

2018

Institute of
Nuclear Materials Management



59th Annual Meeting

Call for Papers

Submit Your Abstract for the 59th INMM Annual Meeting

Abstracts Due February 1

July 22-26, 2018

Baltimore Marriott Waterfront • Baltimore, Maryland USA

www.inmm.org/Events/Annual-Meeting

 #INMM18

Submit an abstract for the 59th INMM Annual Meeting

Be part of this unique educational and networking program for nuclear materials management professionals.

The INMM Annual Meeting is your best opportunity to share your work with your colleagues from around the world. More than 600 attendees from 29 countries saw more than 400 oral and poster presentations during the 2017 Annual Meeting.

In 2018, present your work to this elite group of nuclear materials management professionals. **Submit your abstract by February 1** to be considered to be part of the 2018 program.

Here's what a few of our 2017 attendees had to say about the INMM Annual Meeting:

- *It's an excellent forum for the presentation of accomplishments.*
- *An incredible collection of relevant presentations, posters and exhibitions.*
- *A great opportunity to present your work.*
- *Best smorgasbord of nuclear material management presentations available anywhere.*
- *A great opportunity to meet U.S. and international technical colleagues and get up to date on new ideas and developments.*
- *It's the only real technical conference for safeguards and nonproliferation in the world. It is the only real opportunity to get the entire world together for networking in the context of nonproliferation.*

Who Should Submit an Abstract?

- Academicians
- Consultants
- Government Contractors
- Government Employees
- Licensees
- News Media
- Non-Governmental Organizations
- Nuclear Laboratories
- Private Industry Professionals
- Public Officials
- Public Utilities
- Students

Abstract Submission Deadline: February 1, 2018

Important Dates

February 1, 2018	Abstract Submission Deadline
April 2018	Email Notification of Acceptance Sent
May 22, 2018	Presentation Changes and Withdrawals Deadline
June 8, 2018	Final Papers Due
June 8, 2018	Speaker Registrations Due

How to Present a Paper at the 59th Annual Meeting

Submit a 350-word abstract with paper justification and a short biographical sketch by **February 1, 2018**. Include any additional information that will be helpful in placing your proposed paper in the program, such as the order of any complementary papers.

All abstracts must be submitted via the INMM website at www.inmm.org for review by the INMM Technical Program Committee. INMM uses a versatile online abstract submission database. Be sure to follow the instructions for online submission of abstracts.

Oral presentations and poster presentations will not be considered without an abstract and a written paper — **no exceptions**. It is the responsibility of the author to obtain management, sponsor or classification approval before submitting an abstract. Biographies and paper justifications must be included.

Paper justifications are required to provide additional information for reviewers to judge the quality of the paper.

If your paper is accepted:

- Read the information and directions in the acceptance letter and Speakers' Manual, which will be sent to speakers via email in April 2018.
- You are required to submit a full written paper by June 1, 2018, to be published in the online Proceedings of the Annual Meeting.
- Requests for extensions for submitting your final paper past the June 8, 2018 deadline are not accepted.

It is critical to the success of the Annual Meeting Program that all papers are submitted on time. All final papers will be published in the online Annual Meeting Proceedings and must be submitted by June 8, 2018. Do not submit an abstract if you do not intend to provide a written paper by the due date.

Abstract Submission Requirements

- **Complete all sections of the online abstract submittal form, including name and all contact information.** This data is required so INMM can contact you regarding paper acceptance. INMM is not responsible for non-notification due to incomplete or incorrect contact information.
- **Abstracts must conform to the submission requirements outlined.** Your abstract will not be reviewed or accepted if the Internet format described is not used.
- **All abstracts, paper justifications and biographies must be submitted via the abstract online system on the INMM website by February 1, 2018.**

The Following Information Will Be Collected During Abstract Submission:

Primary Presenter

Provide one primary presenter. Data required for the presenter: first name, last name, complete name of institution, full mailing address, phone and email. The primary presenter will be the author responsible for submitting the final paper.

Co-Authors

A maximum of 14 co-authors are allowed. Data required for the co-authors: first name, last name, complete name of institution, institution city/state/country, and email.

Presenter Biography

A 150-word biographical sketch is required to provide adequate information for the session chair to properly introduce the speaker. Include title, affiliation, relevant experience, academic background and significant accomplishments. Biographical sketches will not be published.

