JMST: PDF Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CF

Dari:Editorial Office (jmst@springer.jp)Kepada:deddychrismianto@yahoo.co.idTanggal:Senin, 1 April 2013 pukul 15.09 WIB

Dear Mr chrismianto,

The PDF for your submission, "Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD" is ready for viewing.

Please go to <u>http://jmst.edmgr.com/</u> to approve your submission. Your username is: deddy1973 Your password is: chrismiant6352

Your submission must be approved in order to complete the submission process and send the manuscript to the Journal of Marine Science and Technology editorial office.

Please view the submission before approving it to be certain that your submission remains free of any errors.

Thank you for your time and patience.

Author Approve Changes or submits updated ms by author

Dari:	Editorial Office (jmst@springer.jp)
Kepada:	deddychrismianto@yahoo.co.id
Tanggal:	Rabu, 3 April 2013 pukul 13.47 WIB

Dear Mr chrismianto,

Re: Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD

Thank you for approving the changes that the Editor made to your submission or updating your submission according to the requested changes.

You will be able to check on the progress of your paper by logging on to Editorial Manager as an author. The URL is http://jmst.edmgr.com/.

Thank you for submitting your work to this journal.

Kind regards,

JMST: A manuscript number has been assigned to Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the

Dari:Editorial Office (jmst@springer.jp)Kepada:deddychrismianto@yahoo.co.idTanggal:Jumat, 5 April 2013 pukul 13.19 WIB

Dear Mr chrismianto,

Your submission entitled "Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD" has been been assigned the following manuscript number: JMST-D-13-00031.

You will be able to check on the progress of your paper by logging on to Editorial Manager as an author. The URL is http://jmst.edmgr.com/.

Thank you for submitting your work to this journal.

Kind regards,

Editorial Office Editorial Office Journal of Marine Science and Technology

JMST-D-13-00031 - gentle reminder

Dari:	Editorial Office (jmst@springer.jp)
Kepada:	deddychrismianto@yahoo.co.id
Tanggal:	Selasa, 30 Juli 2013 pukul 11.57 WIB

Ref.:

Ms. No. JMST-D-13-00031 Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD Journal of Marine Science and Technology

Dear Mr deddy chrismianto,

When checking our records, we noticed that the due date for your revision on JMST-D-13-00031 is approaching.

If you are ready to submit, please access the following site:

http://jmst.edmgr.com/

Your username is: deddy1973 Your password is: chrismiant6352

We are looking forward to receiving your revision. Thank you.

With kind regards, Editorial Office Journal of Marine Science and Technology

JMST: Submission Confirmation for JMST-D-13-00031R1

Dari: Journal of Marine Science and Technology (JMST) (harini.swamy@springer.com)

Kepada: deddychrismianto@yahoo.co.id

Tanggal: Jumat, 2 Agustus 2013 pukul 21.42 WIB

Ref.: Ms. No. JMST-D-13-00031R1

Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD

Dear Mr chrismianto,

Journal of Marine Science and Technology has received your revised submission.

You may check the status of your manuscript by logging onto Editorial Manager at http://jmst.edmgr.com/.

Kind regards,

JMST-D-13-00031R1 - gentle reminder

Dari: Journal of Marine Science and Technology (JMST) (harini.swamy@springer.com)

Kepada: deddychrismianto@yahoo.co.id

Tanggal: Kamis, 3 Oktober 2013 pukul 12.03 WIB

Ref.:

Ms. No. JMST-D-13-00031R1 Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD Journal of Marine Science and Technology

Dear Mr deddy chrismianto,

When checking our records, we noticed that the due date for your revision on JMST-D-13-00031R1 is approaching.

If you are ready to submit, please access the following site:

http://JMST.edmgr.com/

Your username is: deddy1973 Your password is: chrismiant6352

We are looking forward to receiving your revision. Thank you.

With kind regards, Editorial Office Journal of Marine Science and Technology

JMST: PDF Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CF

Dari: Journal of Marine Science and Technology (JMST) (harini.swamy@springer.com)

Kepada: deddychrismianto@yahoo.co.id

Tanggal: Senin, 7 Oktober 2013 pukul 10.51 WIB

Dear Mr chrismianto,

The PDF for your submission, "Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD" is ready for viewing.

Please go to <u>http://jmst.edmgr.com/</u> to approve your submission. Your username is: deddy1973 Your password is: chrismiant6352

Your submission must be approved in order to complete the submission process and send the manuscript to the Journal of Marine Science and Technology editorial office.

Please view the submission before approving it to be certain that your submission remains free of any errors.

Thank you for your time and patience.

JMST: Your manuscript entitled Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of

Dari: Apostolos Papanikolaou (papa@deslab.ntua.gr)

Kepada: deddychrismianto@yahoo.co.id

Tanggal: Rabu, 5 Maret 2014 pukul 21.05 WIB

Ref.: Ms. No. JMST-D-13-00031R2 Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD Journal of Marine Science and Technology

Dear Mr chrismianto,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below. If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. Your revision is due by 04-04-2014.

