



REMTECH

*Remediation technologies and
Requalification Territory Exhibition*

REMTECH2015
REMEDIAZIONE TECNOLOGIE
Bonifiche dei Siti Contaminati e Riqualificazione del Territorio



Patrizia Bianconi

**IPLA –Global forum
Moscow, 7°October 2015**

Identity

“It’s the most specialized event in Italy dedicated to remediation technologies, territory requalification, costal zone and sea management ”



Targets and activities



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RemTech (by Ferrara Fiere) refers to: private companies, public administrations, associations, universities, research centers, professionals.

It is characterized by: **qualified exhibition area**, high level technical scientific conferences, training courses, **RemTech National and International Training School**, Degree and Ph.D. Awards

Conference program focuses on: law evolution, characterization, risk analysis, pilot plants, remediation of soil, water, sediments, innovative technologies, remediation sustainability, oil site remediation, landfill, waste, asbestos removal, coastal and sea management, flood prevention and territory maintenance

B2B meeting with potential new export customers at their own stands to present their technology to interested parties.

Countries participants



RemTech Organization



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REMTECH2015

Scientific Committee



Scientific Committee

INERTIA2015

Scientific Committee



EXHIBITION ENTERPRISES COMMITTEE

RemTech community



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- 400 Exhibitors
- 10.000 Visitors
- 300 Conferences and Training courses
- 2.000 Speakers
- 100 Auspices/partners
- 100 Foreign Delegates
- 90 Degree Awards
- 70 Specialized press and Web supporters



Remtech main Topics



- ◆ Sustainable remediation: pollution prevent, control, Risk assessment, remediation, clean-up targets, reuse of contaminated soils,
- ◆ Contaminated Site Management: legal, technical, financial and social issues, site quality management
- ◆ Coastal zone and sea management
- ◆ Building reuse disposal
- ◆ European and national legislations on remediation, flood prevention and management
- ◆ Diffuse contamination, sediments, mining
- ◆ Public private partnership for site remediation/collaborative clean up and reuse process

Remtech international partner organizations and events



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Remtech enterprises technologies



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Processo	Matrice	Modalità di impianto
Soil venting	Suolo	<i>in situ, on site</i>
Air sparging	Acqua	<i>in situ</i>
Soil flushing	Suolo	<i>in situ</i>
Soil washing	Suolo	<i>ex situ</i>
Immobilizzazione/Inertizzazione	Suolo	<i>in situ, ex situ</i>
Estrazione con solvente	Suolo	<i>ex situ</i>
Desorbimento termico	Suolo	<i>in situ, ex situ</i>
Vetrificazione	Suolo	<i>in situ</i>
Ossidazione Chimica	Suolo/Acqua	<i>in situ, ex situ</i>
Dealogenazione	Suolo/Acqua	<i>in situ, ex situ</i>
Elettrocinesi	Suolo	<i>in situ</i>
Termodistruzione	Suolo	<i>ex situ</i>
Estrazione multifase	Acqua	<i>in situ</i>
Adsorbimento passivo su polimero	Suolo	<i>in situ</i>

