

**2007 Fourth International Phytotechnologies Conference
Sept 24-26, 2007**

Schedule Overview

Day 1 - Monday

PLENARY SESSION - Opening Remarks and Overviews 9:00 am – 11:30

Co-Chairs Steve Rock and Lee Newman

Chairs Welcome

Lee Newman Milton Gordon remembered

John Hickenlooper, Mayor of Denver (invited) Welcome to Denver

Break from 10:00 to 10:15

David Tsao & Kris Geller ITRC Revisited

Tomas Vanek Europe West and East

Younging Luo Chinese Research and Market Opportunities

Jerry Schnoor Global Perspective

Lunch on your own 11:30 - 1

Session 1 –1:00 -3:00

1A History

1B TPH

Chair McCutcheon

Co-Chairs Reynolds and Paquin

Erickson

Burken (Weishaar)

Gerth

Kuo

Landmeyer

Huang

McCutcheon

Nichols

Marmioli

Phillips

Break from 3:00 to 3:15

Session 2 –3:15 to 5:15

2A Gene

2B TPH

Co-Chairs Newman and Rylott

Co-Chairs Reynolds and Paquin

Marmioli, N.(Pirondini)

Farrell

Antosiewicz

Paquin

Weyens

Reynolds

Marmioli, M.(Rustichelli)

Liste

Flokstra

Rylott

Poster Session from 5:15 to 7:00

Phyto Society Meeting 7:30

Day 2 - Tuesday Sept 25

Session 3 – 8:30 to 10:30

3A Groundwater	4B Urban Sustainability	3C Salt
Co-Chairs Erickson, Burken	Chair Marmioli	Chair Zhi-Qing Lin
Ferro	Retzalaff	Freeman
Carnegie1	Coleman	Yazgen
La Freniere	Gawronski	Zalesny, J
Landmeyer	Kocman	Greenberg (Wu)
Lewis-Russ	Marcus	Lin

Break from 10:30 to 11:00

Session 4 – 11:00 to 1:00

4A Phytomonitoring	4B Biowaste	4C Extraction
Co-Chairs Landmeyer/Nichols	Chair Olquin	Chair Baker
Burken	Ludlow	Ebbs1
Gopalakrishnan	Davis (Xie)	Elless
Nichols1	Olquin	Haque
Vroblesky		Blaylock
Medford		Pokethitiyook (Phaenark)
Negri		

Lunch 1: 00 to 2:30

Session 5 – 2:30 to 4:30

5A BioFuels	5B Veg Covers	5C Pesticides & PCBs
Chair Blaylock	Chair Rock	Chair White
Vangronsveld	Mackey	White
Zalesny, R	Stathyelich	Leigh
Lee	Lorentz	Greenberg
van der Lelie	Albright	Zeeb
		Liu

Poster Session from 5:00 to 7:00

International Journal of Phytoremediation Editors Meeting 7:30

Day 3 – Wednesday Sept 26

Session 6 –8:30 to 10:30

6A Restoration	6B Energetics	6C Wetlands
Co-Chairs Brown/Atkinson	Co-Chairs Reynolds and Vanek	Chair Spriggs
Ferro-Serano	Gandia	Smith
Brown	Merchie	Sanchez
Chaney	Reynolds	Reinhold
Carriera	Smith	Alarcon
Maier	Gerth	Jordahl
<i>Break from 10:30 to 11:00</i>		

Session 7 11:00 to 12:30

Closing Plenary

Awarding Student Poster Prizes – David McMillan

2008 Goals and Agenda - Phyto Society Officers

IJP Report - Jason White

Closing Remarks - Alan Baker

Conference Adjournment 2008 IPS President

Tour buses leave 1 pm, return 5 pm

Session	Speaker	Title
Opening Plenary	Chairs Lee Newman & Steve Rock David Tsao Tomas Vanek Youming Luo Jerry Schnoor	Europe East and West Chinese Research and Market Opportunities Global Perspective
History	Steve McCutcheon Larry Erickson Andre Gerth James Landmeyer Steve McCutcheon Nelson Marmioli	Phytoremediation: Eighteen Years of Progress Application of Phytotechnologies in developing countries The Historical Foundation of Phytoremediation of Contaminated Ground-Water Systems
TPH	Chairs Dan Paquin and Mike Reynolds Joel Burken Hsiu-Chi Kuo Huang Elizabeth Nichols Richard Farrell Lori Phillips Dan Paquin Mike Reynolds Hans Liste	Phytoremediation of BTEX Hydrocarbons: Potential Impacts of Diurnal Groundwater Fluctuation on Microbial Degradation Phytoremediation of Soils Contaminated by Heavy oil with Plants Infected by Mycorrhizal Fungi Plant Growth Promoting Rhizobacteria Enhanced Phytoremediation for Removal of Persistent Hydrocarbon Contaminants from Soils. The Impact of Vegetation on Sediment Composition, PAH Attenuation, and PAH Desorption. Phytotechnology Applied to a Weathered Flare-pit Soil: Reflections on a Four-year Field Study Phytoremediation of weathered flare-pit soil: the impact of mixed and single plant treatments on hydrocarbon degradation potential Germination, Early Growth and 35 d Biofuels Biomass in PAH Soil Using Sequential Biodegradation Patterns to Improve PAH Phytoremediation Monitoring Phytoremediation of PAHed soils – Ups and downs, despair and hope

