

# Quarterly Update

September 2001

## **ECOS resolves to promote ITRC to states and feds**

At the annual meeting of the Environmental Council of States held in late August, states' highest environmental officers unanimously passed two resolutions that urge states and federal agencies to expand their support of ITRC. The resolutions recognize the outstanding contribution ITRC is making to building interstate regulatory acceptance of new environmental technologies and the impact ITRC guidance documents, training, and networking are having on timely and cost-effective cleanups at federal sites.

Through the resolutions, ECOS encourages the U.S. Departments of Energy and Defense and the U.S. Environmental Protection Agency to increase current funding levels for ITRC. While commending states and federal agencies for their support and participation in ITRC, the ECOS resolutions call for DOE and DOD to each increase their ITRC funding to \$2 million annually, thereby matching the level at which states are currently supporting ITRC through their in-kind support. USEPA is asked to increase ITRC funding to \$1 million annually while expanding partnerships with ITRC through the Office of Research and Development and the Office of Solid Waste and Emergency Response.

One of the resolutions asks state environmental agencies to expand their endorsement of ITRC by increasing the number of states that agree to use ITRC guidance documents when reviewing work plans that propose new environmental technologies. States are also asked to sponsor and participate in ITRC training events, support staff participation and leadership of ITRC teams, and support the efforts of designated staff to serve as ITRC points of contact—a vital role in communicating information about ITRC across state programs and in obtaining state concurrence in using ITRC guidance on implementing innovative technologies.

## **All set for 2001 Fall Conference**

ITRC has all its ducks in a row for a terrific fall conference in Long Beach, California, November 5–8 at the Westin Long Beach. With a theme of “Environmental Partnerships and Technology Education,” the agenda is shaping up to reflect this year's emphasis on innovative partnerships for

furthering innovative technology deployments. At plenary sessions, lunch speeches, and workshop sessions, discussion will center on how states, DOD, USEPA, and DOE are forging partnerships to find creative solutions to cleanup challenges.

The conference promises something for everyone. On the first day, while the general audience decides between attending a panel on brownfields or one on technical presentations, POCs will meet to plan 2002 activities. During the afternoon, while the general audience is participating in federal and state RFP workshops, POCs will meet with DOE and DOD representatives in concurrent sessions to review federal priorities for inclusion in the ITRC Five-Year Program Plan.

The second day will be devoted to training—a variety of two-hour training courses will be open to all attendees on diffusion samplers, phytotechnologies, permeable reactive barriers, chemical oxidation, and unexploded ordnance. There will also be workshops on DNAPL source reduction and long-term stewardship.

ITRC business will take up the last two days. The first order of business will be the election of two new members to the Board of Directors—a co-chair and the citizen stakeholder representative. Also on the agenda is the year in review by ITRC's Board and ITRC team leaders. The day will conclude with concurrent ITRC team meetings. On the last day, the two newly elected Board members will be announced, and they will share their vision of the path forward for ITRC. The conference will conclude with more concurrent ITRC team meetings.

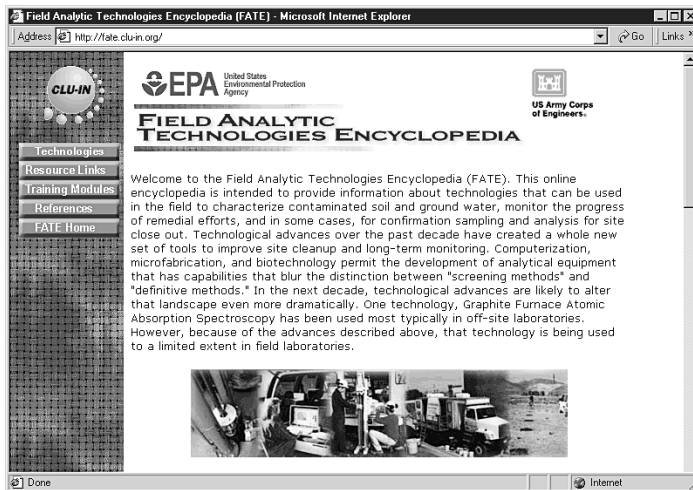
## **Conference logistics**

To ensure your place at the Fall Conference, register online at [www.itrcweb.org](http://www.itrcweb.org). Conference registration closes on October 19.