Abstract Submission

Abstract Title

Provide the proposed title for your presentation. The format for the title should be title case where each major word in the title begins with a capital letter.

Example Title Format: "Presenting a Paper at the Annual Meeting"

Do not type in all UPPERCASE letters.

Abstract Text:

Adhere to the following criteria. Deviation may delay or otherwise affect the acceptance of the abstract for presentation.

The Abstract:

- Should appear in one full paragraph without line breaks.
- Should not include references or bulleted lists.
- May be copied and pasted or uploaded from an existing document.

Content:

- Must contain a description of the work.
- Must describe the significance of the work.
- May include background information.
- May provide a summary.
- Must not contain author data.

Make sure that all acronyms are defined. Descriptions should present the most significant facts that a reader should know about your paper—do not include lists. Background information may be omitted if your subject is self-explanatory. The summary may be omitted if your subject does not readily support a summary. Additional wording may be supplied to supplement the above criteria as long as the total abstract length does not exceed 350 words. The abstract should provide sufficient information for a selective review by the Technical Program Committee. Abstracts not conforming to these guidelines will not be considered. Abstracts can be submitted as an oral presentation or a poster presentation.



Abstract Topics

Practically applied papers and papers featuring end-use applications are desired. Criteria for selection include relevance to the topical areas, originality, clarity of communication and significance to the nuclear materials community. Redundant topical material submitted in several papers from the same organization will not be accepted. Papers describing updates or progress from previously presented work must provide substantially new and significant information.

Papers appropriate for the poster session are also solicited. Demonstrations of instruments, apparatus, equipment, software, processes and capabilities by researchers are encouraged, especially those augmenting or demonstrating concepts described in papers presented at the meeting.

Each Abstract Must Indicate the Most Appropriate Topic:

INMM may provide additional topical guidance, if appropriate.

Facility Operations

- **Nuclear Facility Infrastructure**
 - Aging Nuclear Facility and Infrastructure – Replacement Facilities and Bridging Strategies
 - Major Project Updates at Department of Energy Facilities
 - Maintaining an Experienced Workforce
 - Process and Equipment Recapitalization
- **Nuclear Fuel Cycle**
 - Interfaces with Other Nuclear Groups - American Nuclear Society, World Organization for Nuclear Operators, Nuclear Energy Institute, World Nuclear Association, Nuclear Suppliers Group, etc.
 - Internationalization of the Nuclear Fuel Cycle – New Build Economics; Public Acceptance of New Builds; Harmonization of Rules and Regulations across International Boundaries; Acceptable Risk Levels to Include Material Flow and Power Distribution across International Boundaries
 - Technology Innovations and Updates for the Nuclear Industry
 - Advanced Reactor Concepts and New Nuclear Fuel Designs
- **Nuclear Material Consolidation and Disposition**
 - Surplus Special Nuclear Material Disposition and Disposal
 - Surplus Nuclear Material Minimization and Removal
 - Nuclear Reactor Conversions
- **Nuclear Materials Management**
 - Materials Management Issues and Best Practices as They Pertain to Daily Operations in a Licensed Nuclear Facility (Commercial and/or Government)
- **Nuclear Operations**
 - Challenges and Opportunities in Operations, Regulations, Licensing, etc. in Commercial Nuclear Power
 - Operating and Maintaining Nuclear Reactors and Facilities at Universities and Government Facilities
 - Implications from Systems-level Perspective and State Approaches, Policies and Regulatory Framework

Abstract Topics

International Safeguards

- Implementing Safeguards at Nuclear Fuel Cycle Facilities
- Experiences with Implementing Integrated Safeguards and the Additional Protocol
- Management of Safeguards Information
- Application of Safeguards at the Back-end of the Nuclear Fuel Cycle (e.g., Geological Repositories)
- Termination of Safeguards / Monitoring of Decommissioning Activities
- Safeguards Information Analysis: Sources, Methodologies, and Tools
- Advances in Safeguards Technology and Instrumentation
- Non-Traditional Safeguards Methods (e.g. Unmanned Aerial Vehicles, Unique Applications)
- Evaluating Containment and Surveillance Methods (e.g., Tamper Detection)
- Long-Term Research and Development Activities for IAEA Safeguards
- Future Challenges for the Global Safeguards Regime
- Safeguards Knowledge Management
- Safeguards Methods and Approaches for the Detection of Undeclared Facilities
- Other International Safeguards Topics

