**The geniuses on our doorstep…**

For years I have lived and worked in the shadow of a small group of amazing people who are continuing to develop ground-breaking advances in engineering, technology and science – and all from their Lincoln laboratories. I’m astounded and ashamed (in equal measure) that I knew not of their existence.

Applied Materials Technology are based in Lyndon Business Park to the south of Lincoln and in addition to their state of the art [electroplating services](http://www.appmat.co.uk/electroplating/), these boffins have been the proud recipients of private and state funded grants enabling them to develop some of the most exciting projects I have seen in a long time.

Through Research and Development, AMT’s engineers and scientists are creating (with their research partners) a blanket that will breakdown bilirubin (the cause of the yellow colouring from jaundice suffered by around 650,000 babies in the UK each year). The current medical treatment is phototherapy, and involves the separation of mother and baby whilst powerful lights are shined on the baby’s skin. “[Babylight](http://www.appmat.co.uk/portfolio-item/babylight/)” will facilitate treatment whilst the baby is reassuringly held in parents’ arms – and can be used at home or on the move.

Working closely with [The Welding Institute](http://www.theweldinginstitute.com/) and the [Nofer Institute](http://www.imp.lodz.pl/home_en/dep/enviro_health_hazards/projects_ehh/porpardet/) in Poland, Group Director Iain Glass has developed a prototype [airborne asbestos detector](http://www.appmat.co.uk/portfolio-item/popardet/) for use at a disaster scene; which will remove the delays incurred from laboratory sampling of dust and debris – and would allow our firefighters to remove cumbersome protective clothing and respiratory equipment should it be prudent to do so.

The list of ground-breaking projects underway at their facilities is staggering – from improving the design of power electronic modules (PEMs) for electric vehicles to developing advanced manufacturing technologies that will realise massive cost-savings in both time and the prevention of material wastage.

Don’t get me started on their [Cryogenic Vacuum and Pump](http://www.cryovac-engineering.co.uk/) technology though; I’ll be waxing lyrical for days…or on their work in developing high-end laser applications and deformable optics; production of pharmaceuticals from plant tissue culture; integrated power modules for hybrid and electrical vehicles; and the development of a portable laboratory for offshore wind farms that will assess the quality of the turbine blades using infra red technology (in association with the [National Physical Laboratory](http://www.npl.co.uk/)) – to name but a few!

I know I’m a geek and devour all things engineering – but it is staggering that such exciting projects which will have beneficial implications for millions of people are being developed right under our noses in the heart of Lincolnshire. Not Silicon Roundabout in London, not the science parks associated with the South West of the UK – but right here in Lincoln.

This is another example of how diverse and exciting the industries of Lincolnshire are (and not just the ‘big boys’ either). I for one hope that this hidden gem (and many more like them) do not remain that way for long.