Genetics	Chair Lee Newman & Elizabeth Rylott	Levels of genetic and protein polymorphisms may account for phenotypic plasticity in the	
	Nelson Marmioli	hyperaccumulator specie <i>Thlaspi caerulescens</i>	
	DM Antosiewicz Nele Weyens	Comparison of phytoremediation capacity of tobacco plants overexpressing different PCS genes	
	Marta Marmioli	Role of Plant-associated Bacteria to Improve <i>in situ</i> Phytoremediation of BTEX and TCE Genomic and proteomic approach to identify analytical and molecular descriptors for Cd decontamination in poplar species.	
	Brittany Flokstra Elizabeth Rylott	The Use of Affymetrix® DNA Microarray Populus GeneChips® to Identify Phytotoxic Responses of Hybrid Poplar Trees (<i>Populus deltoids</i> x <i>nigra</i> DN34) During Uptake and Phytoremediation of TNT Engineering Transgenic Plants to Degrade RDX from Military Training Ranges	
Groundwater	Chairs Larry Erickson & Joel Burken Ari Ferro	Irrigation of Tree Stands with Recovered Groundwater Containing 1, 4 – Dioxane Biodegradation of Biphenyl and Ethylene Glycol by Rhizosphere Consortia Enriched from a Phytoremediation Test Plot	
	David Carnegie	Strategies for assessing phytoremediation performance: a real-life, field scale, research-grade case study.	
	Lorraine La Freniere	Long-Term Monitoring (1993-2007) of the Effect of Hybrid Poplar Trees on a Petroleum-Hydrocarbon Contaminated Ground-Water System	
	James Landmeyer Anne Lewis-Russ	Arsenic Uptake by Poplars and Implications for Use in Hydraulic Control of Groundwater	
	Urban/ Sustainability	Chair Nelson Marmioli Bill Retzalaff	Advancing Green Roof Technology Beyond Just Another Pretty Place Identifying and Measuring Dynamic Processes Involved in Belowground Carbon Sequestration.
Mark Coleman Stanislaw Gawronski Kocman Kim Marcus		Usefulness of ornamental plants species for air phytoremediation in urban areas Porous Landscape Phytotechnologies for Urban Sustainability in Denver, CO Sustainable Design Concepts for Lowering Facility Eco-Footprints	
Phyto Salt		Chair Zhi-Qing Lin	Analysis of spatial distribution and chemical speciation of selenium in hyperaccumulator plants using
		John Freeman	

	M.S. Yazgen	micro x-ray absorption spectroscopy and liquid chromatography - mass spectroscopy
	Jill Zalesny	Chelate Assisted Phytoremediation of Boron from Soils
	Bruce Greenburg	Phytoaccumulation of Sodium and Chloride into Leaf, Woody, and Root Tissue of <i>Populus</i> Irrigated with Landfill Leachate
	Zhi-Qing Lin	Enhanced Phytoremediation of Salt Impacted Soil with the use of Plant Growth-Promoting Bacteria (PGPR)
	Chair James Landmeyer & Elizabeth Nichols	Phytomanagement of Salt- and Selenium-Contaminated Agricultural Drainage Water in the San Joaquin Valley, Central California
Monitoring	Joel Burken	Plant sampling for groundwater investigations: Plume delineation, contaminant degradation and improved detection limits
	Gayathri Gopalakrishnan	Nature's sensors: Monitoring short-term temporal fluctuations in phytoremediation systems using tree branches
	Elizabeth Nichols	Monitoring Near Surface and Sub-Surface Nitrogen Contamination Using Trees and Stable Nitrogen Isotope ($d^{15}N$) Analyses.
	Don Vroblesky	
	June Medford	Production of plants to serve as highly specific detectors.
	Christine Negri	Monitoring of a Large-Scale Phytoremediation Site: Over Eight Years of
Biowaste	Chair Eugenia Olquin	
	Amanda Ludlow	Sprayfield Application of Process Waters
	Lawrence Davis	A Green Solution for Blue Lagoons: Phytoremediation of Textile Dyes
	Eugenia Olquin	Phytoremediation of Stillage from Ethanol Production with Tropical Aquatic Plants: <i>Pontederia cordata</i> and <i>Pistia stratiotes</i> .
Extraction	Chair Alan Baker	A screen of some native Australian flora and exotic agricultural species for their potential application in
	Steve Ebbs	cyanide-induced phytoextraction of gold
	Mark Elless	Validation of Fern-Based Phytofiltration for Continuous Removal of Arsenic from Drinking Water
	Nazmul Haque	Screening the phytoremediation potential of desert broom (<i>Baccharis sarothroides</i> Gray) growing on