Materials Control & Accountability

- NDA — Gamma Measurement Methods and Techniques
- NDA — Neutron Measurement Methods and Techniques
- NDA — New Modalities and Techniques
- NDA — Application - Spent Fuel
- NDA — Application - Facility Materials Control & Accountability
- Destructive Analyses and Nuclear Forensics
- Accounting Systems
- Policy and Best Practices
- Material Control and Storage Systems
- Scientific Methodologies in Non-destructive Assay
- State Systems of Accounting - Best Practices and Improvements
- Convergence of Materials Control & Accountability and Physical Protection
- Cyber and Information Security

Nonproliferation & Arms Control

- **Nonproliferation**
 - Regimes and Treaties, Promoting International Security
 - Regional Challenges and Nonproliferation Approaches
 - Nuclear Security (e.g., Culture, International Cooperation, Education, Infrastructure Development)
 - Topical issues (e.g. JCPOA & Iran, DPRK, Nuclear Free Zones)
 - Societal Verification
 - Infrastructure Protection
 - Illicit Trafficking
 - Export Control
- **Nonproliferation and Arms Control**
 - Cyber and Information Security
 - Data Analytics
- **Arms Control – Concepts, Issues, Technologies and Implementation**
 - Existing or Future Arms Control Treaties
 - Nuclear Weapons Dismantlement
 - Comprehensive Nuclear Test Ban Treaty
 - Fissile Material Transparency and Verification (including Nuclear Archeology)
- **Arms Control**
 - Topical Issues (e.g. Weapons Ban Treaty, Next Generation Experts, Compliance)
- **Nonproliferation and Arms Control Technologies**
 - Detection Technologies: Nuclear, Radiological, Chemical, Biological
 - Destructive Analyses and Nuclear Forensics
 - Automatic Tamper and Event Detection Technologies
 - Unattended and Remote Technologies
- **Nuclear Fuel Cycle**
 - Implications in Advances in Civil Nuclear Fuel Cycle Technologies
 - Issues (e.g., Proliferation Resistance, Assured Fuel Supply, Nuclear Material Disposition)

Abstract Topics

Nuclear Security & Physical Protection

- **Technologies**
 - Assessment Methodologies and Simulation Modeling
 - Personnel and Contraband Search Technologies
 - Intrusion Detection and Assessment Technologies
 - Nuclear and Radiological Detection Technologies
 - Research and Development
 - Applications
 - Physical Protection Performance Assurance and Testing Methodologies

- **Planning, Management, and Implementation**
 - Critical Infrastructure Security Measures
 - Physical Protection Policy
 - Decommissioning – Phasing in Appropriate Security Reductions
 - Safety/Security Interface
 - Emergency Management and Security Integration
 - Nuclear and Radiological Security Culture and Culture Evaluation
 - Design Basis Threat Considerations
 - State and Facility Specific Threat Identification and Definitions
 - Insider Threat Mitigation - Human Reliability and Personnel Trustworthiness
 - Security by Design – Facility Design and Security Integration
 - Effective Tactical Response Planning and Management
 - Resource Development and Retention – Physical Protection Specialists
 - Sustainability of Physical Protection Systems

- **Cyber Security and Protection of Nuclear Security Information**
 - Threat Identification and Assessments
 - Impacts of Technological Advances on Security and Safety Systems
 - Protection of Critical Systems and Data

- **Identification and Protection of Nuclear Security Information**

Abstract Topics

Packaging, Transportation & Disposition

- Service Life/Aging
- Demolition and Decommissioning
- Dual Use Spent/Used Fuel Casks
- Effects of Radiation and Temperature
- Emergency Response for Transportation Events
- Fukushima Daiichi Recovery
- Material Control and Storage Systems
- Nuclear Material Detection Technologies
- Package/Cask Design and Evaluation
- Package Tracking, Fleet Management and Monitoring
- Package, Canister and Cask Designs
- Packaging and Transportation Security Systems
- Packaging Materials and Components Research
- Performance Assurance and Testing Methodologies
- Policy & Best Practices
- Quality Assurance in RAM Packaging Fabrication
- Radioactive Material Transportation, Risk Assessment, Route Planning
- Radioactive Material Disposal and Disposition
- Shipping, Storage and Disposal Package Design
- Packaging and Transportation of Medical Isotopes
- Radioactive Source Handling/Recovery
- Spent Nuclear Fuel Packaging, Storage, Reprocessing, and Disposal
- Use of Transportation Packages for Storage

