

Microtech 2016 – a conference that ‘ranged’ the scientific ‘plains’ of MEMS, Sensors and Packaging



MicroTech 2016 was a well attended conference with a theme of sensors, MEMS and advanced electronic packaging. There were a variety of speakers: a CEO, entrepreneurs, academics and engineers, young and old. Topics as diverse as culture, economics, science and politics were discussed - even the ‘Brexit’ referendum featured in one question.

The keynote speech was by Allan James, CEO of Semetech. He was keen to encourage entrepreneurship and provided information and advice on the topic. 51% should be the meaning of life for an entrepreneur (ensuring control) and, quoting Carnegie, he hinted that ‘discontent’ was a characteristic of theirs - one hopes he was satisfied with his own inspiring speech.

Dave Burt from Kelvin Nanotech gave a presentation on the work of his fab. This leading edge fab is able to create novel structures that are so small that they can create Quantum devices and silicon die that analyse individual molecules. He is working towards keeping his audiences more awake with a product that monitors and controls CO2 levels to optimise human alertness.

Marc Desmulliez of Herriot Watt University delivered a talk on the development of a ‘one stop’ innovative flip chip placement and encapsulating machine. Amongst many innovative features, it included localisable microwave curing that did not induce IC failure through unwanted charge build up: no sparks flew, to blow the device up.

After the morning break, a panel discussion was held with members from academia and industry. Topics such as the difference in culture and between industry and academia were debated. Graeme

Morrison neatly summarised their different objectives: academics need to investigate novel ideas, while industry needs to make money to survive and can do this with more modest ideas. Marc Desmulliez advised academics to start small and work to build trust with industrial partners through achievable objectives.

For the poster session, the researchers lined up on stage (as if for an encore) and gave a brief one minute introduction to their poster. They got a good round of applause for public speaking (but no encore). Later, ~~XXXXX~~ won the best poster award.

The AGM was a swift and efficient process with a speech by the 'latent' Chair who, as a woman, had caused a constitutional crisis that led to a motion to change her title from 'Chairman' to 'Chair'. A member of the audience exercised his right to dissent by saying that the title 'Chairman' encompassed 'women' (perhaps, on the basis that as Eve was created from the rib of Adam?). The motion was carried. Additionally, a new Secretary and three new members were voted onto the committee.

The conference broke for lunch with their appetite 'stoked' by the enervating AGM. Late committee members, like jackals at a carcass after the lions have finished, had to scavenge the left over remnants from the audience's hearty meal.

After lunch everyone met the devil himself, Romain Fraux of System Plus, the reverse engineering specialists. They used their black art to give a revealing presentation on MEMS motion sensors and gyros. Kaiam presented a low cost optical transceiver that delivers high data rate transfers for data centres. Cirrus Logic detailed the construction of a MEMS microphone that was smaller than a bed bug. The bed bug was shown lying beside a microphone - one wonders what the bed bug may have said to the microphone.

After the final coffee break, Alan Evans of Unisem, discussed advanced packaging formats for MEMS die. He predicted that the future is multisensor packages. Andrew Holland stepped onto the stage, full of beans, to discuss his novel bean shaped IoT sensor package. Thank you Andrew for stepping in at short notice to fill a late drop out. Finally Bob Hunt of METBS discussed sophisticated hybrid packages for a variety of applications.

The lions of industry and academia went home content after a successful and interesting conference and the committee members went home like semi fed jackals to live another day after 'pulling off' an excellent conference - well done the conference committee.