LIST OF PUBLICATIONS

Books

Textbook (invited, peer reviewed)


Book Chapters (invited, peer reviewed)


Journals

Review Articles (invited, peer reviewed)


**Original Research Articles**


Published Conference Proceedings


Patents and Patent Applications:


LIST OF KEYNOTES, TALKS AND CONFERENCE PRESENTATIONS

1) "Survival through Poison - Defence Mechanisms in Plants"
17.05.1990; The South African Chemical Institute, Western Province Section; Meeting of Young Chemists, Cape Town, South Africa

2) "Alternative Acidic Modifiers in HPLC Analyses"
12.06.1990; ChromSA, The Chromatography Subject Section of the South African Chemical Institute CHROMSA, Western Cape Section, Research Institute for Nutritional Diseases, Tygerberg Hospital Campus, South Africa

3) "Turgorins - A New Class of Phytohormones? The Chemical Power of Plant Movement"
13.06.1990; Colloquium of the Department of Plant Physiology, University of Stellenbosch, South Africa

4) "The Chemistry of Mimosa pudica L., a specific moving plant species"
21.11.1990; The South African Chemical Institute, Western Province Section, Meeting of Young Chemists, Stellenbosch, South Africa

5) "Turgorine - neue Phytohormone oder Phytotransmitter?"
03.09.1991; Kolloquium des Bereichs Naturstoffchemie, Institut für Biochemie der Pflanze, Akademie der Wissenschaften, Halle/Saale, Germany

6) "Konformationsänderung und intramolekulare Beweglichkeit von vollständig derivatisiertem β-Cyclodextrin"
20.08.1991; Seminar von Prof. Dr. K. Krohn, Universität und Gesamthochschule Paderborn, Germany

7) "Biochemical Applications of GC - Combustion - Isotope Ratio Mass Spectrometry"
21.09.1993; ChromSA, The Chromatography Subject Section of the South African Chemical Institute CHROMSA, Western Cape Section, Research Institute for Nutritional Diseases, Tygerberg Hospital Campus, South Africa

8) "Ein- und zwei-dimensionale NMR-Untersuchungen an alkylierten β-Cyclodextrinen"
09.02.1994; Seminar von Prof. Dr. W. A. König, Organisch-Chemisches Institut, Universität Hamburg, Germany

9) "Neue Techniken der Spurenanalyse mit modifizierten Cyclodextrinen und GC-C-IRMS"
05.05.1994; Wissenschaftliches Kolloquium am Institut für Lebensmittelchemie, Prof. Dr. A. Mosandl, Universität Frankfurt, Germany

10) "Comparing GC-C-IRMS to GC-MS in Determining $^{13}\text{C}/^{12}\text{C}$ Ratios of Short-Chain Ketocarbonylic Acids in Plasma"
07.-08.07.1994; Stable Isotopes in Nutritional and Metabolic Research, 2nd World Conference, Erasmus University, Rotterdam, The Netherlands; conference presentation (reviewed).

11) "Bestimmung der $^{13}\text{C}$-Anreicherung mittels konventioneller GC-MS versus GC-C-IRMS: Erste Ergebnisse einer vergleichenden Studie"
06.10.1994; Jahrestagung der Arbeitsgemeinschaft Stabile Isotope ASI, Kernforschungszentrum Jülich, Germany; conference presentation (reviewed).
12) "Simultaneous Determination of $^{13}$C Isotopic Enrichment and Recording of Mass Spectra in one Gas Chromatographic Analysis"

13) "Isotopic Fractionation: the devils you know and the ones you don’t"
10.-12.01.1996; Second Annual Conference - Stable Isotope Mass Spectrometry Users Group SIMSUG, University of Wales - Bangor, Llandudno, United Kingdom; conference presentation.

14) "Eine Methode zur internen Isotopenkalibrierung"
02.10.1996; Jahrestagung der Arbeitsgemeinschaft Stabile Isotope ASI, Humboldt-Universität zu Berlin, Berlin, Germany; conference presentation (reviewed).

15) "A Reference Gas Inlet Module for Internal Isotopic Calibration in Continuous Flow - IRMS"
07.-08.01.1998; Third Annual Conference - Stable Isotope Mass Spectrometry Users Group SIMSUG, NERC Isotope Geosciences Laboratory - Nottingham, United Kingdom; conference presentation.

16) "The Flapjack: A ready-to-use, convenient and palatable test meal to assess gastric emptying of solids non-invasively via a breath test using $[^{13}C-1]$-sodium acetate as a probe - preliminary results."
28.-29.06.1999; BIOMED - SIGN Meeting, Royal Hospital for Sick Children, Yorkhill, University of Glasgow, United Kingdom; conference presentation.

