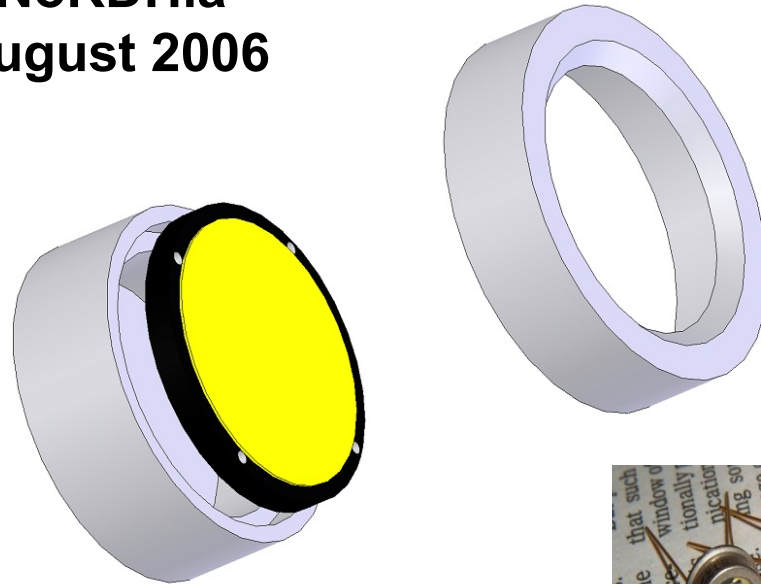


ELEMENT SIX NEWS

***Kevin Oliver
Business Development Manager
(Kevin.Oliver@e6.com)***

**NoRDHia
August 2006**



E6-General NEWS

NEW Diamond Device Electronics

Expect an announcement on this in the next few weeks....

New ScD Technology acquired from Skeleton Technologies AG by Element Six

ScD has already proven its use in a broad range of applications.

The high diamond content of ScD (diamond-silicon carbide) makes it an ideal thermal management substrate for the higher powered silicon-based electronic devices such as processors used in Network Servers and industrial PCs

Single Crystal CVD Diamond Material available

Element Six announces with Monodite MCC 110 the availability of a new single crystal diamond material for cutting tool applications.

E6 Industrial Synthetic Diamond Factory opened in China

E6 acquires manufacturing plant in Ukraine

E6-Electronic R&D Programmes

Carbon and Power Electronics (CAPE) [DTI]

Targeting power electronics to make faster, smaller and more robust IGBT devices. Partners Cambridge University & Dynex.

Micromachined Diamond Device Initiative (MIDDI) [DTI]

To develop novel synthesis and processing technology for advanced nano- and micro-scale structures. Partners Excitech, Institute of Photonics

Quantum Computing

To explore the potential applications for quantum computing using diamond. Partners Bristol University (UK), Stuttgart University (Germany), Melbourne University (Australia), ENS Cachan University (France) and Warwick University (UK)

RD42 CERN

NEW Electronic Grade Single Crystal Thin Plates

Partners GSI

Detector/Sensor NEWS

Electronic Grade Substrates. (EL-Polycrystalline and Single Crystal).

New introduced a standard surface for SC detectors (all SC detectors are now supplied with the current released best practice detector finish for improved detector performance)

New DIAFILM EL Data sheet to be released 2006

New R&D Collaborative project with RD42 provides >8x8mm SC

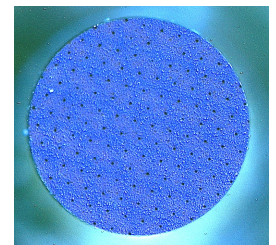
- **NEW Detector manufacture.**

Sandwich and inter-digitated design in T08 or BNC package
Defining a general detector to promote diamond in various applications and supporting detectors for HEP.

Let me know your requirements !

- **NEW Sensor structure manufacture.**

(creating sensor structures in intrinsic and doped poly material)

