



Welcome to the FIRMS December 2017 newsletter. In this update issue we provide a summary of this years papers of interest, highlight upcoming events to put into your calendar ready for the new year and provide the main news headlines from around the FIRMS community. . . .

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Steering Group News

Following on from the successful FIRMS Network Conference in 2016, the wheels have been set in motion to provide the next installment. The 7th FIRMS Network Conference will take place in the week starting 16th September 2019 and will be hosted by the Fondazione Edmund Mach, Italy. Please save the date, we would love to see you there.

Publication of the 2nd edition of the FIRMS Good Practice Guide has been slightly delayed while we await an announcement from the CIAAW regarding LSVEC and the consequent changes to recommendations for reporting carbon isotope delta values. We expect this to be coming soon!

If you have any upcoming events, publications or relevant news items please send us an email (news@forensic-isotopes.org) or get in touch via the [FIRMS Network LinkedIN group](#).

The FIRMS Steering group currently consists of: Phil Dunn (Chair, LGC); Jim Carter (Director, Queensland Health Forensic and Scientific Services); Sean Doyle (Quality Manager, Director & Secretary, Linked Forensic Consultants Ltd); Federica Camin (FEM); Lesley Chesson (IsoForensics); Max Coleman (NASA Jet Propulsion Laboratory, Caltech); Kylie Jones (Membership Secretary, Australian Federal Police); Gerard van der Peijl (Netherlands Forensic Institute); Rob Posey (Communications Officer, Food Forensics); Helen Salouros (National Measurement Institute, Australia); Thomas Schaefer (Bundeskriminalamt); Libby Stern (FBI); David Widory (University of Quebec in Montreal), Wee Chuan Yeo (Health Sciences Authority, Singapore) and Stewart Walker (Flinders University).

News Headlines

LSVEC has been demonstrated to be unsuitable as a scale defining reference material for carbon isotope delta values given that it is unstable with time and is sensitive to storage, handling and measurement conditions. We are awaiting guidance from CIAAW in the near future regarding what to do from now on and this will be included in the good practice guide.

FIRMS steering group members published a paper in July this year providing recommendations for the minimum requirements for [method validation](#).

The use of IRMS for hazardous materials such as explosives has been in the press again this year increasing public knowledge of the technique. FIRMS member John Howa was featured in [Lab Manager](#).

Food fraud continues to be a hot topic, and IRMS continues to be an important tool for its detection. A study by the [EC Joint Research Council](#) this year used IRMS to test the authenticity of retail honeys and concluded that over 14 % of samples tested showed signs of adulteration.

FIRMS members at [QHFSS](#) and [AFP](#) are working together to standardise methods of analysis, and develop common databases of, stable isotopic composition of physical evidence types. Initially this collaboration will focus on items manufactured from synthetic polymers such as cable ties, tapes and ropes.

Thank you to all who have contributed to the upcoming Special Edition of [Science and Justice](#).

Join the [FIRMS Network LinkedIN group](#) to keep up to date with the latest news from the FIRMS community.



Upcoming Conferences



American Academy of Forensic Sciences 70th annual scientific meeting, (19th-24th February 2018), Seattle, WA, USA

PITTCON 2018 Conference and Expo, (26th February - 1st March 2018), Orlando, FL, USA

Forensics Europe Expo 2018, (6th-7th March 2018), London, UK

European Geosciences Union General Assembly 2018, (8th-13th April 2018), Vienna, Austria. Abstract deadline - 10th January 2018

20th International Conference on Forensic Sciences London, (28th-29th June 2018), London, UK. Abstract deadline - 15th December 2017

10th International Conference on the Applications of Stable Isotope Techniques to Ecological Studies, (30th July - 3rd August 2018), Vina del Mar, Chile. Abstract deadline - 1st March 2018

Goldschmidt 2018, (12th-17th August 2018), Boston, MA, USA

20th International Conference on Forensic Sciences Paris, (27th-28th August 2018), Paris, France. Abstract deadline - 15th December 2017

8th European Academy of Forensic Science Conference 2018, (27th-31st August 2018), Lyon, France

Upcoming Workshops

IsoCamp 2018, (11th-22nd June 2018), Salt Lake City, UT, USA. Application deadline - 2nd February 2018

SPATIAL short course 2018, (11th-22nd June 2018), Salt Lake City, UT, USA. Application deadline - 2nd February 2018

Isotope Ratio Measurements, Metrology and the SI, workshop to take place at Goldschmidt 2018 (12th-17th August 2018), Boston, MA, USA.

Featured Articles

[Explosive new paper](#) from FIRMS member Libby Stern and her colleagues at the FBI discusses the temporal variation of stable isotopes in ammonium nitrate and its implications in identifying sources of fertilizer based explosives.

[Food for thought](#) from FIRMS member Federica Camin and colleagues in this paper that discusses requirements for using stable isotope ratios in court cases and provides a guide for best practice.

[FIRMS members tie up loose ends](#) with this study on the physical, chemical and isotopic characteristics of cable ties and their value in criminal investigation. Stable isotope composition was able to distinguish between cable ties from all manufacturing batches tested.

The highly anticipated new textbook '[Food Forensics: Stable isotopes as a guide to authenticity and origin](#)' is available to buy now. Edited by FIRMS steering group members Jim Carter and Lesley Chesson, this book represents the first standalone volume focusing exclusively on applications of stable isotope analysis and allied techniques for food authentication and geo-location.



Papers

Disclaimer: This section contains a non-comprehensive list of recent publications that may be of interest to the FIRMS community. Inclusion of an article in this list does not mean that FIRMS approves the content. You are encouraged to consider critically whether (i) the experimental work complies with SI guidelines and the FIRMS Good Practice Guide; and (ii) whether the conclusions drawn are based on sound scientific background information.

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