



## RF Systems, Embedded Processing, Devices & Materials

### Sidlaw Auditorium (Level +2)

Session Chairmen  
Tony Kinghorn (SELEX S&AS), Bryan Rickett (Roke Manor Research), Richard Lang (FiltronIQ), Iain Anderson & David Bruce (DSTL)

#### Day 1 - Thursday 13th July 2006

<b>8:00</b>	Registration in Strathblane Hall and Coffee in the Cromdale Hall (Level -2)	
<b>9:00</b>	Welcome Address in the Sidlaw Auditorium (Level +2)	
<b>9:15</b>	Non-Linear SAR	Mr. G. J. Vigurs (Sula Systems Ltd)
<b>9:40</b>	SS-BAR with Transmitted Opportunity Development Practical Aspects	Prof. M. Chemiakov (University of Birmingham)
<b>10:05</b>	Sea Spikes and Radar False Alarm Rates	Dr. K. D. Ward (TW Research Ltd)
<b>10:30</b>	Coffee/Tea Break in Cromdale Hall	
<b>10:55</b>	Adaptive Spatio-Temporal-Doppler CFAR & Multiple-Hypothesis Tracking System	Dr. E. J. Hughes (Cranfield University)
<b>11:20</b>	Perspective Aperture Dependency of Netted Radar Target Classification	Mr. M. Vespe (University College London)
<b>11:45</b>	Airborne Bistatic SAR-ATR: A Case Study	Mr. A. Kumar Mishra (Edinburgh University)
<b>12:10</b>	Evaluation of Netted Radar Performance	Miss. Yu Teng (University College London)
<b>12:35</b>	Lunch Break in Cromdale Hall	
<b>13:20</b>	Advances in Diamond MESFETs	Dr. M. Schwitters (Element Six Ltd)
<b>13:45</b>	X Band GaN Power Devices on Si Substrates	Dr. J. Wallis (QinetiQ)
<b>14:10</b>	Optimisation of High Temperature Performance and Reliability of GaN HFETs	Prof. P. A. Houston (Sheffield University)
<b>14:35</b>	Present Status of the Compact EM THz Source	Prof. A.I. Al-Shammara (Liverpool John Moores University)
<b>15:00</b>	Coffee/Tea Break in Cromdale Hall	
<b>15:25</b>	Novel Multi-Layer Packaging Techniques for High Density and High	Mr. R. Wormald (FiltronIQ)
<b>15:50</b>	High-Power Module Integrated into LTCC Package	Mr. M. Lanti (VTT Electronics)
<b>16:15</b>	Compact Left-Handed Filters	Dr. Z. Hu (Manchester University)
<b>16:40</b>	Reception and Networking in the Cromdale Hall	

#### Day 2 - Friday 14th July 2006

<b>8:45</b>	RF MEMS Switches with Magnetic Actuation	Prof. R. E. Miles (Leeds University)
<b>9:10</b>	Synthesis of Microwave Filters with Finite Dissipation Loss	Prof. I. Hunter (Leeds University)
<b>9:35</b>	Microwave PHEMT Frequency Dividers	Miss. Z. Heshmati (Leeds University)
<b>10:00</b>	Microwave Self Adaptive Filters and Set-On Oscillators	Mr. S. Middleditch (Leeds University)
<b>10:25</b>	Coffee/Tea Break in Cromdale Hall	
<b>10:50</b>	Compact Inductors and Baluns Using Multilayer Technology	Prof. A. Rezaeadeh (Manchester University)
<b>11:15</b>	Performances of Linearised GaAs Electro-Optic Modulators for High Dynamic Range RF	Dr. J. Heaton (FiltronIQ)
<b>11:40</b>	Compact, Low Cost Direction Finding, Using Time to Digital Converters	Ms. M. Kelly (ESL Defence Ltd)
<b>12:05</b>	Lunch Break in Cromdale Hall	
<b>12:50</b>	Multiprocessor Memory and IPC Efficiency and FPGA Operation Multiplexing Techniques for Sensor Systems	Mr. W. I. Lundgren (GEDAE)
<b>13:15</b>	Dynamic Range Enhancements in Radar Systems	Mr. B. Harker (Roke Manor Research Ltd)
<b>13:40</b>	Superresolution for HF Radar: Comparison of Performance with Simulated and Real Radar Data	Mr A. D. Chadwick (Roke Manor Research Ltd)
<b>14:05</b>	Coffee/Tea Break in Cromdale Hall	
<b>14:30</b>	Change Characterisation with Coherent SAR Data	Dr. P. Wright (BAE SYSTEMS ATC)
<b>14:55</b>	The Enhancement of Interrupted SAR Imagery	Dr. R. J. A. Tough (TW Research Ltd)
<b>15:20</b>	Netted Forward Scattering Micro Sensors for Ground Targets	Prof. M. Chemiakov (University of Birmingham)
<b>15:45</b>	Radar NCTR Using Non-Radar Referents	Dr. R. Miller (BAE SYSTEMS ATC)
<b>16:10</b>	Coffee and Networking in the Cromdale Hall	