There is no registration fee for active ITRC members, who have committed 10% of their time to ITRC in 2001. For all nonmembers, there is a \$250 registration fee.

To reserve your room at the special ITRC group rate of \$120, call the Westin Long Beach at (562) 436-3000 by October 19.

## Visit FATE for site characterization info



Need to characterize a contaminated site? FATE is an online resource ([fate.clu-in.org](http://fate.clu-in.org)) that can help you find more information about technologies that can be used in the field to characterize contaminated soil and groundwater, monitor the progress of remedial efforts, or support decisions about site cleanups. The Field Analytic Technologies Encyclopedia was developed jointly by the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers to help a broad audience easily find useable information for streamlining the site investigation phase of a cleanup. FATE organizes information on technologies into categories:

- ▼ analytics (such as gas chromatography, immunoassay, or x-ray fluorescence)
- ▼ geophysics (such as ground-penetrating radar or magnetics for environmental applications)
- ▼ sampling (such as passive diffusion samplers)
- ▼ delivery systems (such as direct-push platforms)

For each technology, FATE provides

- ▼ description,
- ▼ typical uses,
- ▼ theory of operation,
- ▼ system components,
- ▼ mode of operation,
- ▼ performance specifications,
- ▼ advantages and limitations,
- ▼ cost,
- ▼ additional resources,
- ▼ documented past uses, and
- ▼ verification/evaluation reports.

The documents, photographs, diagrams, and links provided in FATE are designed to be used by a wide audience from highly technical users—like engineers, field technicians, and site managers—to the general public and nontechnical users. The database also contains downloadable training modules. Your feedback is important to ensure that FATE continues to meet the needs of users. An online feedback comment form is provided, or you can send your comments directly to Ann Eleanor of USEPA's Technology Innovation Office at (703) 603-7199, [eleanor.ann@epa.gov](mailto:eleanor.ann@epa.gov).

## OST online calendar keeps you in the loop

Keeping up with DOE's Office of Science and Technology is a snap—actually a click—now that its calendar is online. Go to [ostcalendar.envnet.org/month.asp](http://ostcalendar.envnet.org/month.asp), and you'll be able to see at a glance when OST plans its next technology demonstration, planning event, or conference. These events for the current month are displayed with a conventional calendar. You'll notice that the event names are abbreviated and color-coded. The colors denote different kinds of events, which are listed in a key placed at the bottom of the screen. Clicking on the event name will reveal a popup window that displays the full name of the event and various kinds of information that might include the URL for the event's Web site.

This online calendar also lets you view OST events by year, week, or particular days. Just go to the top of the screen and select the type of view. An especially helpful feature is the capability to search events. Click on "Search" at the top of the screen, and you'll be able to construct a search by keywords and/or event types. The types of events that this calendar tracks are categorized into DOE-sponsored event, budget activity, focus area activity, technology demonstration, and other conferences.

You can even submit events for the calendar through an "Add an Event" page. Events are reviewed by the calendar administrator and then added to the calendar.

## Nominations sought for ITRC Board

Two ITRC Board of Directors positions are open. Both Roger Kennett of the New Mexico Environment Department and Aimee Houghton of the Center for Public Environmental Oversight are finishing up their two-year terms. Roger served as one of the two state co-chairs of the Board, while Aimee filled the citizen stakeholder position on the Board. To replace these positions, ITRC is accepting nominations from its membership until October 19, 2001. (See the nomination form below.)

At the first ITRC members' plenary of the 2001 Fall Conference, nominated individuals will accept or decline these nominations. At the second plenary, members will vote for and elect a new state co-chair. In accordance with ITRC governance, the two co-chairs will subsequently select the new stakeholder representative in consultation with the rest of the voting members of the Board.

