



MAY 24-27, 2010
MONTEREY, CALIFORNIA

SEVENTH INTERNATIONAL CONFERENCE

**REMEDICATION OF
CHLORINATED
AND
RECALCITRANT
COMPOUNDS**

CALL FOR ABSTRACTS

Due July 31, 2009

Presented by
Battelle
The Business of Innovation

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www.battelle.org/chlorcon

REMEDICATION OF AND RECALCITRA

Make plans now to attend the *Seventh International Conference on Remediation of Chlorinated and Recalcitrant Compounds*, to be held in Monterey, California, May 24–27, 2010. The Conference is organized and presented by Battelle. For the 2010 Conference, there are 14 sponsors, government and private organizations active in environmental assessment, remediation, and management. The Conference Program Chairs are Abraham Chen, Ph.D., P.E., and Keith Fields, P.E., PMP, both of Battelle.

The Conference is one of the world's leading environmental remediation conferences. It focuses on innovative application of existing and new technologies and approaches for characterizing, treating, and monitoring chlorinated and other recalcitrant compounds in various environmental media. The 2008 Conference was attended by 1,750 scientists, engineers, regulators, remediation site owners, and other environmental professionals representing universities, government site management and regulatory agencies, and R&D and manufacturing firms from 32 countries.

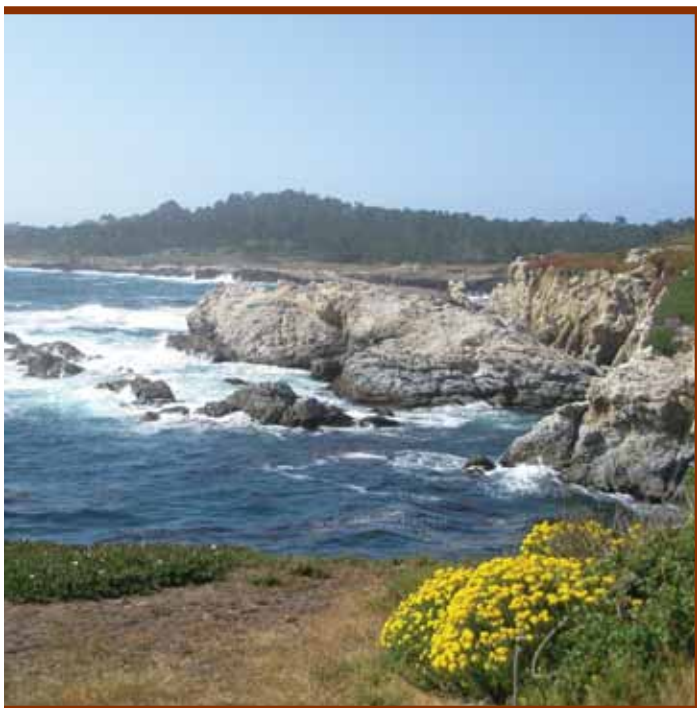
The panel discussions and 63 sessions in 2008 comprised nearly 850 platform and poster presentations. The sessions covered a broad range of chlorinated and other recalcitrant compounds, including PCBs, PAHs, pesticides/herbicides, dioxins/furans, DNAPLs, propellants, oxygenates, energetics/munitions constituents, and other emerging contaminants in soil, groundwater, surface water and runoff, sediments, range residue, and indoor air. The



CHLORINATED ANTICOMPOUNDS

technologies and approaches discussed included chemical, physical, biological, thermal, and combined treatment technologies; barriers; delivery systems; characterization; fate and transport; risk assessment; environmental forensics; performance verification; and management of specialized sites including municipal, industrial, military, harbor, mining, and landfill.

We hope you will plan to submit an abstract to be considered for the program. The anticipated scope of the technical program is outlined on pages 2 and 3. **Abstracts are due July 31, 2009.** The program will be developed on the basis of the abstract review conducted by the technical committee and by the chairs of appropriate sessions. **Short courses** and **exhibits** will provide additional technical information, and a **student paper competition** will be conducted. See pages 6–8 for information on these features of the Conference.