## EO Systems, Embedded Processing, Devices & Materials

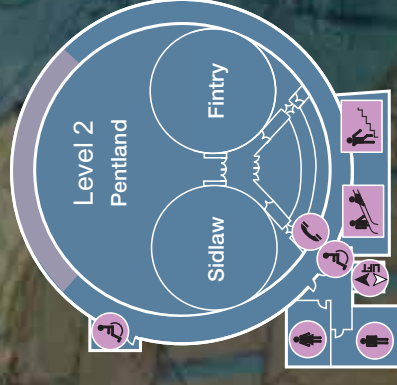
### Fintry Auditorium (Level +2)

Session Chairmen  
Stuart Duncan (SELEX S&AS), Stephen McGeoch (Thales), Richard Hollins & Tom McCutcheon (DSTL)

Registration in Strathblane Hall and Coffee in the Cromdale Hall (Level -2)	
Welcome Address in the Fintry Auditorium (Level +2)	
Pulsed Laser Systems for 3D Active Imaging	Prof. D. Reid (Heriot-Watt University)
OPO Routes to a Broadband 1.5um Source for Speckle Reduction in BIL	Dr. J. A. C. Terry (University of St Andrews)
Hybrid Fibre-Bulk Erbium Laser	Prof. A. Clarkson (Southampton University)
Coffee/Tea Break in Cromdale Hall	
Self-Optimising Sensors and Sources for Remote Sensing	Prof. M. J. Damzen (Imperial College London)
Intracavity Adaptive Optics Control of Lasers	Dr. D. Burns (Strathclyde University)
Enhanced Signal-to-Noise in Coherent Lidar Using a Multimode Local Oscillator	Prof. R. M. Jenkins (QinetiQ)
Coherent System Tests of Experimental Retroreflectors with Very Wide Field of View	Dr. V. Handerek (BAE SYSTEMS ATC)
Lunch Break in Cromdale Hall	
Fabrication of a 16um Pixel Pitch CdHg Te Infrared Detector by Inductively Coupled Plasma Etching	Mr. C. Shaw (SELEX S&AS Ltd)
Multi-Colour MCT Infrared Detectors	Dr. L. Hipwood (SELEX S&AS Ltd)
High Performance Quantum Dot-Infrared Photodetectors Using Dots-in-a-well (DWELL)	Mr. P. Avalliotis (Sheffield University)
Mid-IR Avalanche Photodiodes	Dr. C. Hing Tan (Sheffield University)
Coffee/Tea Break in Cromdale Hall	
Temporal Sensors for Long Range Target Recognition and Identification	Dr. J. Lees (QinetiQ)
Enhanced Electro-Optic Wavelength Converters Using Slow Light	Dr. R. M. Langdon (BAE SYSTEMS ATC)
An Electrically Driven Solid State Modulator	Dr. C. Yew Lee (Southampton University)
Reception and Networking in the Cromdale Hall	