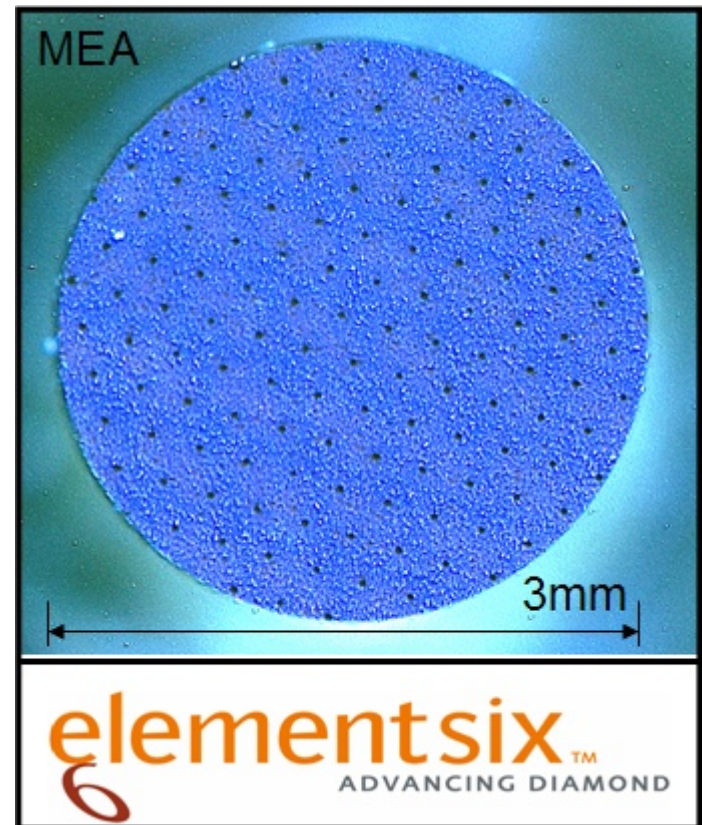
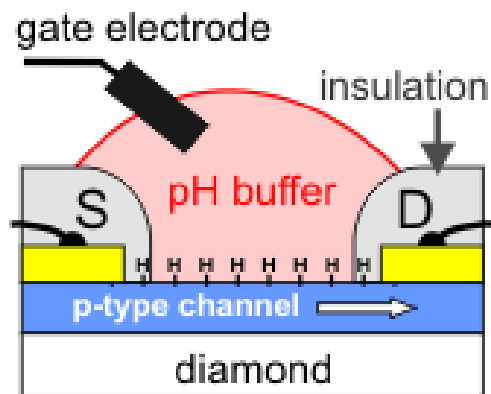


Where are we heading...

- Evaluating different business models on commercialization of diamond detectors and sensors to provide a reliable route to market.
- Focus on surface preparation, thin plates and larger areas..
- Identifying standard detector products (substrates, die & packaging)
- Review material/production costs and delivery with increased demands and potential large area applications.
- Customers asking for custom metallization and packaging, looking at how we can best serve these requests.
- Focus on market opportunities within the HEP and Industrial applications.
- *To be the world wide supplier of choice for diamond based detectors and sensors*

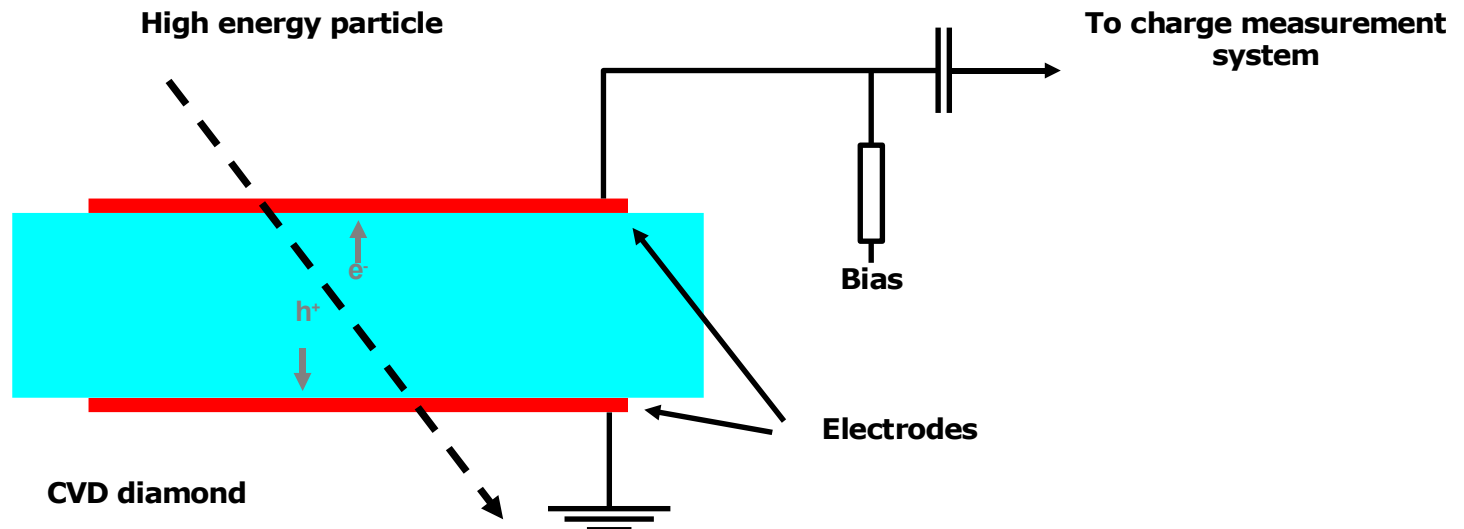
Sensor Applications

- **Electro-chemical sensors (MEA, trace element analysis)**
- **PH-Sensors**
- **Temperature-Sensors**
- **Conductivity**