TECHNICAL PROGRAM SCOPE

The program for the Seventh Conference will emphasize field applications and case studies, but many presentations will address laboratory, pilot, and modeling studies of innovative remediation and rational site-closure approaches. Presentations will address the full range of technologies that can be used to remediate sites contaminated by chlorinated and other recalcitrant compounds. Risk, regulatory, and site management issues associated with these technologies will be discussed.

Examples of anticipated presentation topics are listed below. **Note that this is not a list of sessions, nor is it a comprehensive list. Abstracts are welcome on all topics relevant to the overall scope of the Conference.**

Characterization, Fate and Transport, Risk Assessment, and Environmental Forensics

- 1.1 Chlorinated solvents
- 1.2 Perchlorate and other propellants
- 1.3 MTBE and other oxygenates
- 1.4 Energetic compounds and munitions constituents
- 1.5 PCBs/PAHs
- 1.6 Pesticides/herbicides
- 1.7 Dioxins/furans
- 1.8 DNAPLs and LNAPLs—*Advances in source and solvent plume characterization*
- 1.9 1,4-dioxane, endocrine-disrupting compounds (EDCs) and other emerging contaminants
- 1.10 Heavy Metals
- 1.11 Compound-specific isotope analysis

Site Management

- 2.1 Remediation cost and technology selection
- 2.2 Improvements in verification of monitored natural attenuation
- 2.3 Innovative site assessment and performance-monitoring tools
- 2.4 Remedy optimization and long-term monitoring strategies
- 2.5 Risk assessment methods and risk-based cleanup actions
- 2.6 Site closure and exit strategies
- 2.7 Post-remediation management
- 2.8 Landfill leachate control
- 2.9 Storm water management

Green/Sustainable Remediation

- 3.1 Sustainability/green metrics and baseline assessments
- 3.2 Impact mitigation strategies
- 3.3 Use of on-site renewable energy
- 3.4 Incorporating sustainability into the remedy selection and design process—*Case studies and lessons learned*
- 3.5 Optimizing existing systems—*Case studies and lessons learned*
- 3.6 Programmatic considerations

Technological Advances in Bioremediation

- 4.1 Enhanced bioremediation (above-ground and in situ treatment)
- 4.2 Bioaugmentation
- 4.3 Molecular biological tools for remediation
- 4.4 Physical and microbiological inhibitors to bioremediation
- 4.5 Phytoremediation
- 4.6 Other advances in bioremediation for site restoration

Technological Advances in Physical/Chemical Remediation

- 5.1 Improved delivery mechanisms
- 5.2 In situ chemical oxidation and reduction
- 5.3 Advances in permeable barrier construction and materials
- 5.4 Micro/nanoscale ZVI
- 5.5 Barriers to VOC vapor intrusion into buildings
- 5.6 Thermal technologies—*Resistive, steam, and RF heating*
- 5.7 Improvements in pump-and-treat applications
- 5.8 Other advances in physical/chemical remediation

Special Topics in Environmental Management and Remediation

- 6.1 Sediment sites—*Sediment characterization and risk assessment; Containment; Remediation; Beneficial use of dredged materials*
- 6.2 Munitions ranges and explosives-production sites—*Characterization and fate and transport of energetic compounds; Treatment of soil and groundwater; Range residue management and processing*
- 6.3 Control of greenhouse gases—*Identification and characterization of deep reservoirs for CO₂ storage; Predicting geomechanical and geochemical effects of CO₂ injection; Monitoring and verification*

ABSTRACT PREPARATION AND SUBMITTAL

To be considered for the program, abstracts (maximum one page) are to be prepared and submitted as specified below. **Abstracts are due July 31, 2009.**

Content. See pages 2 and 3 for an overview of the expected range of topics. Each abstract must clearly and concisely outline the material being proposed for presentation. Include the information the Program Committee will need to quickly comprehend the scope of the work, determine its relevance, and assign it to an appropriate platform or poster slot. Specify the contaminant(s) or stressor(s) addressed, the scale of the project (laboratory, pilot, or field), and anticipated project dates. Identify the scientific principles, technologies, or combination of technologies being studied and discuss results to date. Case studies are encouraged. Preference will be given to those abstracts that provide a concise and thorough summary of the project objectives and results. **Abstracts with a pronounced commercial tone will not be accepted.**

Format. Abstracts must be in English, cannot exceed one standard-size page, and are to be submitted as Microsoft Word® files. Details on format requirements, an example abstract, and a template are available at www.battelle.org/chlorcon, under “Abstract Specifications and Review.”