17) "Practical and meaningful breath tests for clinicians: Wishful thinking or reality?"
08.10.1999; Yorkhill Research Seminar - "Early Origins of Health and Disease"; Royal Hospital for Sick Children, Yorkhill, University of Glasgow, United Kingdom.

18) "The Flapjack: A Convenient Test Meal to Assess Gastric Emptying of Solids Using a $[^{13}C-1]$-Sodium Acetate Based Breath Test"
18. - 19.01.2000; Annual Conference of SIMSUG, Insitute of Terrestrial Ecology, Merlewood Research Station, Grange-over Sands, United Kingdom; poster presentation.

19) "The Chromatographic Side of High-Precision GC-C-IRMS"
23.02.2000; SUERC Research Seminar; Scottish Universities Environmental Research Centre; East Kilbride, United Kingdom.

20) "A test meal suitable for measuring gastric emptying of solids by means of a $[^{13}C-1]$-sodium acetate breath test."

21) "A novel $^{13}$CO$_2$ breath test for the non-invasive assessment of synthetic liver function in-vivo"
16. - 17.01.2001; Annual Conference of SIMSUG, Scottish Universities Environmental Research Centre, University of Glasgow, Glasgow, United Kingdom; conference presentation.

22) "A novel $^{13}$CO$_2$ breath test for the non-invasive assessment of synthetic liver function in-vivo"
18. - 21.03.2001; Annual Meeting of the British Society of Gastroenterology, Glasgow, United Kingdom; poster presentation (reviewed).
23) "GC/C-IRMS: Potential and Pitfalls"
08. - 12.09.2001; Invited keynote lecture for the SIGN Symposium at the 2001 ESPEN Conference; Munich, Germany.

24) "Potential and Pitfalls of GC/C-IRMS"
25.10.2001; Invited talk for the "Biomedical Mass Spectrometry Unit Research Day" at the University of Newcastle, Newcastle, United Kingdom.

17. - 19.12.2001; Biochemical Society meeting, York, United Kingdom; conference presentation (reviewed).

17. - 19.12.2001; Physiological Society meeting, York, United Kingdom; poster presentation (reviewed).

17. - 19.12.2001; Physiological Society meeting, York, United Kingdom; conference presentation (reviewed).

28) "Direct, Functional and Non-Invasive Tests for Assessing Human Physiology and Metabolism in vivo".
31.08. - 01.09.2002; SIGN/EUROSTARCH meeting, Glasgow, United Kingdom; conference presentation.

29) "GC/C-IRMS: Potential and Pitfalls"

30) “Sample Conversion at Temperatures well below Dumas-type Combustion for Compound Specific Isotope Analysis”
14. - 16.04.2003, Annual Conference of SIMSUG, School of Chemistry, University of Bristol, Bristol, United Kingdom; conference presentation.

31) “Can hypnosis be used to induce nausea and is this associated with delayed gastric emptying?” L.A. Houghton, C. Fell, W. MEIER-AUGENSTEIN, H.F. Kemp, P. Cooper, C.L. Lawrie, P.J. Whorwell, J. Morris.
21. - 24.03.2004; Annual Meeting of the British Society of Gastroenterology, Glasgow, United Kingdom; poster presentation (reviewed).

32) “Forensic Applications of Stable Isotope Technologies”
30.08. - 03.09.2004; Joint European Stable Isotope Users’ Meeting (JESIUM), IAEA, Vienna; conference presentation.
33) “Forensic Stable Isotope Signatures from Biological and Non-Biological Materials”
08.03. – 10.03.2005; 2nd International Forensic Isotope Ratio Mass Spectrometry (FIRMS) Network Conference, DSTL, Fort Halstead; conference presentation.

08.03. – 10.03.2005; 2nd International Forensic Isotope Ratio Mass Spectrometry (FIRMS) Network Conference, DSTL, Fort Halstead; poster presentation.

08.03. – 10.03.2005; 2nd International Forensic Isotope Ratio Mass Spectrometry (FIRMS) Network Conference, DSTL, Fort Halstead; poster presentation.

08.03. – 10.03.2005; 2nd International Forensic Isotope Ratio Mass Spectrometry (FIRMS) Network Conference, DSTL, Fort Halstead; poster presentation.

37) “Forensic Application of Stable Isotope Signatures”
31.03 – 02.04.2005; invited presentation for the 7th annual conference of the British Association of Human Identification (BAHID), University College Dublin (ROI).


10.04. - 13.04.2005; Annual Conference of SIMSUG, hosted by the Stockholm Environment Institute and the Environment Department at the University of York; poster presentation.