The co-chairs are selected by the full membership of ITRC on a rotating basis every three years. All voting

members of the Board serve three-year terms. Nominated individuals do not have to be current ITRC members. The two new Board members shall officially begin their terms on January 1, 2002.

The ITRC Board of Directors conducts its business openly, mainly in conference calls and a few meetings over the course of a year. The Board's goal is to make decisions among its members (including the non-voting or ex-officio members of the Board) by consensus.

The Board makes decisions regarding business plans, funding plans, priority work areas, budget allocations and scope of work, funding requests, reconciliation of available funding with scope of work, changes in ITRC management structure and procedures, appointment of public and tribal stakeholders to ITRC, appointment of team leaders, selection of ITRC program director, and selection of ITRC support contractors and subcontractors.

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## Nomination Form: ITRC Board of Directors

Please return by fax, (202) 624-3666, by October 19. Two positions are available—one state co-chair and one stakeholder representative. You may nominate yourself. You may nominate more than one person for either or both positions. Please copy this form as needed.

I nominate the person below as a (please circle one) **State Co-Chair Stakeholder Representative**

<i>(Please Write Name of Nominee Above)</i>	<i>(Please Write Organization of Nominee Above)</i>

Your Name \_\_\_\_\_

Your Organization \_\_\_\_\_ Your Phone \_\_\_\_\_

## STATE ENGAGEMENT UPDATE

### ❖ Outstanding ITRC state points of contact earn awards

At the September ITRC state points of contact (POCs) meeting in Austin, Texas, six POCs received awards for their performance and outstanding service to ITRC over the last few years. The awards dinner began with a welcome provided by Bob Huston, chairman of the Texas Natural Resources Commission. Chairman Huston commended ITRC for accomplishments and encouraged POCs to apply the ITRC model to environmental areas beyond remediation. We congratulate the following POCs for their accomplishments and thank them for their commitment to ITRC: Marybeth Brenner (NJ), Ken Marra (MA), Charles Johnson (CO), Saqib Khan (KS), Julieann Warren (MO), and Ted Dragovich (IL). These individuals are very active in ITRC and are helping to ensure their states gain great value from their ITRC participation while also promoting the advancement of ITRC around the country.

### ❖ ITRC states identify environmental priorities to guide the future of ITRC

During the Austin POC meeting, ITRC POCs identified priority areas for their state environmental agencies for upcoming years. This information will be used to guide future ITRC activities. Selected areas range from continuing to investigate remediation technologies, ITRC's traditional focus, to permitting energy production technologies and environmental technologies for CAFOs (concentrated animal feeding operations). ITRC is very open to investigating areas outside its traditional focus and looks to ITRC state leadership to develop new proposals for incorporation into the ITRC Five-Year Program Plan. The current ITRC Five-Year Program Plan is available at [www.itrcweb.org](http://www.itrcweb.org). In addition, information is being gathered from our federal partners to ensure common priorities are shared and pursued as appropriate. State POCs will reconvene at the ITRC Fall Conference in November to prioritize future ITRC activities.

### ❖ Success stories welcomed!

The State Engagement Team tracks and documents the use of ITRC products and services in order to assist in meeting customers' needs and to highlight successful use of ITRC resources. By filling out a form available on the ITRC Web site from the State Engagement Team page, you'll help the team track down and further document how ITRC guidance documents, training, and network are being used in organizations to cut approval costs, slash remediation costs, find better solutions, and pave

the way for new technologies. To encourage responses, the State Engagement Team will award \$1,000 to the lucky winner of a drawing from among all the people who complete a Document and Training Feedback Form. Don't delay, complete a form today!

If you would like more information on ITRC State Engagement activities, please refer to the ITRC Web site at [www.itrcweb.org](http://www.itrcweb.org) or contact Paul Hadley, ITRC State Engagement coordinator, at [phadley@dtsc.ca.gov](mailto:phadley@dtsc.ca.gov), (916) 324-3823 or ITRC program advisors, Mary Yelken, [myelken@westgov.org](mailto:myelken@westgov.org), (402) 325-9615 or Cain Diehl, [diehl@sseb.org](mailto:diehl@sseb.org), (770) 242-7712. Your ITRC state POC can also answer your questions about ITRC (contact information at [www.itrcweb.org](http://www.itrcweb.org)).