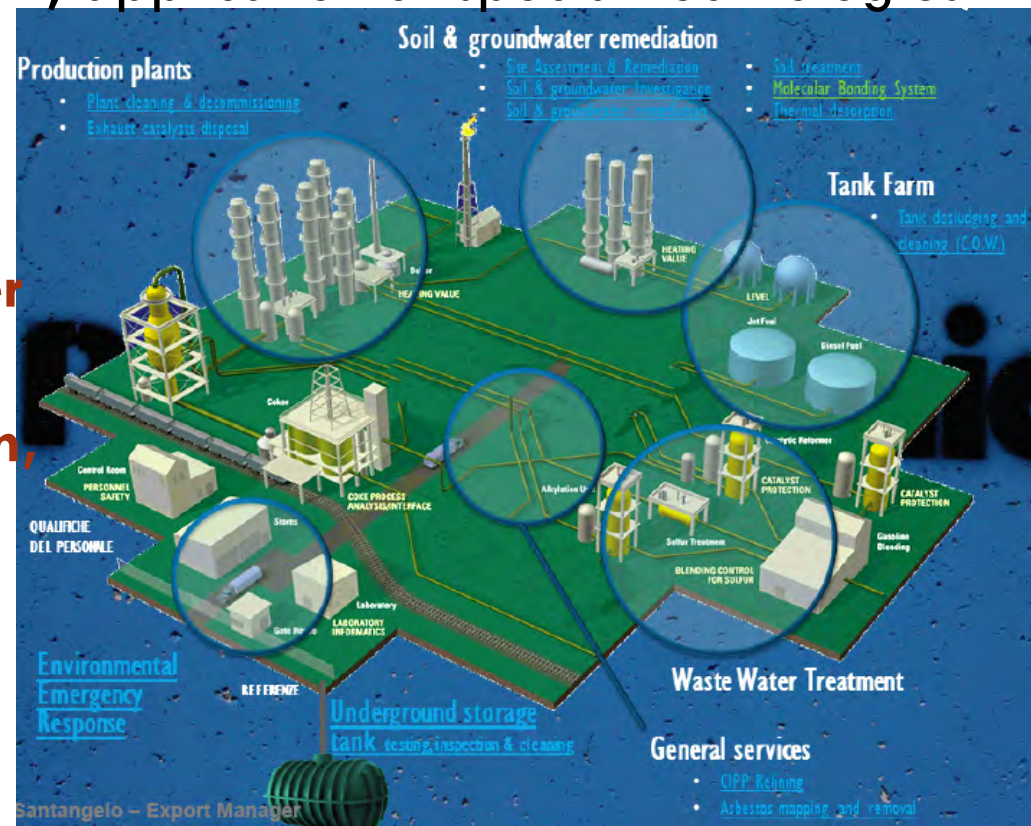
The offer of RemTech/1



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Remediation steps could be generally divided into: Initial Investigation and Characterization Plan, characterization, analysis, Risk Analysis, remediation planning, remediation execution, monitoring plan, waste management, application of special technologies research activities and testing.

**Emilia Romagna with RemTech
(by Ferrara Fiere) integrated offer
could cover all steps,
from investigation to remediation,
with special and
innovative technologies**