10.04. - 13.04.2005; Annual Conference of SIMSUG, hosted by the Stockholm Environment Institute and the Environment Department at the University of York; poster presentation.

10.04. - 13.04.2005; Annual Conference of SIMSUG, hosted by the Stockholm Environment Institute and the Environment Department at the University of York; poster presentation.

42) “Isotope Analysis of Safety matches“; Farmer, N.L.*, Meier-Augenstein, W., Kalin, R.M.
21.08. – 26.08.2005; ‘Justice through Science’, 17th Triannual Conference of the International Association of Forensic Sciences, (IAFS 2005), Hong Kong; poster presentation.

20 –25 May 2006; Digestive Disease Week, Los Angeles Convention Centre (USA).
44) “Stable Isotope Profiling – A New Powerful Tool for Forensic Science and Human Identification?”
13 – 16 June 2006, Keynote presentation at the 4th International Conference of the European Academy of Forensic Science (EAFS), Helsinki (Finland).

03 – 06 July 2006; Annual Meeting of The Association of Coloproctology of Great Britain and Ireland, Gateshead (UK).

46) “Forensic Isotope Ratio Mass Spectrometry”
15 March 2007, invited presentation at an one day RSC and SCI joint event on ‘Modern Techniques in Forensic Analysis’ hosted by the Dublin Institute of Technology, Dublin, ROI.

47) “Human Identification: It’s Elemental”
12 – 14 April 2007, opening Keynote presentation at the 9th International Conference of the British Association for Human Identification (BAHID, University of Surrey, Guildford (UK).

48) “SIF – Stable Isotope Fingerprinting”
26 – 29 November 2007; Keynote address at the 3rd International Conference on Forensic Isotope Ratio Mass Spectrometry (FIRMS), University of Otago, Dunedin, New Zealand.

49) “A potentially compounding factor affecting $^2$H isotope analysis of explosives by TC/EA-IRMS (and nitrogen rich compounds in general)”
26 – 29 November 2007; oral presentation at the 3rd International Conference on Forensic Isotope Ratio Mass Spectrometry (FIRMS), University of Otago, Dunedin, New Zealand.

50) “Emerging Use of Isotope Ratio Mass Spectrometry as a Tool for Discrimination of MDMA by Synthetic Route”

51) “Emerging Use of Isotope Ratio Mass Spectrometry as a Tool for Discrimination of MDMA by Synthetic Route”

52) “Emerging Use of Isotope Ratio Mass Spectrometry as a Tool for Discrimination of MDMA by Synthetic Route”

53) “Emerging Use of Isotope Ratio Mass Spectrometry as a Tool for Discrimination of MDMA by Synthetic Route”
54) “IRMS Potential in a Forensic Context: An MDMA Profiling Example”

55) “IRMS Potential in a Forensic Context: An MDMA Profiling Example”

56) “Field scale spatial distribution of soil δ^{13}C and δ^{15}N under permanent grassland”

57) “The hydrological response of heavy clay soils to rainfall as assessed using δ^{2}H”
poster presentation; R Bol, S Granger*, W Meier-Augenstein, H Kemp, BMSS/SIMSUG 2009, Glasgow, Scotland, UK, Jan 14/15, 2009

58) “Butyrate Metabolism in Quiescent Ulcerative colitis”

59) “Human Provenancing: It’s Elemental”
19 - 24 April 2009, Keynote presentation at the EGU General Assembly 2009, Vienna, Austria.

60) “CSI – Crime & Stable Isotopes”
30 August – 2 September 2009, opening Plenary presentation at the International Mass Spectrometry Conference (IMSC) 2009, Bremen, Germany.

61) “Human Provenancing Based on Stable Isotope Forensic Intelligence”
08 – 11 September 2009, oral presentation at the EAFS Conference 2009, Glasgow, UK.

62) “An investigation into the power of IRMS to discriminate batches of MDMA by synthetic route”

63) “CSI – Crime & Stable Isotopes”
17 March 2010, Plenary lecture at the AGM of the Royal Society Chemistry Analytical Division – Scotland, Aberdeen, UK.

64) “Isotopic evidence for the provenance and turnover of organic carbon by soil microorganisms in the Antarctic dry valleys.”

65) “^{2}H stable isotope analysis of human tooth enamel: a new tool to extract forensic information from human remains?”
66) “Stable Isotopes and Human Provenancing”

67) “Human Provenancing: It’s Elemental…Aiding Victim Identification through Stable Isotope Records of Diet and Geographic Provenance in Human Remains”

68) “Stable Isotope Profiles from a Lock of Hair Provide Information of Illegal People Trafficking Route used by a Vietnamese Organised Crime Group”

69) “From the mountains to the sea: stable isotope data on animals and humans in Mesolithic Cantabria, northern Spain”

70) “2H stable isotope analysis of human tooth enamel: a new tool to extract forensic information from human remains?”

