

SHORT COURSE

# Modern Antenna Range Measurements

16–18 November 2016

This course will provide an introduction to all aspects of modern antenna range measurements including an introduction to antennas, far-field antenna measurements, compact ranges, planar, cylindrical and spherical near-field testing.

The speakers are Professor Clive Parini, Dr Daniël Janse van Rensburg and Dr Stuart Gregson who are co-authors of the research text *Theory and Practice of Modern Antenna Range Measurements*.

## Course outline

### DAY 1 WEDNESDAY 16 NOVEMBER 2016

09:15 **Antenna Fundamentals**

10:15 **Intro to Antenna Measurements & Far-Field**

11:15 Break

11:30 **Compact Antenna Test Ranges**

13:30 Lunch

14:15 **Coordinate Systems & Polarization Bases**

15:15 Break

15:30 **Planar Near-Field Theory**

17:00 Close

### DAY 2 THURSDAY 17 NOVEMBER 2016

09:00 **Cylindrical Near-Field Theory**

10:45 Break

11:00 **Low Gain and Body-centric Measurements**

12:00 Lunch

13:00 **Spherical Near-Field Theory**

14:30 Break

14:45 **Gain and Efficiency Measurement**

15:45 **Tour of Antenna Lab & Hardware Demo**

17:00 Close

### DAY 3 FRIDAY 18 NOVEMBER 2016

09:00 **Range Assessments & Error Budgets 1**

10:30 Break

10:45 **Range Assessments & Error Budgets 2**

11:45 **Advanced Antenna Measurement Topics 1**

12:45 Lunch

13:30 **Advanced Antenna Measurement Topics 2**

14:45 **RF Subsystems & Instrumentation**

15:45 Break

16:00 **Probes & Feeds for Antenna Measurements**

17:00 Close

Course sponsors:



This course is intended for researchers, practicing engineers and technicians who want to obtain a better understanding of antenna measurement concepts, theory and techniques.

**Fee: £1800**

(excluding VAT) per person.

This course will be held at *Burleigh Court International Conference Centre*, Loughborough, UK. Loughborough is located at the centre of the UK and is just a 15 minute drive from the East Midlands Airport or 1h:15min by train from London. With its 4 Star on-site accommodation, Burleigh Court provides a convenient, comfortable and friendly environment for delegates to study.

**Prof. Clive Parini** is Professor of Antenna Engineering at Queen Mary University of London. He has published over 400 papers on research topics including array mutual coupling, array beam forming, antenna metrology, antennas for mobile and on-body communications, millimetrewave compact antenna test ranges, millimetrewave integrated antennas, quasi-optical systems and antenna applications for metamaterials. He is a Fellow of the Royal Academy of Engineering and has published two texts on antenna measurements.

**Dr Daniël Janse van Rensburg** has been involved in the design and implementation of antenna test systems worldwide for the past 30 years and has published many technical papers on near-field and compact range systems. His particular field of interest is measurement error analysis & modeling. He is a Fellow of AMTA, a Senior Member of the IEEE, and a Licensed Professional Engineer in Ontario. Since 1997 he has worked as Applications Engineering Consultant for Nearfield Systems Inc, Torrance, California, USA. He is also an adjunct professor at the University of Ottawa.

**Dr Stuart Gregson** is FIET, FInstP, CEng, CPhys, has BSc and MSc degrees in physics from the University of Portsmouth, and a PhD from Queen Mary University of London. He has been working in the field of antenna design and antenna measurement for the space and aerospace industries for nearly 20 years. He has special experience with near-field antenna measurements, electromagnetic scattering, computational electromagnetics and installed antenna performance prediction.

## REGISTRATION FORM

# Modern Antenna Range Measurements

16–18 November 2016

Burleigh Court International Conference Centre,  
Loughborough, UK

Course sponsors:



Please register:

NAME	
JOB TITLE	
COMPANY/ ORGANISATION	
POSTAL ADDRESS	
TELEPHONE	
FAX	
EMAIL	

## Joining instructions

Please scan / complete this registration form and return by email to: Simon Young (info@frequensys.co.uk).

Alternatively just email your details to the same address. For multiple attendees, please duplicate this form.

## Payment

Registrants will receive an invoice. Payment needs to be made in full by 10th October 2016 via cheque or bank transfer.

Cheques should be made payable to **Frequensys Limited** and posted to Unit 51, Harley Road, Sheffield S11 9SE.

Bank transfer: Frequensys Limited  
Sort code: 60-02-13  
Account number: 62198122  
Please reference any payments with registrant surname.

## Course information

### WEBSITE

[www.frequensys.co.uk/news\\_1605.html](http://www.frequensys.co.uk/news_1605.html)

### REGISTRATION DEADLINE

10th October 2016.

### FEE

£1800 (excluding VAT) per person.

### LOCATION

Burleigh Court International Conference Centre, Loughborough, UK

### FURTHER INFORMATION

Dr Stuart Gregson  
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### Cancellation Policy:

This short course is presented by Antenna Measurement Consultants (AMC) in collaboration with Frequensys Ltd. Cancellations without penalty are allowed until 12.00 noon GMT on 10th October 2016. After that date, cancellations will incur a £350 administration charge. AMC/Frequensys reserve the right to cancel the event due to unforeseen circumstances. If this occurs, notification will be sent by email no later than the 17th of October 2016 and all registrants will be offered either a full refund or transfer (re-scheduling) to another event.