The offer of RemTech/2



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GIO.ECO srl



Barriers

Phytoremediation



Thermally enhanced SVE

Bioremediation

Soil washing

Soil venting

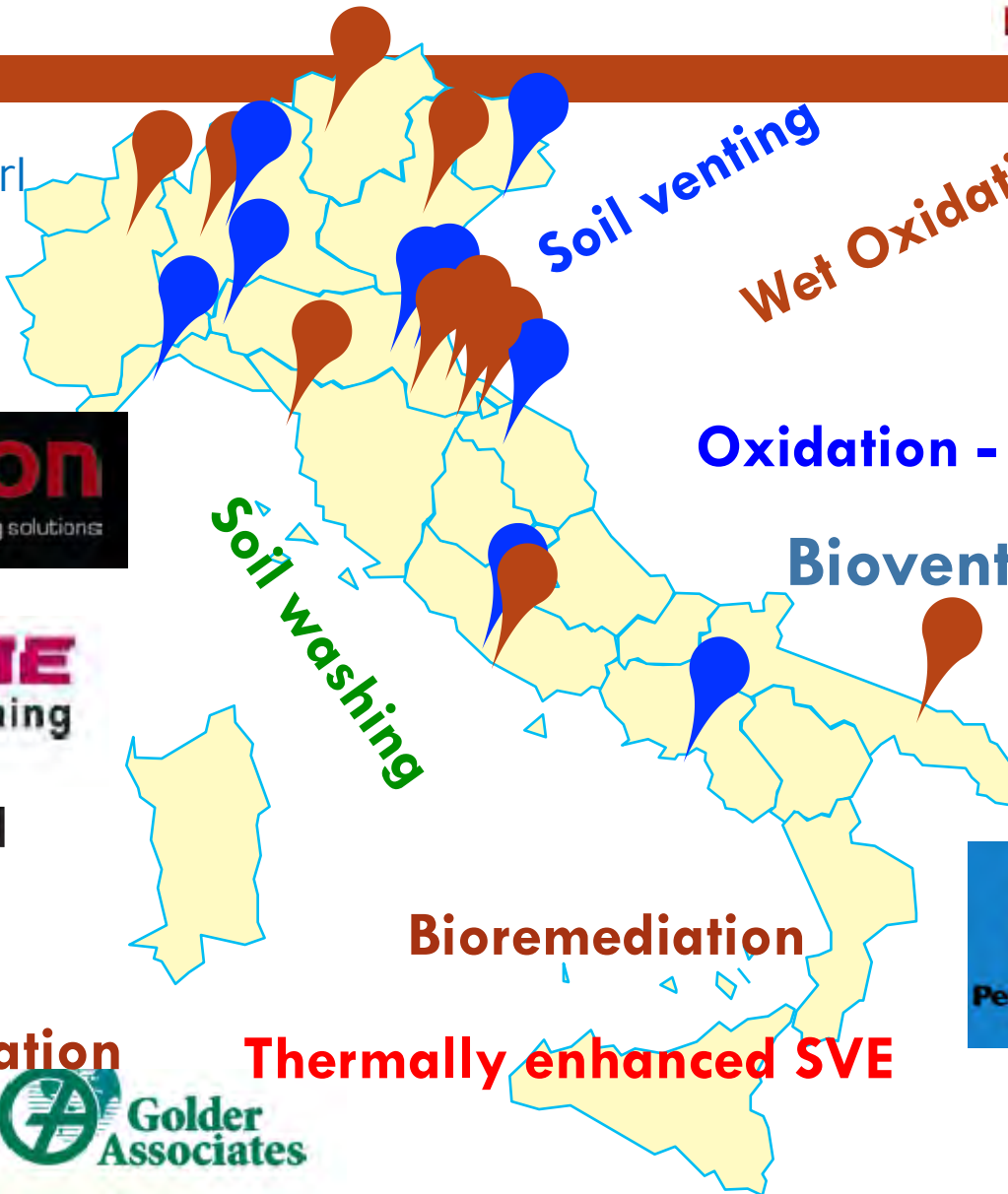
Wet Oxidation

Oxidation - ISCO

Bioventing



Skimmer



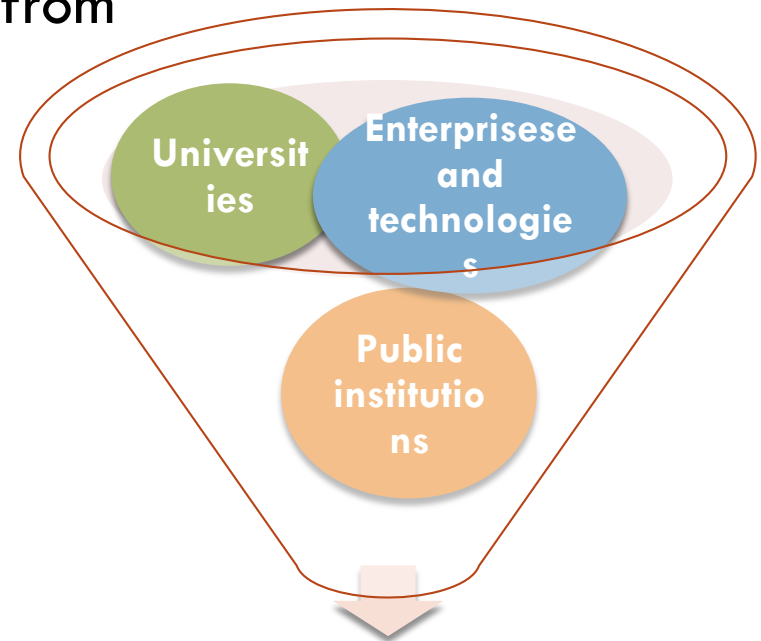


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Remtech International School approach/1

The first important strength point of Remtech is the possibility to involve and use:

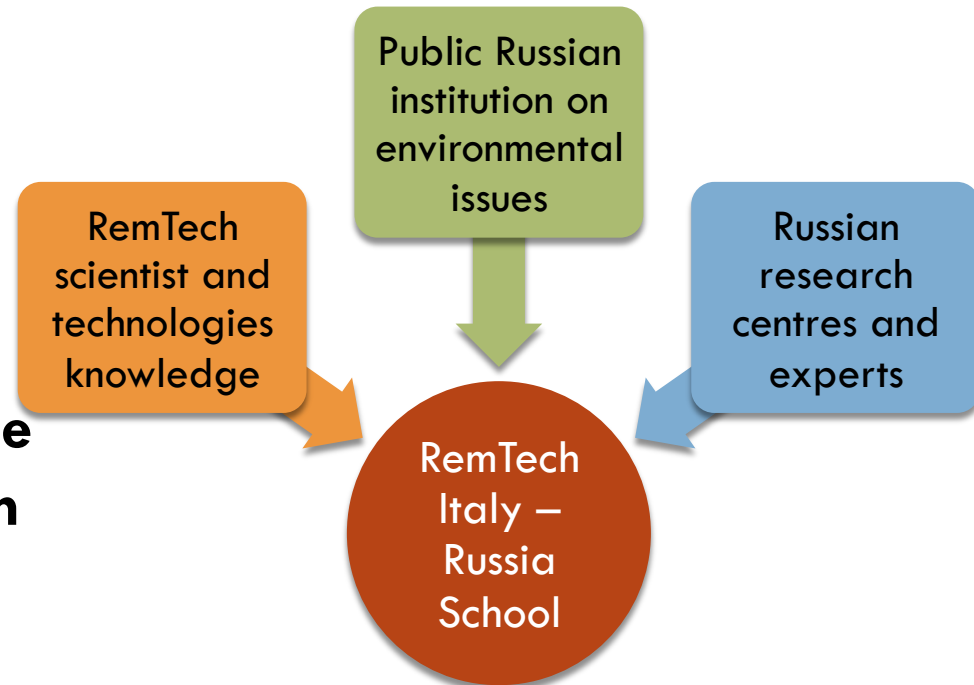
- High level knowledge from Universities and Research centres
- Practical and operative experiences from best enterprises at Italian level
- Advanced technologies by exhibiting companies
- Public operators and technicians



RemTech Training School

Remtech Italy – Russia International School approach/2

The RemTech International School would be partnership between Italian academia and industry, (represented by RemTech), and Russian government with the aims to achieve excellence by **offering training and high-profile, technicians and officials which are key players for the implementation of policies, implementation of remediation** and redevelopment of the area in general.





Objective of the training school

The aims of the full immersion training school are:

- increase the knowledge over soil and underground water regarding site securing systems, technologies and techniques, case histories and site visits to remediating sites;
- answer, from the operative point of view, to specific requests connected to the environmental pollutions and pollutants of Russia contaminated sites and/or to focus on needs coming activities
- give some fundamental information on EU regulation and best practices, procedures, technologies and techniques;



Scientific Coordinator: Member of RemTech Scientific Committee and Russian organizations

Speakers: Italian, Russian and international speakers

Location: Russia

Duration: 56 hours (7 days)

Target: public and private operators involved into remediation sector



The arguments RemTech International School may include:

- Hydrogeology and contaminants diffusion in groundwater (models of transport of fluids) ;
- Characterization of contaminated sites (description of technics and technology for characterisation, surveys and sampling, overall management of the sample, dynamic approach to the characterization);
- Parameters for remediation – introduction to EU regulations and limits;
- Risk Analysis to define prioritization of interventions and health risk and exercise on risk analysis;
- Decontamination of heavy metals in rural soil, hazardous chemical concentrations such as Cd, As, Pb, Cu, and Zn, especially in paddy soil;
- Using Plants to Clean Up Contaminated Soils (Phytoremediation)

- Overview on remediation and innovative technologies (Operating principles, Full scale configurations, Design criteria, Modelling and laboratory testing - pilot test, Full scale application);



Remediation consolidated and innovative technologies (practical application and case history) as for example: Physical barriers, Reactive Permeable Barriers, In Situ Chemical Oxidations (ISCO), Bioremediation and Thermal remediation.

Remtech International School approach/7



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- Remediation consolidated and innovative technologies (practical application and case history) as for example: Physical barriers, Reactive Permeable Barriers, In Situ Chemical Oxidations (ISCO), Bioremediation and Thermal remediation.

Remtech International School approach/8



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- Focus on technologies for remediation of heavy metals and oil (Case histories by Italian companies).



Remtech International activities



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RemTech wants create alliances with russian operators for the development of initiative and activities (commercial and/or services) in particular for the remediation of soils and groundwater the promoters (possibly organized as joint ventures) have the aim of:

- Develop and consolidate a **network of relationships among actors** (institutions and enterprises)
- Support the identification and initiation of entrepreneurial development paths aimed at promoting the intersection of the supply and demand of the two territories;
- **Development of technological exchange agreements,** manufacturing, or sales and enhancing the capacity of Italian companies in the Russia market
- Supporting Russian investors in the field of land remediation and environmental technologies



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Thank you for your attention !

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