Submission. Use the form that appears under “Abstract Submittal” at www.battelle.org/chlorcon to submit abstract files. Please do not submit any abstract more than once. The submittal form will require the following information:

▶ **Title of abstract.** Should not exceed 10 significant words.

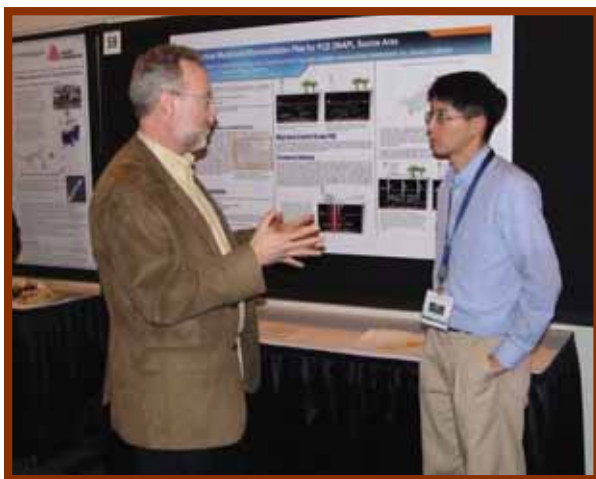
▶ **Corresponding/presenting author information.** All correspondence concerning the abstract will be addressed to the person who plans to give the presentation at the Conference (i.e., the name given in **bold italics** on the abstract). Include all contact information—employer, street address, city, state/province and zip/postal code (as applicable), country, telephone, fax, and e-mail address.

► **Coauthor address list.** Full names of coauthors and the contact information for each—employer, street address, city, state/province and zip/postal code (as applicable), country, telephone, fax, and e-mail address. This information is required for all coauthors.

► **Placement preference.** To suggest the most pertinent subject area(s), refer to the example topics listed on pages 2 and 3 and select up to three codes (e.g., “1.4, 3.8, 4.1”) or, if the abstract is being submitted at the request of a prospective session chair, state that person’s name. If the topic of the abstract does not match any of the example topics and is not being submitted at the request of a prospective session chair, leave the subject area blank. In addition, please indicate whether the author prefers a platform (oral) or a poster presentation. **Note: The author’s preference will be taken into account, but placement cannot be guaranteed.**

Confirmation of Receipt. Receipt of the abstract will be acknowledged by e-mail within one week. Each abstract should be sent only once—please do not send a backup copy by mail or fax and do not resubmit the abstract electronically unless no acknowledgment of receipt has been received after one week.

Review. Abstracts received by the **July 31 due date** will be reviewed for technical merit, currency, and relevance to the Conference. When assigning accepted abstracts to program slots, the Technical Program Committee and session chairs will consider authors’ suggestions as to session and



format (platform or poster), but the final decision on placement will be based on best overall design of the Conference program and on space available.

Notification of Acceptance/Placement. By November 30, 2009, a letter stating the Committee's decision on each abstract will be mailed to the corresponding/presenting author. If the abstract was accepted, this letter will state the platform or poster session to which the abstract has been assigned and will provide information on preparing the presentation.

Inquiries. Questions about abstract submittal should be addressed to Gina Melaragno (chlorcon@battelle.org; phone: 614-424-7866).

All presenting authors and session chairs are expected to register and pay the standard fees. This policy is necessary because registration fees are the major source of funding for the Conference and a significant percentage of registrants will make presentations.

STUDENT PAPER COMPETITION

A student paper competition will be conducted. The primary author of each winning paper will receive a complimentary registration, will be scheduled to make a presentation (poster or platform) at the Conference, and will be recognized during the Plenary Session. Some financial assistance with travel costs will be provided; the amount available will depend on the response from corporate sponsors.