To submit a revision, go to <u>http://jmst.edmgr.com/</u> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Prof. Apostolos Papanikolaou Deputy Editor Journal of Marine Science and Technology

Reviewers' comments:

Please read carefully the latest reviews on revision 2 of your paper and take care of the made comments the best way possible. If this is done satisfactorily, we will consider your paper accepted without further revision.

Reviewer #1: The part of the paper on CFD and optimisation has become better documented now; while still of limited value in my opinion. Seeing its purpose as an illustration of the usefulness of the geometry work, I think it is acceptable.

Reviewer #3: The more I read, the more I doubt.

What is the innovative part of the work? Where is a new approach?

- parametric design for ships has been around for 20 years and several CAD programs offer it (Catia, Napa, Friendship Modeller, etc)

- RANSE methods are also standard, with CCM+, Fluent, CFX and OpenFOAM applied as standard industry practice

- optimisation for hull shapes is offered on a commercial base by some companies: Hydrocean, FutureShip, Marin to name the just three

The state-of-the-art industry applications are multi-objective optimisations considering not just resistance for one draft, but resistance and propulsion (often wake number or some other simplified measure of merit rather than simulating the ship with propeller) for weighted operational profiles with different drafts and speeds. And for full scale Re numbers. Research should be ahead of industry practice and JMST is a research oriented journal.

There are no references to ship optimisation applications from French, German and Dutch groups which are driving the state of the art. Check the MARINE 2013 proceedings, Compit, IMDC for latest applications.

The CFD application in itself is questionable. You get Ct within 1.95% to model tests. Has turbulence stimulation been used in the model tests and have you ensured laminar flow until the position of the turbulence stimulators? If not, your results should differ more and the agreement is just coincidence. But even if they are "wrong", your optimisation may still work as long as the errors remain fairly constant. But that should be discussed in the paper.

So the paper needs to be fundamentally reworked:

- inclusion of latest publications on ship optimisation using parametric modelling (a lot more homework needed!)
- updating the optimisation model to reflect intermediate draft conditions (beware, the breaking is subject to scale effects and free-surface RANSE at full-scale Re would be appropriate for a real containership project)
- at least in the text state why resistance and not power is optimised, why you think that your CFD solution is grid independent or if not grid indepedent, why you still think optimisation results are reliable. What were convergence criteria in the CFD?

But probably, the paper is better published in one of the many conferences where it may be suitable, eg PRADS or IMDC.

Reviewer #4: Use of English remains an issue Most of the indicative examples included in my previous review have not been addressed.

My remaining remarks have been more or less answered.

Proofreading is certainly required. Try having a native English speaker read the paper

Reviewer #6: The paper describes a procedure for bulbous bow optimization. Although the topic deserves investigation, in my opinion the paper is not suitable for publication, it being very unsatisfactory under many respects:

1) first of all, it is very poorly written, and it turns out to be hardly readable and even comprehensible in most of the manuscript; besides, it is very poorly organized in its structure;

2) the authors claim that "....to solve this problem, thus the main objective of this study is to develop a new method that can be used to generate the parametric bulbous bow design..."; for what I can understand from the text, they use cubic Bezier curves and a series of tools of a commercial software (i.e. "ANSYS Design Modeler" in the text) to carry out bulb design. The originality of the proposed algorithm and/or method cannot be inferred from the description;

3) globally, the paper cannot be considered a scientific paper, as it neither offers a new methodology or algorithm nor an application of some established methods to new test cases, nor a critic discussion of known algorithms.

For these reasons, I do not suggest to publish the paper.

the hull pressure seems to be necessary in the future work.

Reviewer #7: This paper treats a parametric bulbous bow design by use of cubic Bezier and plane-curve intersection method in order to optimize ship resistance. The reviewer thinks the originality of the work seems to be less. Some parts of the paper looks like ANSYS software manual. Hence the reviewer thinks the work is not suitable for the Journal article. However, the reviewer thinks the work is still helpful for the ship designer, the work would be suitable for ,say, workshop or symposium for sdhip design, as pointed out by another reviewer.

Comment on the figure 15:

The authors show the "Force" distribution around hull surface with unit "N" in color bar. But this is curious. If so, the surface integral of "force" should be the value with "N*m^2". What does this mean? In the figure, stripes can be found. Probably the authors think this comes from the unstructured meshes. But in the figure 10, the meshes on the hull surface are almost uniformly distributed. Another work for the gird dependency on

Note:

Handling Editor makes the final decision for Minor/ Major Revision. JEO must notify the author.

JMST: Submission Confirmation for JMST-D-13-00031R3

Dari: Journal of Marine Science and Technology (JMST) (sathish.srinivasan@springer.com)

Kepada: deddychrismianto@yahoo.co.id

Tanggal: Jumat, 4 April 2014 pukul 17.04 WIB

Ref.: Ms. No. JMST-D-13-00031R3

Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD

Dear Mr chrismianto,

Journal of Marine Science and Technology has received your revised submission.

