of reviewing/publishing)
- Open access papers/journals…
- Potentiate citations: good/comprehensive literature reviews, with many relevant references (make sure they are actually relevant!), emerging topics, "definitive" works, the right journal…
- Don't be afraid of citing your own previous work, provided that it is relevant in the context (self-citation is NOT a crime, if honestly used)
- Create and keep permanently updated your personal/group webpages (Researcher ID, Scopus, Research Gate, Google Scholar, etc.)

6. How to Enhance the Impact of Your Published Papers

- Include additional material in your paper (e.g., video slides, movies of experiments/numerical simulations)
- Review papers/be a member of the Editorial Board of GOOD journals
- Win a reputation in your own niche, by being consistent in terms of quality - Do not compromise quality!

Thank you

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