## TECHNICAL TEAM UPDATES

### ❖ Dense Nonaqueous Phase Liquids (DNAPLs)

The DNAPLs Team plans to produce three technical/regulatory guidance documents by June 2002—on thermal technologies, characterization, and surfactant/co-solvent flushing.

The effort on thermal technologies will be coordinated with work being conducted by the U.S. Army Corps of Engineers and the USEPA Technology Innovation Office. The thermal group has agreed to an outline for USACE/TIO's document and has responsibility to produce case summaries and sections of the outline and provide a regulatory perspective. Eric Hausamann (NY), Cynde Devlin (SC), Bill Dana (OR), and Anne Callison of the Lowry AFB Restoration Advisory Board will be the leads for coordinating with USACE/TIO. The DNAPLs Team plans to come out with its own technical/regulatory document on thermal technologies—*Regulatory Guidance for In Situ Thermal Remediation of DNAPL Source Zones*—in June 2002.

The characterization subteam is still in the process of identifying case studies that they can track while compiling its technical/regulatory document, and the surfactant/co-solvent flushing subteam has begun drafting sections of its technical/regulatory document.

On September 18–20, the DNAPLs Team met and conducted a site visit to Cape Canaveral in Florida to observe the demonstration of steam heating using Dynamic Underground Stripping combined with Hydrous Pyrolysis/Oxidation, which is part of the Interagency DNAPL Consortium's testing of three innovative technologies for controlling DNAPLs.

Jim Harrington (NY) stepped down from leading the DNAPLs Team, and Eric Hausamann (NY) is now the sole leader. Eric can be reached at [eghausam@gw.dec.state.ny.us](mailto:eghausam@gw.dec.state.ny.us).

## ❖ Diffusion Sampler Protocol (DSP)

The DSP Team continues to partner with the Air Force Base Conversion Agency (AFBCA) and HQ Air Force Center for Environmental Excellence (AFCEE) to deploy passive diffusion bag (PDB) samplers at selected BRAC and DERA bases in California and elsewhere. In June, as part of the AFBCA-ITRC Diffusion Sampler Deployment Initiative, the partnership conducted meetings at McClellan Air Force Base and March Air Force Base to kick off the initiative and to inform BRAC cleanup team members, other interested stakeholders, base personnel, and contractors from bases at Mather, McClellan, Castle, March, George, Norton, and Williams about the scope and operation of the initiative. At these two meetings, the team presented the ITRC/USGS/USEPA-TIO Internet training on PDB samplers and followed up with focused discussions on issues or concerns that might be raised by the deployment of the PDB sampler technology.

The DSP Team intends to develop and expand a Web site to track deployment efforts, evaluate the appropriateness of diffusion sampler implementation, track progress, and capture lessons learned. The DSP Team has also teamed with AFBCA to set up an ITRC-AFBCA Partnership Web site ([www.sitecloseout.org](http://www.sitecloseout.org))—click on “ITRC-AFBCA Partnership Working Group” under “List of Working Group Websites”, which supplements the Web site the team will maintain about diffusion sampler activities.

The DSP team presented “Diffusion Sampler Deployment Initiative 2001: ITRC and USAF” at the 4th Tri-Service Environmental Technology Symposium, held in mid-June in San Diego, and the team assisted NEWMOA (Northeast Waste Management Officials Association) in a September training session on passive diffusion bag samplers.