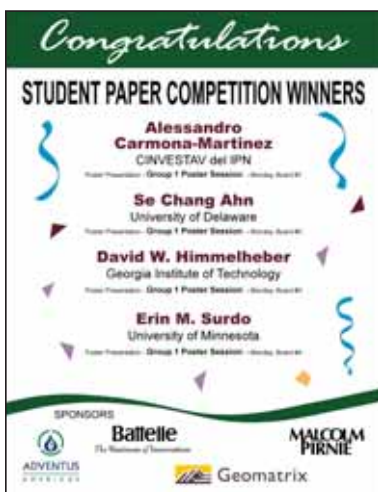
Eligibility. The primary author must be a full-time student when the paper is submitted. Papers may list faculty advisors as coauthors, but the student must be the intended presenter at the Conference. A student who already has submitted an abstract to be considered for the program may also submit a paper for the competition, on either the same or a different topic. Students who wish to present their work at the Conference whether or not they win the competition should submit abstracts by July 31, and then submit their papers for the student competition by the November 30 deadline.

Scope and Review Criteria. Student papers must be relevant to the overall scope of the Conference. All papers submitted by the due date will be reviewed by a committee of remediation experts. Review criteria will be originality of the research, clarity of data presentation, and discussion of results.

Format. Student papers should not exceed 10 pages (including figures, tables, and references). Detailed specifications are available at www.battelle.org/chlorcon. Papers that do not adhere to the specifications will not be considered. If you have questions, call Gina Melaragno at 614-424-7866 or send an e-mail to chlorcon@battelle.org.

Submission. The format specifications sheet provides information on submission. ***Student papers are due November 30, 2009.*** Late submissions may not be considered. Receipt of each paper will be acknowledged within one week. All competition

participants will be informed of the results in February.



Student Paper Sponsorship. To inquire about becoming a corporate sponsor for the competition, please call 800-783-6338 (USA and Canada) or 614-488-2030, or send an e-mail to info@confgroupinc.com.



SHORT COURSES

Several short courses are being planned, and additional proposals will be considered. Courses will be offered on Sunday, May 23 (the day before the technical program begins), and possibly on Wednesday afternoon.

Short course proposals will be accepted through September 30, 2009. Proposals should provide the following information:

- ▶ Summary of course content—a concise (maximum 250 words) description of the technology or approach that is the subject of the course, situations in which it would be applicable, and the intended audience
- ▶ Biosketches for all instructors
- ▶ Draft agenda and list of the course materials to be provided to participants
- ▶ Whether students will need computers for classroom exercises

Submit proposals to **chlorcon@battelle.org** by September 30. Course proposals will be evaluated, and you will be notified by October 31. If your course is selected, you will receive information about scheduling and how course registrations will be handled. Course descriptions will be included in the Preliminary Program, which will be printed for a general mailing in January 2010 and posted at **www.battelle.org/chlorcon**.

CALL FOR EXHIBITS

Organizations that conduct remediation activities or supply equipment used in such work are invited to exhibit at the Conference. Exhibits will be on display in a large area adjacent to the platform and poster presentation, registration, lunch, break, and reception areas. Because the Exhibit Hall is centrally located, exhibitors will have the opportunity to present information to a large, focused audience of people who acquire and use environmental management products and/or services at industrial and government sites around the world. The fee for an 8-ft X 10-ft booth and standard furnishings is \$3,995; a discounted fee of \$3,695 applies if payment is made by November 16, 2009. In July, sponsors will be contacted to select their booth spaces. On August 5, the exhibit bro-

chure will be posted at www.battelle.org/chlorcon. The brochure will contain the contract, the application form, and a floor plan showing available spaces. Space is limited and will be assigned on a first-come/first-served basis, according to receipt of the completed application and deposit.

CONFERENCE REGISTRATION

To register, go to www.battelle.org/chlorcon and register on line or print a form for registration by mail or fax. We encourage you to register early—registrations will be limited to the number that the facility can accommodate efficiently. Program registration fees are as follows:

	Paid by Feb 26	Paid by April 30	Paid after April 30
Standard	US\$825	US\$895	US\$975
Student*	US\$400	US\$450	US\$500

** Reserved for full-time students whose fees will be paid by their universities or who will not be reimbursed by their employers. A copy of current student ID is required with registration.*

Registration fees cover admission to all platform and poster sessions, exhibits, group lunches, receptions, and daily continental breakfasts and refreshment breaks. Registration materials will include the final program and a set of abstracts.