Broadband Efficiency Improvements in Infrared Diffractive Optics	Mr. A. P. Wood (OloptIQ Ltd)
Synthesis Imaging	Prof. A. H. Greenaway (Heriot Watt University)
Waveband Choice and Systems Architectures for Optical Aperture Synthesis	Dr. R. S. Hall (QinetiQ)
Applications of Microstructured Fibre Technology in Aerospace and Defence	Dr. E. J. O'Driscoll (BAE SYSTEMS ATC)
Coffee/Tea Break in Cromdale Hall	
Photonic Bandgap Fibres for Broadband Transmission of SWIR Wavelengths	Dr. M. N. Petrovich (Southampton University)
Hyperspectral Algorithm Development for Military Applications: A Multiple Fusion Approach	Dr. P. Yuen (BAE SYSTEMS ATC)
Hyperspectral Anomaly Detection and Un-Mixing in Fat-Tailed Clutter	Dr. O. Watkins (Waterfall Solutions Ltd)
Lunch Break in Cromdale Hall	
Scene Based Atmospheric Correction Methods for LWIR Hyperspectral Sensors	Dr. O. Thomas (Thales Optronics Ltd)
Fit-For-Purpose Assessment of Hyperspectral Simulated Imagery	Dr. M. A. Watson (BAE SYSTEMS ATC)
Strategic Hyperspectral Detection Through Sonic Transformation	Dr. M. Bernhardt (Waterfall Solutions Ltd)
Coffee/Tea Break in Cromdale Hall	
Active Spectral Imaging for Target Detection	Dr. G. Bishop (BAE SYSTEMS ATC)
A Robust Vision System for Vehicles	Dr. C. G. Harris (Roke Manor Research Ltd)
Video Motion Anomaly Detection for Military Applications	Mr. R. J. Evans (Roke Manor Research Ltd)
Optical Testbed for Hybrid Optoelectronic Vector Matrix Processor for Radar Signal Processing	Dr. V. Handerek (BAE SYSTEMS ATC)
Coffee and Networking in the Cromdale Hall	

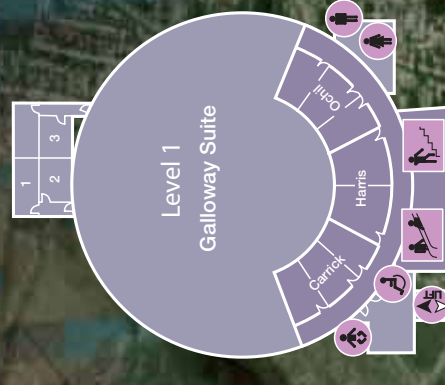
# Orientation Guide



Pentland: SEAS DTC Plenary Sessions

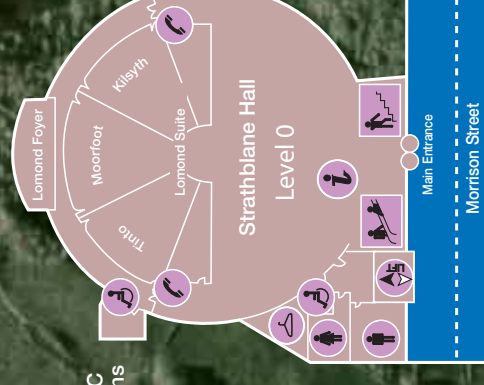
Fintry: EMRS DTC EO Systems, Embedded Processing, Devices & Materials

Sidlaw: EMRS DTC RF Systems, Embedded Processing, Devices & Materials



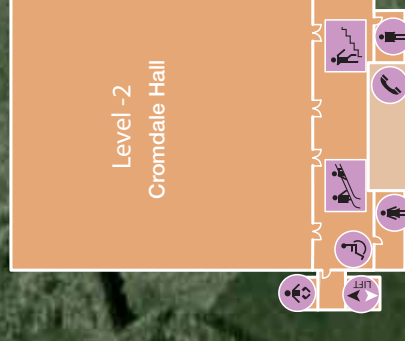
Galloway Suite: Product Demonstrations

Details available on: [www.emrsdtc.com/conferences/2006/exhibitors.htm](http://www.emrsdtc.com/conferences/2006/exhibitors.htm)



Lomond Suite: SEAS DTC Research Theme Sessions

Strathblane Hall: Registration



Cromdale Hall: Exhibition, Catering & Networking Reception

Details available on: [www.emrsdtc.com/conferences/2006/exhibitors.htm](http://www.emrsdtc.com/conferences/2006/exhibitors.htm)

Close