The DSP team is now actively planning for the ITRC Fall Conference. The DSP Team will provide a morning training session on the use of PDB samplers on Tuesday, November 6. On Tuesday afternoon, the team will have several presentations on PDB sampler deployment experiences from AFCEE, the U.S. Navy, and the private sector. A workshop is planned with a panel of experts and regulators to discuss PDB sampler deployment issues and concerns. The DSP Team will also hold a team

meeting during the Fall Conference. George Nicholas (NJ) and Paul Bergstrand (SC) lead the DSP Team. George is at (609) 984-6565, [gnichola@dep.state.nj.us](mailto:g nichola@dep.state.nj.us); Paul’s at (803) 896-4016, [bergstpm@columb34.dhec.state.sc.us](mailto:bergstpm@columb34.dhec.state.sc.us).

## ❖ DOE Gate 6 Technologies

Roger Kennett has been joined by ITRC staff support George Hall in tracking the progress of this project, the objective of which is for state members to participate in demonstrations and deployments of technologies of high importance to the U.S. Department of Energy and the states. Instead of being a stand-alone team, the coverage of the technologies is through other existing ITRC technical teams. For example, several of the demonstrations identified for the project involve DNAPL treatment—the topic of study for the ITRC DNAPLs Team. Other priority areas include PRB performance evaluation, landfill covers, and alternative treatment technologies for mixed waste. Optimal participation would include input to demonstration test plans and observing the conduct and evaluating the results of the demos/deployments.

In support of this effort, George is gathering the results of participation in the demos identified for 2001. He distributed a form to various team leaders and contractors in order to document the current involvement of ITRC teams in DOE technologies and the types of interrelationships that exist between ITRC teams and site personnel or technology vendors. If you received one of these forms, please complete it and send back to George Hall at [technology-consultant@prodigy.net](mailto:technology-consultant@prodigy.net). Roger Kennett, ITRC co-chair, is the point of contact for the project and can be reached at [roger\\_kennett@nmenv.state.nm.us](mailto:roger_kennett@nmenv.state.nm.us), (505) 845-5933. George and Roger are working with DOE to identify key demonstrations and deployments that would benefit from ITRC involvement during 2002.

## ❖ In Situ Bioremediation (ISB)

The ISB Team is on schedule to complete its document *Systematic Approaches to In Situ Bioremediation* by the end of the year. *Systemic Approaches* describes the basic framework for implementing an ISB approach and will include several decision trees—a general decision diagram for ISB and specific decision trees for evaluating a site’s ability to use ISB for nitrates, perchlorate, and carbon tetrachloride. The team reviewed the third draft of the document during a team meeting held in conjunction with the In Situ and On-Site Bioremediation Symposium held in San Diego in early June. The team also used this occasion to review the second draft of the decision tree for general ISB and the first draft of the nitrates module. The

team estimates that its document is approximately 60 percent completed. Co-Team Leader Bart Faris gave a presentation of the team's work to the American Geophysical Union in Boston. Bart Faris (NM) and Kris Roberts (ND) lead the In Situ Bioremediation Team. Reach Bart at (505) 841-9466, bart\_faris@nmenv.state.nm.us; Kris can be reached at (701) 328-5236, kroberts@state.nd.us. Ralph Martin heads up the Carbon Tetrachloride Team. He can be reached at (402) 471-3120, ralph.martin@ndeq.state.ne.us.

### ❖ In Situ Chemical Oxidation (ISCO)

Since the publication of its first document, a technical/regulatory document entitled *Technical and Regulatory Guidance for In Situ Chemical Oxidation of Contaminated Soil and Groundwater* (ISCO-1), the ISCO Team has been focusing on preparing for its first Internet-based training. The team has held four practice sessions, and Wilson Clayton will be the team's primary technical instructor with Tom Stafford being the secondary instructor for the Internet-based course. Internet-training events were planned for September 25 and 27. The team is also working to ensure a successful concurrence among states of its new document and has prepared concurrence training slides to explain to POCs the best process for obtaining adoption of the document among state environmental agencies. Tom Stafford (LA) leads the ISCO Team. He can be reached at (225) 765-0462, t\_stafford@deq.state.la.us.