You may check the status of your manuscript by logging onto Editorial Manager at http://jmst.edmgr.com/.

Kind regards,

JMST: Your manuscript entitled Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of

Dari: Apostolos Papanikolaou (papa@deslab.ntua.gr)

Kepada: deddychrismianto@yahoo.co.id

Tanggal: Rabu, 16 April 2014 pukul 20.49 WIB

Ref.: Ms. No. JMST-D-13-00031R3 Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD Journal of Marine Science and Technology

Dear Mr chrismianto,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below. If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. Your revision is due by 16-05-2014.

To submit a revision, go to <u>http://jmst.edmgr.com/</u> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Prof. Apostolos Papanikolaou Deputy Editor Journal of Marine Science and Technology

Reviewers' comments:

results compared to each other.

Dear Author,

As earlier informed, there are conflicting reviews regarding the final acceptance of your paper. I will not go into technical details at this final stage, but I do expect that the English of your paper is once more carefully updated by native speaker.I am sorry to say that I have great doubts that somebody with good English command has reviewed the last version of your paper! It is hard to follow your text, as it is now! I can offer you the below updated text for your abstract

ABSTRACT: Parametric geometric modeling plays an important role in ship's hull form optimization by use of Computational Fluid Dynamic (CFD) analysis. However, it is difficult to create satisfactory parametric modeling for some curved shapes, such as ship's bulbous bow. In this study, the cubic Bezier curve and curve-plane intersection methods are applied to generate the parametric design of a bulbous bow in a solid modeling procedure by taking into account the input of 4 (four) design parameters. For this, a suitable Application Program Interface (API) script within the ANSYS Design Modeler was developed. An application to the ship resistance minimization by use of CFD was made to show that the proposed method could be implemented properly. In this respect, the parametric design of the bulbous bow of a container ship (KCS type) was chosen to be modified. First, it was shown that the computational results by CFD were close to the experimental data for the original ship hull form. The developed optimization method was subsequently applied to find the optimal bulbous bow. Finally, the dependence of the optimum bulbous bow on ship's speed (some variations of Fn values) was investigated and the

Finally, take care to update your list of references with proper important references in the study field! It is not only MARINE 2013 that you should cite, as these references are not that important. I would recommend that you study the proceedings of the symposium on Naval Hydrodynamics (and of Numerical Ship Hydrodynamics) over the last years to see many original contributions to the study field (e.g. by Dr. E. Campana and his associates...).

Note:

Handling Editor makes the final decision for Minor/ Major Revision. JEO must notify the author.

JMST - Corresponding Author Confirmation

Dari: Sathish Srinivasan (no-reply@editorialmanager.com) Kepada: deddychrismianto@yahoo.co.id Tanggal: Sabtu, 7 Juni 2014 pukul 07.58 WIB

Dear Mr deddy chrismianto,

Thank you very much for submitting your manuscript entitled "Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD" to Journal of Marine Science and Technology

I have noticed that you are listed as corresponding author in the system, whereas Dr. Dong-Joon Kim is listed as the corresponding author in the manuscript.

Kindly confirm who will be the corresponding author so that all correspondence regarding the submission can be addressed to the correct person.

Looking forward to hearing from you at your earliest convenience.

With kind regards, Sathish Srinivasan Springer Journals Editorial Office Journal of Marine Science and Technology

RE: JMST - Corresponding Author Confirmation

Dari: Jeyaraj, Aravindhan (aravindhan.jeyaraj@springer.com)

Kepada: deddychrismianto@yahoo.co.id

Tanggal: Senin, 21 Juli 2014 pukul 12.32 WIB

Dear Dr. Chrismianto,

Thank you for contacting us.

As mentioned in e-mail below, your paper has been published online and is appearing in the Springer link.

Hence, further changes are not allowed to be made in the published paper.

Thank you for your kind understanding,

Kind regards, Aravindhan ----**P.J. Aravindhan** Springer Journals Production Production Editor --tel +91 44 42197756 fax +91 44 4219 7757 <u>Aravindhan.Jeyaraj@springer.com</u> www.springer.com

From: Deddy Chrismianto [mailto:deddychrismianto@yahoo.co.id] Sent: Saturday, July 19, 2014 10:08 AM To: Srinivasan, Sathish Subject: FW: JMST - Corresponding Author Confirmation

Dear Mr. Sathish Srinivasan,

My article entitled "Parametric bulbous bow design using the cubic Bezier curve and curve-plane intersection method for the minimization of ship resistance in CFD (DOI: 10.1007/s00773-014-0278-x)" to be published in: Journal of Marine Science and Technology.

As you know in last reply email that I have decided my name as a corresponding author. However, actually my co-author (Dong-joon Kim) wants to be a corresponding author also. His consideration is a requirements of his university to get a fullfilment of duty.

Is it possible to change the corresponding author? As you know that my article status is "Online First" Please give me a reply because it is important for me.

Thank you

Best Regards,

Deddy Chrismianto