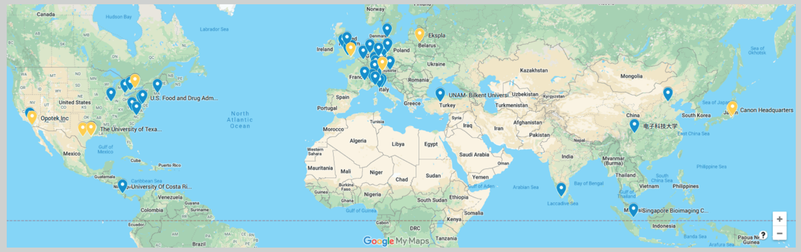
IPASC International Photoacoustic Standardisation Consortium



Phantom Development

Aim: To define ideal optical and acoustic phantom properties and design standard phantoms for consortium-wide use.

Recent progress: In 2020 so far we have been prototyping at multiple consortium partners a robust base material for phantom fabrication that yields tunable optical and acoustic properties using low-cost, traceable components with chemical abstract service (CAS) reference numbers.

Next steps: Establish consensus on the target optical and acoustic properties for a standard photoacoustic phantom and distribute a recommended recipe to achieve these to the consortium.

More than 100 academic and 25 industrial members worldwide!

Data Acquisition and Management

Aim: To implement a standardised data format with conversion tool to enable open access for photoacoustic data independent of platform or vendor.

Recent progress: A set of standard metadata parameters has been published (linked right) to enable exchange of data.

Next steps: A software tool is in development to enable conversion of photoacoustic data from any system into an open HDF5 format.

Standard Metadata Parameters

For Consultation and Feedback

List of PAI metadata parameters to enable description, interoperability, and exchange of data

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Multi-Centre Study Design

Aim: To develop design principles and logistics for multi-site standardisation studies and agree a standardised set of well-defined image quality metrics for instrument comparison.

Recent progress: A set of useful terms and definitions has been agreed and consensus finding activities have begun to define image quality metrics.

Next steps: Through further consortium consultation, image quality metrics will be agreed and with the PD theme, phantoms designed to test for these.

Terms and Definitions

For Consultation and Feedback

A list of useful terms and definitions when dealing with photoacoustic imaging

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Contact us to find out more: