### Thirteenth International Conference

# METHODS AND APPLICATIONS OF RADIOANALYTICAL CHEMISTRY

# FIRST CALL FOR PAPERS

Abstracts of research to be presented at the conference are solicited at this time. An up-to-date list of session organizers is available on the MARC XIII website (see below). All abstracts must be submitted to the Program Chair as described on the web site (<a href="www.marcconference.org">www.marcconference.org</a>) which also includes details on preparation and submission of 250-word abstracts using a excel form template available on the website.

# TENTATIVE TIMELINES

Abstracts due: December 1, 2024
Notification to authors: January 15, 2025
Preliminary program: February 15, 2025
Papers for Publication Due: May 1, 2025

# **CONTACT PERSONS**

Questions concerning the scope and organization of the conference should be addressed to the General Chair:

Stephen P. LaMont Tel: (505) 667-1008 E-mail: lamont@lanl.gov

Information on the scientific program of the conference can be obtained from the Program Chair:

Samuel E. Glover Tel: (513) 609-2920 E-mail: sam.glover@uc.edu

To be added to the mailing list please contact the Conference Administrator:

Danielle Roybal Tel: ((505) 665-6138

E-mail: administrator@marcconference.org

March 23-28, 2025 Kailua-Kona, Hawaii, USA

# ORGANIZING COMMITTEE

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#### CONFERENCE ADMINISTRATOR

Danielle Roybal, Los Alamos National Laboratory

# WEBSITE ADMINISTRATION

Dann Glover

# **CONFERENCE WEB SITE**

Most information about the conference will be distributed through the web site and by e-mail. The web site will be updated periodically as new information is published. The conference web site address is <a href="https://www.marcconference.org">www.marcconference.org</a> or use the QR code:





KAILUA-KONA, HAWAII • MARCH 23-28, 2025

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Kailua-Kona, Hawaii, USA

# ABOUT THE CONFERENCE

The conference will continue the tradition set by the previous MARC conferences by focusing on emerging developments in radioanalytical chemistry, with particular emphasis on new applications. These conferences have grown to become a major international forum for the field of radioanalytical chemistry. The scope of the conference includes, but is not limited to, techniques such as instrumental and radiochemical activation analysis; radionuclide production; radiochemical separation methods; alpha, beta, gamma, x-ray and other nuclear spectrometries; in situ and remote sensing; radiochemical tracer methods, and mass spectrometry methods for the measurement of radionuclides. Applications of radioanalytical methods to environmental studies, environmental radioactivity including the actinide elements and radon, radioactivity in the ocean, biomedical, bioassay and clinical problems, geochemical, materials and energy sciences, nuclear fuel cycle and nuclear waste characterization, safeguards, nuclear forensics, treaty monitoring, and non-proliferation studies are some of the topics presented at previous MARC conferences.

The objective of the MARC conferences is to promote a broad exchange of information on radioanalytical chemistry among scientists from participating countries. The MARC XII conference attracted participants from more than 35 countries who benefited from the informal nature of the conference and locale. The central geographic location of Hawaii encourages participation and attendance of scientists from Pacific Rim countries as well as providing European scientists with easy accessibility via major US airports. The isolated nature of Kailua-Kona on the Island of Hawaii provides an excellent atmosphere for informal discussions and working groups among the anticipated 325-375 attending scientists and also provides excellent recreational facilities for participating guests.

The conference will include both oral and poster sessions grouped around specific topics. Poster sessions will be organized around specific themes, similar, or in addition, to those included in the oral sessions. Continuing the policy of previous MARC conferences, high-quality research presented at the conference may be submitted to the Program Chair for peer review and publication in serial volumes of The Journal of Radioanalytical and Nuclear Chemistry. The previous nine conferences were the venue for the presentation of the Hevesy Medal, which is awarded to individuals who have made outstanding contributions to the fields of radiochemistry or radioanalytical chemistry, and MARC XIII again has been selected to have the honor to present this award.

Topics in MARC XIII are being built under broad themes (tracks) and preliminary session titles are shown below. The following topics are not complete and may be updated (please see the website) and the organizers welcome papers in any area of fundamental or applied radioanalytical chemistry. A partial listing of topics includes:

#### PARTIAL LISTING OF TRACKS & SESSIONS

# Nuclear Security, Nonproliferation and Forensics Track

Radiochronometry Techniques and Nuclear Data for Nuclear Forensics

Advances in Microscopy, Imaging, and Spatially Resolved Methods for Nuclear Forensics

Application of Nuclear Techniques to Treaty Monitoring

Actinide Mass Spectrometry for Treaty Monitoring and Nuclear Forensics

### Environmental Radioactivity Track

Ultra-sensitive Mass Spectrometric and Radiometric Methods Applied to Environmental and Space Applications

Advances and Applications of Wide Area Environmental Monitoring for Atmospheric Releases

Speciation of Radionuclides in the Environment: Recent Progress, Methods, and Applications

# Activation Analysis, Particle Beam and Imaging Track

Instrumental, Preconcentration, Radiochemical and Speciation Activation Analysis

Development and Application of Nuclear Analytical Methods with Neutron Beam Technologies

Neutron Imaging Technologies and Applications

Emerging Radioanalytical Techniques, Advances and Applications in the Production of Essential Radionuclides

## Advanced Analytical Methods for Fuel Cycle Radiochemistry Track

Advances in the Nuclear Fuel Cycle – Radio and Analytical Chemistry Supporting Re-Processing, Characterization, and Waste Form Development

Salt Chemistry and Radiochemistry in Support of Molten Salt Reactors

Analytical and Electrochemical Technology Development for Pyroprocessing

# Nuclear Science and Education Track

Advances in Actinide Chemistry

Nuclear and Radiological Reference Materials

Separation Chemistry and Target Preparation for Nuclear Chemistry Experiments

International Status and Challenges of Radiochemistry Education and Training

# TECHNICAL PROGRAM COMMITTEE

A complete list of the technical program committee can be found on the conference web site.

http://www.marcconference.org/technical-committee/

# **CONFERENCE LOCATION**

The conference will be held in Kailua-Kona, Hawaii at Kamehameha's Kona Beach Hotel, home to nine of the MARC Conferences. Kailua-Kona is on the beautiful Big Island of Hawaii and provides an excellent atmosphere for informal discussions and working groups among the anticipated 325-375 attending scientists.

# **REGISTRATION**

All attendees must register for MARC XIII via the website or by contacting the Conference Administrator. A registration fee will be charged to all attendees to help defray the costs of the conference. The fee will include all official conference functions. Guests who would like to attend any of the conference functions may register to attend on site. Please see the website for more information.

# SOCIAL AND GUEST PROGRAM

A social program is planned to provide an opportunity for informal contacts and discussions among the participants. Activities for guests on the Big Island of Hawaii and the other Hawaiian Islands are many and will be offered through local agents. See the web site for links to information on Hawaii.

# **SPONSOR**

MARC XIII is sponsored by the Isotope and Radiation Division of the American Nuclear Society (<a href="www.ans.org">www.ans.org</a>) as a Class I topical meeting.