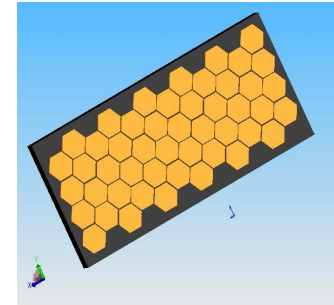
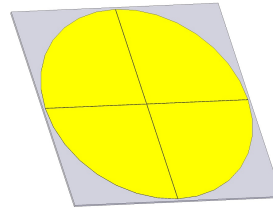
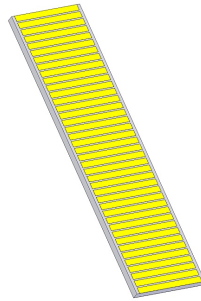
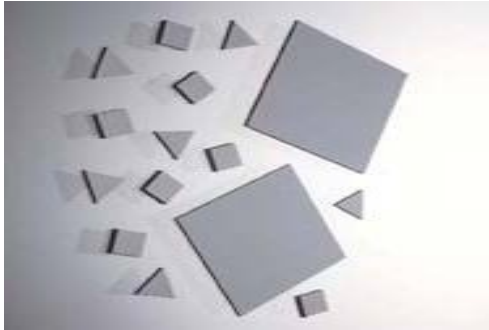


Detector applications under review

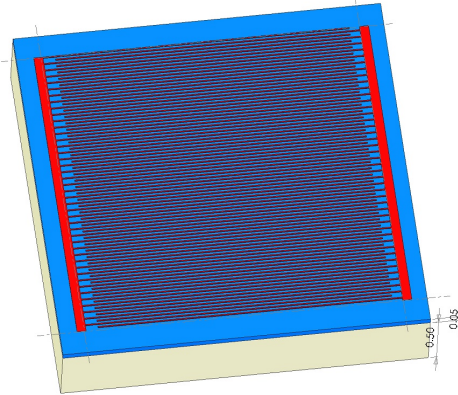
- HEP :- High Energy Physics Community.
- UV (<220nm) :- Photolithography, Flame, Military Application
- Alpha /Beta :- Air Flow, Nuclear Waste Incineration, Military.
- Neutrons :- Mobile Reactor Monitoring, Military Dosimeters
- X-rays :- Health Physics (High Flux Applications)



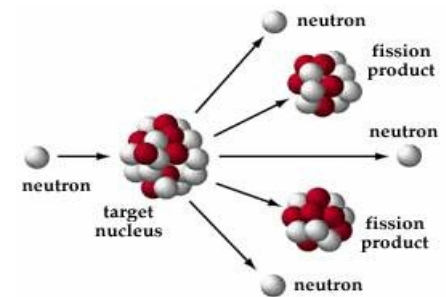
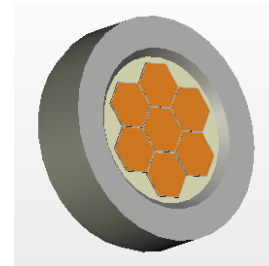
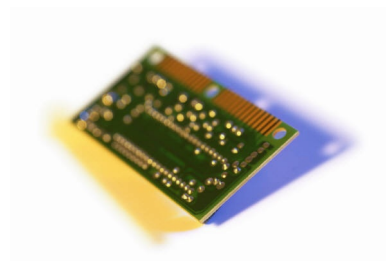
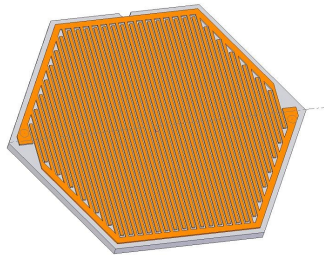
HEP – Physics Community. Detector material Single Crystal and Polycrystalline. Quadrant Detectors and Strip Detectors.



General Purpose Diamond Detector (Flame, UV) in T08 or BNC Package.



Alpha/Beta/Neutron Detectors and modules.



End of Presentation