### ❖ Permeable Reactive Barriers (PRB)

The team has delivered its Internet training on permeable reactive barriers a number of times. Responding to students' requests, the team is developing an advanced Internet training that discusses specific case studies, as well as presents updated information from many of the ongoing PRB installations around the nation. This course will also include information from recent studies that have monitored PRBs' long-term performance. September was the target for the first full advanced Internet training on PRBs.

The PRB Team is also continuing its involvement in a Department of Defense Long-Term Performance Monitoring Project for PRBs. The project is focused on the evaluation of monitoring data collected at a number of PRB installations to better understand hydraulic capture and longevity issues for PRBs. Matthew Turner (NJ) leads the PRB Team and can be reached at (609) 984-1742, mturner@dep.state.nj.us.

### ❖ Phytotechnologies/Constructed Wetlands

The Phytotechnologies Team has completed development and testing of the ITRC *Phytotechnologies: Mechanisms and Applications* classroom training. The first full course was delivered in Austin, Texas, on September 12 and 13 to 73 students, including state regulators from 23 states, the city of Austin, environmental consultants, tribal representatives, and community stakeholder representatives. The attendance was somewhat restricted due to the terrorist disaster but was very successful never the less. The course will be offered again in conjunction with the 17th Annual International Conference on Contaminated Soils, Sediments, and Water: Expediting and Economizing Cleanups, October 22–25, University of Massachusetts at Amherst. ITRC is a cosponsor of this 2001 conference, and Roger Kennett, co-chair of ITRC, will be the lunch speaker on Wednesday of the conference. The phytotechnologies course begins at 1:30 p.m. on October 24.

In Austin on September 12, ITRC and AFCEE hosted a meeting to discuss alternative landfill covers. Prior to the meeting, a white paper prepared by AFCEE was distributed to POCs to introduce the technology to them. At the meeting, presentations were made by the most prominent researchers in the field. Discussions of regulatory issues, individual state requirements, and performance issues were held between presentations. The meeting concluded with the understanding that ITRC would provide a meeting location during the ITRC Fall Conference for the group to continue discussions toward the development of a work team in 2002. Dib Goswami (WA) and Bob Mueller (NJ) lead the Phytoremediation Team. Dib can be reached at (509) 736-3015, dgos461@ecy.wa.gov; Bob can be reached at (609) 984-3910, bmueller@dep.state.nj.us.

### ❖ Radionuclides (Rads)

The Radionuclides Team met in Denver in late July to discuss the cleanup document, site visits, the Five-Year Program Plan, and future activities. The team continues to work on its document, *Cleanup Goals at Radioactively Contaminated Sites: Case Studies*, and planned to have a draft final complete by the end of September.

Team members have attended several recent conferences, including the Long-Term Stewardship Conference, July 30–August 2, Grand Junction, Colorado. DOE's Office of Long-Term Stewardship (EM-51), and DOE's Idaho and Grand Junction operations offices sponsored this conference, where Tom Schneider was a speaker. For the past

four years, Rads Team members have attended the DOE-sponsored Environmental Restoration Technology End User Conference. The event, which is cosponsored by DOD and USEPA, Region IV, focuses on sharing innovative cleanup technologies that have the potential to save time and money. This year's conference was held July 16–19 in Atlanta. The Rads Team is getting ready to present a workshop on long-term stewardship at the ITRC Fall Conference in Long Beach on November 6. Tom Schneider and Carl Spreng lead the Rads Team. Tom can be reached at (937) 285-6466, tom.schneider@epa.state.oh.us. You'll find Carl at (303) 692-3358, carl.spreng@state.co.us.

### ❖ **Small Arms Firing Range (SAFR)**

The SAFR Team has completed a rough draft of a technical/regulatory document for remediation of small arms firing ranges. Team members continue to work on refining assigned portions of the draft document and planned to have a draft final version of the document completed in September. The team plans to meet in Cape Cod and visit a range remediation site at the Camp Edwards National Guard Facility. The SAFR Team is led by Dib Goswami (WA) and Bob Mueller (NJ). Dib can be reached at (509) 736-3015, dgos461@ecy.wa.gov; Bob can be reached at (609) 984-3910, bmueller@dep.state.nj.us.

