ISO-TOPICS: THE FIRMS NETWORK NEWSLETTER

April 2019

ABOUT US
The Forensic Isotope Ratio Mass Spectrometry (FIRMS) Network was founded to develop the scope of stable isotope techniques in forensic applications.

FIRMS brings together chemists, physicists, materials scientists, and life scientists who employ isotopic analysis in their respective fields. FIRMS is helping to focus collective knowledge and expertise on improving methods for crime detection and reduction.

Don’t forget to submit your abstract to the 7th FIRMS Network Conference. We look forward to seeing you in Italy in September 2019!

WELCOME
Welcome to the FIRMS April 2019 newsletter.

DISCLAIMER
Reference to or mention of any commercial product or process by specific trademark or manufacturer within this newsletter does not necessarily represent an endorsement by the FIRMS Network.

UPDATES FROM THE STEERING GROUP

Abstract submission is currently open for the 7th FIRMS Network Conference. The conference will take place 16 to 19 September 2019 in San Michele all’Adige (northern Italy) at Fondazione Edmund Mach. Please visit the official conference website for details: https://eventi.fmach.it/firms2019

Abstracts for the 7th FIRMS Network Conference will be accepted from now until 30 June 2019

The conference opens Monday with two workshops on (1) good practice, reference materials, and accreditation; and (2) isoscapes. Dr Jason West from Texas A&M University kindly agreed to provide the plenary lecture. We look forward to seeing you there!

The FIRMS Steering Group welcomes its newest member, Anatoly Chernyshev (Analytica Laboratories Ltd). If you are interested in joining FIRMS as an Institutional Member and nominating an individual to the Steering Group, please contact us via the website.

Steering Group Chair and Director Phil Dunn co-organized a session at EGU 2019 on Quality Control Tools in Stable Isotope Measurements. FIRMS members co-authoring presentations in that session included Federica Camin and Lesley Chesson.

Finally, we note that the FIRMS Proficiency Test Scheme has been revised from two rounds of analyses per year to one, consisting of two different materials. Participants will still have approximately six weeks between material distribution and result submission. Please contact us if you have suggestions for materials of forensic relevance that could be distributed in upcoming tests.

Results from previous proficiency tests are archived on the FIRMS website and freely available for download.

There will be an optional honey isotope proficiency test offered by LGC this year. While this test is not funded by FIRMS, some FIRMS members may be interested in participating. For details, please contact LGC Standards.

NEWS AND NOTICES

Researchers at the University of Utah have developed an iOS app to assist others in the collection of standardized metadata for water isotope samples. Named wiSamples, the app is freely available for download through the App Store. A user’s guide and list of FAQs are available online via waterisotopes.org.

You can join the FIRMS Network LinkedIn Group to stay informed with the latest news from the FIRMS community.

The FIRMS Network LinkedIn Group is used to share up-to-date news with members and even post job opening that may be of interest.

HIGHLIGHTED PUBLICATIONS

FIRMS Member Glen Jackson and his colleague Mayara Matos from West Virginia University have just published a comprehensive review of isotope ratio mass spectrometry in forensic science applications in the journal Forensic Chemistry: https://doi.org/10.1016/j.forc.2019.100154.

For those interested in “do-it-yourself” reference materials, researchers in Canada have developed three sugar reference materials for use in carbon stable isotope analysis as detailed in a recent publication in Rapid Communications in Mass Spectrometry: https://doi.org/10.1002/rcm.8357.
Additionally, researchers in China and New Zealand have developed two defatted beef reference materials for use in carbon and nitrogen stable isotope analysis; details of the development were published in *Rapid Communications in Mass Spectrometry* [https://doi.org/10.1002/rcm.8411](https://doi.org/10.1002/rcm.8411).


Researchers at the University of Utah, led by Gabe Bowen, have published a review of isotopes in the water cycle in *Annual Review of Earth and Planetary Sciences*. The review will be in hardcopy print in May 2019 but is available online now: [https://doi.org/10.1146/annurev-earth-053018-060220](https://doi.org/10.1146/annurev-earth-053018-060220).

Finally, the 2nd edition of *Tracing Animal Migration with Stable Isotopes* has been published (ISBN: 9780128147238). Full bibliographic details for this book and all highlighted publications can be found below.

**PUBLICATIONS LIST**

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