- Denial of Shipment
- Used/Spent Fuel Monitoring
- Regulatory Issues
- Used/Spent Fuel Cladding Behavior
- Advancements in Criticality and Shielding Analysis
- Advancements in Structural and Thermal Analysis
- Used/Spent Fuel Transport (after Aging)
- Air Transport
- Emergency Response to Transportation Events
- Used/Spent Fuel Interim Storage
- Testing of Radioactive Material Packages/Storage Casks
- Transportation Risk Analysis
- Transportation and Disposition of Large Items
- UF₆ Issues-Tracking and Monitoring
- Cyber and Information Security

Education, Training and Workforce Development

- Workforce Planning and Development
- Knowledge Management/Knowledge Retention
- Personnel Training and Qualification
- Human Performance Improvement
- Developing Education and Training Partnerships
- International Perspectives in Education and Training

- Education & Training Best Practices and Perspectives
- Applications of Technology to Training and Education
- Educating the Public about Nuclear Issues
- Research Reactors in Education
- Performance Metrics in Education and Training Programs

Special Sessions

- Nuclear Security and Physical Protection
- Alternative Technologies to High-Activity Radioactive Sources
- Spent Nuclear Fuel – Waste Management or Global Security Issue
- Cyber and Information Security

General Information

Paper Justification Guidelines for Oral Presentations

Briefly describe any new information being presented. This might include new products, new services, new technology, etc. Paper justifications are required to provide additional information for reviewers to judge the quality of the paper.

Paper Significance

Briefly describe the significance behind the presentation being submitted.

References

Give complete references of where this work was presented elsewhere. Limit to the five most recent presentations.

Notes

Add additional comments or notes for the Technical Program Committee regarding this abstract. Include any additional information that would be helpful in placing your proposed paper in the program, such as the order desired of any multiple complementary papers.

Submitting Final Written Papers

Final papers must be submitted via the **INMM Abstract Submission Website** by June 8, 2018. Panel discussion summaries must be submitted to INMM Headquarters no later than August 31, 2018. See the Speakers' Manual for details on how to submit a final written paper. Final papers must have a file size no larger than 10 full, single-spaced, single-column pages (including charts and photos). Authors of papers will be charged a fee of \$200 USD per page for each additional page after 10 pages. INMM does not charge for publishing final papers in the online Proceedings that are no more than 10 pages long.

Promotion of Commercial Products

Vendors, laboratories and others promoting the sale of instruments, apparatus, equipment, software, processes and capabilities are required to present or exhibit their commercial products separately from the oral and poster presentation sessions. Only the results of nuclear materials management research may be presented in the oral and poster sessions. Vendors and others wishing to exhibit their commercial products should request an Exhibitor Prospectus from INMM Headquarters (inmm@inmm.org).

General Information

Guidelines for Oral and Poster Presentations

- Presenting authors are required to notify INMM Headquarters by May 22, 2018, of presentation withdrawals and speaker changes. *Changes to presentations or speakers not reported by May 22 will not be published in the meeting program.*
- Speakers should present concise information, focus on ideas, concepts and the impact of the work, and emphasize points, results and conclusions.
- Graphics should be logical and easily readable by the audience.

Oral Presentations

- Each presentation is allotted 20 minutes, which includes the introduction.
- Session chairs will assure that each presentation begins at the scheduled time. Speakers should prepare to speak for approximately 15 minutes with an additional five minutes for questions. In no case shall the total time exceed 20 minutes. Speakers must adhere to this policy for the benefit of meeting participants who wish to attend presentations in other scheduled sessions. Speakers who exceed the time allotted will be curtailed.
- Each meeting room will be equipped with an LCD projector for PowerPoint presentations.
- Extensive details, complex graphics and lengthy discussions and explanations should be included in the written paper, not the oral presentation.
- Authors must agree that their papers are accepted for oral presentation contingent upon providing a written paper by June 8, 2018.
- If your abstract is selected for presentation, a speakers' manual and formal acceptance letter will be sent in April 2018.