71) “Hydrogen, Oxygen and Strontium isoscapes for provenancing in Europe”

72) “A New Approach to Calculating the Non-exchangeable 2H Isotopic Composition of Hair and the Procedural Fractionation Factor by Treating the Molar Exchange Fraction as a Process Related Variable”
04 – 08 April 2011, oral presentation, Wolfram Meier-Augenstein*, Jurate Landwehr and Helen Kemp: EGU General Assembly 2011, Vienna, Austria

73) “2H Stable Isotope Analysis of Human Tooth Dentine: A Pilot Study”

74) “Detection of Counterfeit Scotch Whisky by 2H and 18O Stable Isotope Analysis to Determine Provenance.”
04 – 08 April 2011, poster presentation, Wolfram Meier-Augenstein*, Helen Kemp and Susie Fawley: EGU General Assembly 2011, Vienna, Austria
75) “Stable Isotope Profiles from a Lock of Hair Provide Information of Illegal People Trafficking Route used by a Vietnamese Organised Crime Group.”
04 – 08 April 2011, poster presentation, Wolfram Meier-Augenstein*, Helen Kemp, Ian Brewster, and Geoff Ronayne: EGU General Assembly 2011, Vienna, Austria

76) “Forensic identification of the anthropogenic contribution of fatty alcohols to the environment by stable isotope analysis.”

77) “Irish case report on the multidisciplinary approach towards identification of a human skull recovered from the sea.”
09 April 2011, oral presentation, Kealy, Gerard*; Gapert, René; Buckley, Laureen; Cassidy, Marie; McNulty, Jonathan; Wright, Richard; Foyle, Robin; Meier-Augenstein, Wolfram; Kemp, Helen; Wilkinson, Caroline; Rynn, Christopher; Clifford, Stephen: BAHID conference 2011, Manchester, UK.

78) “Investigation into Mummies from the Atacama Desert, Chile: Did they suffer from arsenic poisoning?”

79) “$^2H$ Stable Isotope Analysis of Human Tooth Dentine: A Pilot Study”
25 – 26 September 2011, poster presentation, Anastasia Holobinko*, Wolfram Meier-Augenstein, Helen Kemp, Tracey Prowse and Henry Schwarcz: Isoscapes 2011, Discovery Park, Purdue University, West Lafayette, USA.

80) “Tackling the forensic analytical challenges associated with the global increase in seizures of cathinone-derived ‘legal highs’”
28 August – 1 September 2011, oral presentation, Oliver Sutcliffe*, Niamh Nic Daeid, Wolfram Meier-Augenstein and Helen Kemp: 242nd National Meeting & Exposition of the American Chemical Society (ACS), Denver, Colorado, USA.

81) “Human Provenance and Drug Profiling based on Stable Isotope Signatures”
10 December 2011, invited presentation: “Sex, Drugs and …”, one-day conference of the Forensic Science Society, Aberdeen, UK.

82) “Investigating the origin of cotton in yarn using multivariate isotope profiles“

83) “The First Detailed $^2H$ and $^{18}O$ Isoscapes of Freshwater in Scotland”

84) “Multivariate Stable Isotope Analysis to Determine Linkages between Benzocaine Seizures”
85) “Determination of geographic provenance of cotton fibres using multi-isotope profiles and multivariate statistical analysis”

86) “Rising to the Forensic Analytical Challenges Associated with the Global Increase in Seizures of Cathinone-derived ‘Legal Highs’”

87) “Methylamphetamine synthesized from cold medication as precursor source via two different routes show significantly different stable isotope signatures”


89) “The Efficacy of Isotope Ratio Mass Spectrometry to Link Precursor to Final Products in the Cathinone-derived ‘Legal High’ Drugs.”

90) “Profiling methylamphetamine synthesized using precursors extracted from proprietary cold medication via the "Hypo and Moscow" route – part 2: IRMS.”

91) “Geographical provenancing of cotton fibres using multi-isotope profiles.”

92) “Ten Years of “Forensic” Stable Isotope Analysis: The Good, The Bad and The Ugly”
03 – 07 September 2012, Keynote presentation for Session 9 at the Joint European Stable Isotope User Meeting (JESIUM) 2012, Umweltforschungszentrum (UFZ) Leipzig, Germany.

93) “Stable Isotope Forensics: provenancing Pharmaceuticals, Drugs and People”