### ❖ **Unexploded Ordnance (UXO)**

The UXO Team tentatively plans on conducting UXO training throughout the United States beginning in January 2002. The best way to sample *UXO Basic Training* is to attend the 2001 ITRC Fall Conference in Long Beach, CA and sign up for the special two-hour *Introduction to OE/UXO* scheduled for the afternoon of Tuesday, November 6. ITRC will be offering a limited number of free passes to the mini-course to qualified state regulatory personnel and community stakeholders. If you're interested, contact Todd Margrave at margrave1@home.com, (619) 589-0784.

The UXO Team has started to develop its technical/regulatory guidance document on ordnance and explosives (OE/UXO), which is tentatively scheduled for a late 2002 or early 2003 release. The OE/UXO technical/regulatory guidance document will be the first multi-state-reviewed reference guide on OE/UXO site assessment and remediation.

The UXO Team will soon lose one of its capable leaders when Steve Nussbaum steps down to assume a position in the private sector. On October 12, Steve will end a 13-year career with the state of Illinois to begin working for Bodine Environmental Services, Inc. His new mailing address will be 5350 East Firehouse Road, Decatur, IL 62521-9601. Call him at (800) 637-2379. Steve has been an outstanding team leader, and ITRC and the UXO Team will miss him. On leaving, Steve says, "I'm personally sad to be leaving the relationships that have been established but professionally excited about the opportunities presented by my new position. I thank the team for consolidating ourselves around our goal of preparing and presenting UXO training and our Five-Year Plan. I'm confident that the UXO Team will fill a national void in the UXO arena. DOD, states, and communities are counting on ITRC to continue the effort." Jennifer Roberts (AK) remains as team leader. Jennifer can be reached at (907) 269-7553, jennifer\_roberts@envircon.state.ak.us.

## **CONTACTS**

For questions or comments regarding ITRC, please contact Rick Tomlinson, ITRC program director, Environmental Council of States, (202) 624-3660, rickt@sso.org.

To provide comments, suggestions, or input for ITRC's *Quarterly Update*, please contact Elaine Specht, WPI, (540) 557-6071, elaine\_specht@wpi.org.

**\*CALENDAR**

Event	Location	Date	Contact
<b>Internet Course:</b> Diffusion Samplers		Oct. 9 and 11	Register at <a href="http://www.itrcweb.org">www.itrcweb.org</a> Click on "Internet Training" Mary Yelken, (402) 325-9615 <a href="mailto:myelken@westgov.org">myelken@westgov.org</a>
<b>Classroom Course:</b> Accelerated In Situ Bioremediation of Chlorinated Solvents	Pasadena, CA	Oct. 23-24	Register at <a href="http://www.itrcweb.org">www.itrcweb.org</a> Click on "Classroom Training" Vicki Nelson, (770) 242-7712 <a href="mailto:nelson@sseb.org">nelson@sseb.org</a>
<b>Classroom Course:</b> Phytotechnologies	Univ. of MA Amherst, MA	Oct. 24-25	Register at <a href="http://www.itrcweb.org">www.itrcweb.org</a> Click on "Classroom Training" Vicki Nelson, (770) 242-7712 <a href="mailto:nelson@sseb.org">nelson@sseb.org</a>
<b>2001 Fall Conference</b>	Long Beach, CA	Nov. 5-8	Marty Kushner, (202) 624-3501 <a href="mailto:mkushner@sso.org">mkushner@sso.org</a>
<b>Classroom Course:</b> Accelerated In Situ Bioremediation of Chlorinated Solvents	New Orleans, LA	Dec. 4-5	Register at <a href="http://www.itrcweb.org">www.itrcweb.org</a> Click on "Classroom Training" Vicki Nelson, (770) 242-7712 <a href="mailto:nelson@sseb.org">nelson@sseb.org</a>

\* All course dates and times are subject to change. Check the ITRC Web site at [www.itrcweb.org](http://www.itrcweb.org) for updates and registration. Registration opens four to six weeks prior to events.

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