Poster Presentations

- Each poster presenter must be in attendance from 11:00 a.m. – 2:00 p.m. on the poster presentation day.
- Posters cannot be set up with the intent that there will be no presenter – only a “viewing” for the audience.
- Note that it is acceptable to have someone present, other than the presenter, who is knowledgeable of the content of the presentation.
- **IMPORTANT:** Posters that do not have the presenter or someone knowledgeable of the content of the poster present during the poster session will not be included in the online Proceedings of the INMM Annual Meeting.
- A Poster Presenters' Manual and a formal acceptance letter will be sent in April 2018 if your abstract is selected for a poster presentation.
- Scheduled Poster Presenters who “no-show” cost INMM money in blank boards in the presentation area. If your plans change and you cannot present your poster, withdraw your abstract by May 22, 2018.
- Authors must agree that their papers are accepted for poster presentation contingent upon providing a written paper by June 8, 2018.

General Information

Interpreters: What You Can Expect

The official language of the conference is English. It is preferred that all presentations be delivered in English. If this is not possible, and you need to use an interpreter, you must notify INMM Headquarters by June 8, 2018, so arrangements can be made. Serious scheduling problems may arise for presenters using interpreters. The use of interpreters with speakers can add significant time to the presentation. Furthermore, private concurrent translation in the meeting room may create a distraction for the other attendees.

Special Sessions at the Annual Meeting

If you are interested in organizing a special session, you MUST consult an INMM Technical Division chair and the chair of the INMM Technical Program Committee before taking any action. Contact INMM Headquarters (inmm@inmm.org) as soon as possible if you need assistance in making these contacts.

If your proposal is accepted, you will be required to have all abstracts in your session submitted by February 1, 2018. Further, your attendance is required at the Technical Program Committee review meeting in March 2018 to evaluate the papers in your proposed session along with the other submitted papers. You may send a knowledgeable surrogate if you are unavailable for this review meeting but someone affiliated with the special session must attend this meeting.

Special Sessions must follow all of the requirements of the Annual Meeting process. It is important that the organizer maintain frequent contact with INMM Headquarters staff regarding any questions or potential changes in the program, especially during the months prior to the Annual Meeting.

What You Can Expect from INMM

- Acceptance/Rejection emails will be sent in late March 2018. All submitters will be contacted by email. If you do not receive an email, email inmm@inmm.org to ensure your email was not blocked by your server.
- Presenting authors of accepted abstracts will receive session information and a speakers' manual by email with detailed information for presenting their papers or posters and guidelines for the preparation of the final paper in April 2018. **The presenting author is responsible for updating co-authors of presentation details and informing INMM Headquarters immediately of any changes to their presentation.**
- A Preliminary Program with a tentative agenda and other meeting information will be available in April 2018.
- A Meeting Program containing the meeting schedule and paper presentation times will be available at the Annual Meeting.
- Proceedings of the INMM Annual Meeting will be available at the time the Annual Meeting begins. In order to have your paper included in the online Proceedings by that time, it must be submitted by the deadline of June 8, 2018. Any papers submitted after the deadline will be uploaded to the Proceedings after the Annual Meeting, later in the fall of 2018.

Registration

Participation in the INMM 59th Annual Meeting is limited to registered attendees. Your full registration includes:

- Admission to all sessions (Monday – Thursday)
- Access to exhibits
- Entry to the poster session
- Invitation to the President’s Welcome Reception
- Daily coffee and tea breaks
- Entry to the INMM Annual Business Meeting
- Printed meeting program
- Access to the online Proceedings

Registration Fees

All speakers, session chairs and meeting attendees are required to pay the registration fee for the Annual Meeting according to INMM policy and fee schedule. Registration and fee schedule apply even when the speaker attends the Annual Meeting for a short time only to present his/her paper or poster or participate in a panel discussion.

A Preliminary Program with registration forms will be available in April 2018. Visit the INMM Website at www.inmm.org for the most current meeting information. All speakers must register by June 8, 2018.

INMM Members receive a substantial discount on meeting registration. To be eligible for the member rate, you must be a member of INMM for a minimum of one fiscal quarter (three months) prior to the Annual Meeting; for 2018, you must be a member by April 21, 2018. Visit www.inmm.org/join to learn more.

Questions

Questions regarding the Call for Papers or general meeting information may be directed to INMM Headquarters by:

Email: inmm@inmm.org
 Phone: +1-856-380-6813
 Fax: +1-856-439-0525

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