

## EPSRC HiFUT Fellowship Project Meeting Minutes

*Date of Meeting:* 19 March 2018

*Location of Meeting:* Department of Physics, University of Warwick

**Present:** Steve Dixon<sup>SD</sup> (University of Warwick), Colin Edge<sup>CE</sup> (DynOptic Systems), Andrew Feeney<sup>AF</sup> (University of Warwick), Stuart Graham<sup>SG</sup> (University of Warwick), Lei Kang<sup>LK</sup> (University of Warwick), Rob Turner<sup>RT</sup> (Katronic).

19 March 2018

Dear project partners,

Thank you for your attendance at the meeting, I hope you found it both informative and useful. The key points from the meeting are summarised below.

- A 2018 summer project student, Stuart Graham, was introduced.
- AF and LK gave an update presentation on the research which has been completed since the September 2017 meeting, comprising measurements of ultrasound up to approximately 320 kHz in air with two flexural transducers in a transmit-receive configuration, and the latest developments in the fabrication of flexural transducers for high temperatures, and initial high pressure measurements. The latest results in phased array measurements and research into acoustic levitation, including the demonstration of a new device by LK, were also shown, followed by our recent developments into electromagnetic-based transducers.
- A general discussion followed on the key developments from this work, including feedback from each of the project partners.

### **Actions**

1. Attempt a high frequency beam profile measurement for a receiver FUT (CE).
2. AF and LK to conduct more rigorous high pressure tests on a selection of FUTs.
3. AF to undertake the next phase of the high temperature FUT research.
4. AF, LK, and SD to continue publishing research, with open access where possible.
5. Arrange the next meeting towards September 2018.



Again, let us know if there are any questions, or if there is something specific you would like to see in development which would be applicable to your own line of work. Also, contact us if you see anything here which has been recorded in error so it can be amended.

Kind regards,

Andrew

**Dr Andrew Feeney**  
**Research Fellow, Centre for Industrial Ultrasonics**