Novel Composite Riser Development for Offshore Deep Water Applications

1 Introduction
The use of pipes in oil exploration dates back to early Chinese using bamboo sticks as conduits to transport oil. Thus, the study on Composite Marine riser behaviour is very important. Structures in water behave differently from those structures not in water. Composite materials offer a range of benefits that could be harnessed to improve riser technology. Although composite risers were first deployed in deep waters in 2002 in the UK on Halten TL platform as a composite riser joint, there are still some challenges, e.g. standards.

2 Method & Configurations

3 Results: Local Design

4 Results: Global Design & Experiment

5 Conclusion & Publications

Amaechi Chiemela Victor
PHD Student - Engineering Department
Supervision Prof. Jianqiao Ye
Email: aamaechi@lancaster.ac.uk; chiemelavic@gmail.com

2019 FST ANNUAL (CHRISTMAS) CONFERENCE
@Lancaster University Management School LUMS,
Date: 17th December, 2019

I wish to acknowledge the support of my Supervisor Prof. Jianqiao Ye.
I also appreciate my sponsors NIDO and Lancaster University Engineering.
Special thanks to the staff and members of the Engineering Department.
FST Annual Conference

Citizen Science
with special guest speaker
BBC's Professor Chris Lintott

Tuesday 17th December
9.15am-4.30pm
Management School Hub and LT1

Staff talks, PhD student presentations, poster competition

lancaster.ac.uk/scitech-conference/  #FSTconf
# FST Annual Conference 2019
## Citizen Science
### Agenda

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<th>Time</th>
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<tr>
<td>9:15am-9:20am</td>
<td>Welcome&lt;br&gt;Professor Malcolm Joyce</td>
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<td>9:20am-10:35am</td>
<td><strong>Department Talks</strong>&lt;br&gt;• Professor Alastair Martin (Engineering)&lt;br&gt;• Dr Calum Hartley (Psychology)&lt;br&gt;• Professor David Middleton (Chemistry)</td>
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<td>10:35am-11:00am</td>
<td><strong>Break</strong></td>
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<td>11:00am-12:00pm</td>
<td><strong>PhD Talks</strong>&lt;br&gt;Dean’s Award for PhD Excellence</td>
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<td>12:00pm-1:15pm</td>
<td><strong>Lunch</strong></td>
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<td>1:15pm-2:15pm</td>
<td><strong>Guest Speaker</strong>&lt;br&gt;Professor Chris Lintott</td>
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<td>2:15pm-2:30pm</td>
<td><strong>Break</strong></td>
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<td>2:30pm-4:10pm</td>
<td><strong>Department Talks</strong>&lt;br&gt;• James Devine (SCC)&lt;br&gt;• Dr Simon Lunagomez (Maths &amp; Statistics)&lt;br&gt;• Dr Alex Bush (LEC)&lt;br&gt;• Dr Brooke Simmons (Physics)</td>
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<td>4:10pm-4:30pm</td>
<td><strong>Prize Giving and Close</strong>&lt;br&gt;Professor Pete Atkinson, Dean</td>
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