	Michael Blaylock Prayad Pokethitiyook	mine tailings in Arizona, USA Phytoextraction of Arsenic Using <i>Pteris</i> Ferns Cd and Zn accumulation in plants from the PADEANG Zinc mine area
Biofuels	Chair Michael Blaylock Jaco Vangronsveld Ron Zalesny David Lee Daniels van der Lelie	Metal accumulation in plant species with added economical value grown on metal contaminated soils: sustainable use of these soils for bio-energy production and possibilities for phytoextraction Ecological Sustainability of Alternative Biomass Feedstock Production for Environmental Benefits and Bioenergy The plant expression of hydrolytic enzymes for the enhanced production of cellulosic ethanol Plant growth promoting endophytic bacteria for improved phytoremediation, carbon sequestration and biomass production
Veg Cover	Chair Steve Rock William Albright Carl Mackey Janna Stathyelich Simon Lorentz	Design and Construction of the Shell Trenches Alternative RCRA Cover at Rocky Mountain Arsenal, Selection of Phytoremediation over Traditional Stabilization and Capping Alternatives as the Removal Action at a Waste Oil Lagoon Superfund Site Assessment of hydraulic control and chlorinated hydrocarbon degradation in waste impoundments utilizing a managed vegetative cover
Pesticides& PCBs	Chair Jason White Jason White Mary Beth Leigh Bruce Greenberg Barbara Zeeb Jiyan Liu	Phytoremediation of Persistent Organic Pollutants with <i>Cucurbita pepo</i> : Mechanistic studies and Field Application Rhizoremediation of PCBs: New insights from stable isotope probing techniques Phytoremediation of DDT Contaminated Soil Phytoremediation of Polychlorinated Biphenyls (PCBs) by Whole Poplar Plants: Gene Expression after Exposure to Mixture of PCBs

Restoration	<p>Chair Brad Atkinson Nicholas Dickinson Sally Brown Rufus Chaney Raina Maier</p> <p>Laura H Carriera</p>	<p>Carbon in Phytoremediated Brownfield Soils</p> <p>Phytoextraction of Ni and Cd from Biosolids-Contaminated Soils. Phytostabilization of Mine Tailings in Arid and Semi-Arid Environments Remediation and Site Restoration of a Botanical Garden Site Contaminated with Solvents in Groundwater</p>
Energetics	<p>Chairs Mike Reynolds and Tomas Vanek Fernando Gandia-Herrero Kate Merchie</p> <p>Mike Reynolds Thomas Smith Andre Gerth</p>	<p>The Role of Glycosyltransferases in the Phytodetoxification of TNT Proteomic/Protein Analyses of GST in Poplar Coupling Mineralization-Immobilization Turnover in Soil with Humification of Plant-Conjugated Energetics: Carbon Evolution and Humic Fraction Toxicity Native Grasses and Forbs As Remediators of Military Energetics Contamination in Soils Treatment of Explosives-Contaminated Water in a Wetland System</p>
Wetlands	<p>Chair Tom Spriggs John Smith</p> <p>Gloria Sanchez-Galvan</p> <p>Dawn Reinhold Teresa Alarcon-Herrera Jim Jordahl</p>	<p>Use of Natural Systems for Sustainable Water Treatment Aquatic Phytoremediation with a Lead Hyperaccumulator, <i>Salvinia minima</i>: Kinetic Studies Phytoremediation of organic pollutants in constructed treatment wetlands: Insights from laboratory studies Constructed Wetlands: an alternative for Arsenic Removal Treatment Wetlands for RO Concentrate</p>
Final Plenary	<p>David McMillan Jason White Alan Baker</p>	<p>Student Poster Awards IJP Report Closing remarks</p>