1 - Please, analyze the progress of the project, the results and publications resulting from it.

(Comments, criticisms and suggestions have been helpful in improving projects.)

Professor Stephen Ekwaro-Osire and Professor Aparecido Carlos Gonçalves are the principal investigators for grant # 2015/50026-1 entitled “Probabilistic Dynamics Analysis and Lubricant Analysis to Improve Reliability of Gearboxes”. Funds were sought and received ($48K a year) to support a post doc Dr. Joao Paulo Dias. Funds were sought and received ($20K) to organize and host a workshop at Texas Tech University. Funds were sought and received ($2K) to organize and host a workshop at Ilha Solteira, Brazil. Professor Ekwaro-Osire, Professor Gonçalves, and Dr. Dias have co-authored numerous publication and made several presentations.

BOOK

BOOK CHAPTERS

PEER-REVIEWED CONFERENCE PUBLICATIONS
PLENARY PRESENTATION

PRESENTATIONS
[1] Perspectives on Bioengineering, São Paulo State University (UNESP), Tupã, SP, Brazil, Dec 11, 2015.

WORKSHOP AND SYMPOSIA ORGANIZED BY PROF EKWARO-OSIRE AND PROF GONÇALVES

POST-DOCTORAL RESEARCH ASSOCIATE CURRENTLY MENTORING
3- *Participation in scientific or technological meetings*

<table>
<thead>
<tr>
<th>Does the importance of the meetings justify the expenses listed in the report?</th>
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<tbody>
<tr>
<td>[ X ] Yes    [ ] No</td>
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<tr>
<th>Was there participation in congresses without presentation of work?</th>
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<td>[ ] Yes      [ X ] No</td>
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If so, please discuss the exceptional conditions justifying such expenditure.

4 – *Visits to the Brazilian partner*

3  Ilha Solteira, Brazil, May 24-25, 2017

** S. Ekwaro-Osire and A.C. Gonçalves organized the “Minisymposium on Probabilistic Prognostics and Health Management of Energy Systems” in Ilha Solteira. Scientists from academy industry presented over 10 pertinent papers. S. Ekwaro-Osire and A.C. Gonçalves some of the funds from UNESP to put up the workshop. **

2  Ilha Solteira, Brazil, Dec 13–16, 2015

** S. Ekwaro-Osire and A.C. Gonçalves organized the “1st Probabilistic Prognostics and Health Management of Energy Systems Workshop (PPHMES 2015)" in Ilha Solteira. Scientists from academy, government, and industry presented over 15 pertinent papers. S. Ekwaro-Osire and A.C. Gonçalves submitted a proposal for some of the funds used in putting up the workshop. **

1  Rio de Janeiro, Brazil, Dec 5–11, 2015

** S. Ekwaro-Osire and A.C. Gonçalves attended the largest international conference in Brazil. The conference was ABCM International Congress of Mechanical Engineering - COBEM2015, and it took place in Rio de Janeiro, Brazil. S. Ekwaro-Osire and A.C. Gonçalves each presented a paper at the conference. **

<table>
<thead>
<tr>
<th>Was the visit of appropriate duration?</th>
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<tr>
<td>[ X ] Yes    [ ] No</td>
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<th>Did the Brazilian partner dedicate enough attention for scientific discussion during the visit?</th>
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<td>[ X ] Yes    [ ] No</td>
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If not, please comment on it.

<table>
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<tr>
<th>Did the outcome justify the visit?</th>
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<tr>
<td>[ X ] Yes    [ ] No</td>
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</table>

If no, please comment on it?

In the case of other participants in the research proposal (professors or postdocs) who also visited the Brazilian partner. Did the outcome justify the visit?

| [ X ] Yes    [ ] No               |

If no, please comment on it?

Workshop and Symposia


2  TTU/FAPESP – SPRINT “STEM Across Continents” Workshop and Conference, Lubbock, TX, Aug 31–Sep 1, 2016.
5. Final Analysis

[ ] Progress Report Approved
[ ] Progress Report Approved with criticisms or suggestions that should be considered in the next scientific report
[ ] Progress Report not Approved

[ ] Final Report Approved
[ ] Final Report Not Approved

INFORMATION FOR THE EXCLUSIVE USE OF TTU

The content of the previous items may, at TTU’s discretion, be sent in full to the PI. If you wish to add information considered important for TTU to support your decision and should not be transcribed to the PI by its confidential nature, include them in this space.
I declare that there is no circumstance characterizing a situation of potential conflict of interest or that it may be perceived as an impediment to an exempt opinion. I undertake to keep confidential all the information in this case, in particular my advisory status and the content of this report.

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<th>Advisory Institution:</th>
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<td>Place, date and signature:</td>
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