Payment is required to confirm registration.
Purchase orders will be accepted, but the registration discounts will apply only if payment is received by the specified date.

- ▶ **Credit card** payments can be made using MasterCard, Visa, Discover, American Express, or Diner's Club.
- ▶ **Checks** should be drawn on a U.S. bank, payable in U.S. funds to "The Conference Group, Inc., FEID#311157243" and referencing "Chlorinated Conference."

Inquiries about registration may be addressed to The Conference Group (phone: 800-783-6338 or 614-488-2030; e-mail: info@confgroupinc.com). For cancellations received by April 1, 2010, the registration fee will be refunded, less a \$50 service fee. No refunds will be made after April 1, but paid no-shows will receive all materials covered by their registration fees. Substitutions will be accepted at any time, preferably with advance notice.

MEETING SITE/ ACCOMMODATIONS

Conference Center. The Monterey Meeting Connection, made up of the Monterey Conference Center, the Portola Hotel & Spa, and the Marriott Hotel, is situated on Portola Plaza, within walking distance of Fisherman's Wharf, Cannery Row, the Monterey Bay Aquarium, shopping areas, restaurants, and other attractions of downtown Monterey, California. Many scenic and historic sites and championship golf courses are just a short drive away along the seacoast north or south of Monterey.

Hotel Accommodations. Conference registrants can reserve rooms at the Portola Hotel & Spa at the reduced group rate of \$185/night (single or double), plus tax. At the Marriott Hotel, the reduced group rate is \$189/night (single or double), plus tax. Comparable discounts are available for suites. These rates are good through April 19, 2010, unless the blocks sell out before that date. Hotels will begin taking reservations on June 29, 2009. Both hotels are connected to the Monterey Conference Center, and some Conference func-

tions will be held at each. To reserve a room, call the Reservations Department at the preferred hotel. To qualify for the group rate, mention that you are attending the “Battelle Chlorinated Conference.” Be sure to inquire about the hotel’s cancellation policy.

► **Portola Hotel & Spa**

2 Porto Plaza
Monterey, CA 93940
Phone: 831-649-4511

► **Marriott Hotel**

350 Calle Principal
Monterey, CA 93940
Phone: 831-649-4234

A percentage of rooms will be available at the prevailing U.S. Government per diem rate (plus tax) for U.S. federal, state, and local government employees. **If you are a government employee (not a contractor)**, contact The Conference Group (telephone: 800-783-6338 or 614-488-2030; e-mail: info@confgroupinc.com) to request the link for on-line reservations at the Government rate. When making your reservation with the preferred hotel, ask what documentation will be required at check-in to secure the government rate.



INQUIRIES

Abstract submission and review, short course proposals, and student paper competition: Gina Melaragno (chlorcon@battelle.org; phone: 614-424-7866).

Conference sponsorship, exhibits, or registration: The Conference Group (phone: 800-783-6338 or 614-488-2030; e-mail: info@confgroupinc.com).

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The Business of Innovation

The Conference is organized and presented by Battelle.

Combining sound science and engineering solutions with creative management strategies, Battelle develops practical solutions to complex problems in site restoration, risk assessment, hydrogeologic assessment and monitoring, and sustainable remediation. Battelle is the world's largest nonprofit, independent research and development organization, providing innovative solutions to the world's most pressing needs through its four global businesses: Laboratory Management, National Security, Energy Technology, and Health and Life Sciences. It advances scientific discovery and application by conducting \$5.2 billion in global R&D annually through contract research, laboratory management, and technology commercialization. Headquartered in Columbus, Ohio, Battelle oversees 20,400 employees in more than 130 cities worldwide, including seven national laboratories it manages or co-manages for the U.S. Department of Energy and the U.S. Department of Homeland Security and two international laboratories—a nuclear energy lab in the United Kingdom and a renewable energy lab in Malaysia. Battelle also is a leading charitable trust focusing on societal and economic impact and actively supporting and promoting science and math education. www.battelle.org

SPONSORS

Organizations active in site assessment and remediation have contributed financial support.



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