Remediation Laboratory

§Ò¹ÇÔ¨ÑÂ¢Í§ËéÍ§»¯ÔºÑµÔ¡ÒÃ Remediation

- ¡ÒÃ¾Ñ²¹ÒµÑÇ´Ù´«ÑºµèÒ§æ¨Ò¡ÇÑÊ´ØàËÅ×Í·Ôé§·Ò§¡ÒÃà¡ÉµÃà¾×èÍãªéã¹¡ÒÃÓºÑ´¹éÓàÊÕÂ·ÕèÁÕÊÒÃÍÔ¹·ÃÕÂìáÐâÅË

- ¡ÒÃºÓºÑ´¹éÓàÊÕÂ/´Ô¹·ÕèÁÕÊÒÃÍÔ¹·ÃÕÂìáÐâÅËÐË¹Ñ¡»¹à»×éÍ¹â´ÂãªéÇ¾×ª

- ¡ÒÃ¡Ó¨Ñ´ÊÕã¹ÍØµÊÒË¡ÃÃÁÍÒËÒÃâ´ÂãªéÇÑÊ´Ø·ÕèÁÕÍÂÙèã¹»ÃÐà·È

ËéÍ§»¯ÔºÑµÔ¡ÒÃ Remediation ä´é´Óà¹Ô¹¡ÒÃÇÔ¨ÑÂà¡ÕèÂÇ¡ÑºµÑÇ´Ù´«Ñº¨Ò¡ÇÑÊ´ØàËÅ×Í·Ôé§·Ò§¡ÒÃà¡ÉµÃ àªè¹ «Ñ§¢éÒÇ
à¾×èÍ¹ÓÁÒºÓºÑ´¹éÓàÊÕÂ·Õè»¹à»×éÍ¹âÅËÐË¹Ñ¡áÅÐÊÒÃÍÔ¹·ÃÕÂì â´ÂÈÖ¡ÉÒ¶Ö§¡Ää¡¢Í§ÇÑÊ´Ø´Ù´«ÑºµèÒ§æã¹¡ÒÃÓºÑ´¹éÓ
áÅÐ·ÃÒºÇ¸Õ¡ÒÃ¨Ñ´¡ÒÃµÑÇ´Ù´«Ñº·Õèãªéáéé¢çµèÍä»à¾×èÍãËéà¡Ô¤ÇÒÁ»ÅÍ´ÀÑÂÃµèÍÊÔè§áÇ´ÅéÍÁ ÇÔ¸Õ¹ÕéÁÕÃÕ¤ÒäÁèá
à¾×èÍä´é¹éÓ·Ôé§·Õè»ÅÍ´ÀÑÂÃáÅÐ¼èÒ¹ÁÒµÃ°Ò¹¹éÓ·Ôé§

ã¹»Ñ¨¨ØºÑ¹¡ÃÐºÇ¹¡ÒÃÓºÑ´¹éÓàÊÕÂ·Õè¾Ñ²¹Òâ´ÂËéÍ§»¯ÔºÑµÔ¡ÒÃ Remediation ÊÒÁÒÃ¶¹Óä»ãªéä´é¨ÃÔ§ ä´éá¡è ÃÐººÓºÑ
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ÃÙ»·Õè 1 ÃÐººÓºÑ´¹éÓàÊÕÂÊÓËÃÑºâÃ§¾ÔÁ¾ìÃÐººÍÍ¿à«çµ à¿Å¡â«¡ÃÒ¿Õ áÅÐÊ¡ÃÕ¹

µÑÇÍÂèÒ§âÃ§§Ò¹·ÕèÁÕ¡ÒÃ»Ñ»ÃØ§ÇÔ¸ÕºÓºÑ´¹éÓàÊÕÂ

µÑÇÍÂèÒ§âÃ§§Ò¹·ÕèÁÕ¡ÒÃÍ¡ºáÅÐµÔ´µÑé§ÃÐººÓºÑ´¹éÓàÊÕÂ

ËéÍ§»¯ÔºÑµÔ¡ÒÃ Remediation ÂÑ§ÈÖ¡ÉÒ¡ÒÃºÓºÑ´¹éÓàÊÕÂ/´Ô¹·Õè»¹à»×éÍ¹âÅËÐË¹Ñ¡áÅÐÊÒÃÍÔ¹·ÃÕÂìâ´ÂãªéÇ¾×ª â´Â¤Ñ´
à¾×èÍÊÒÁÒÃ¶¹Óä»»ÃÐÂØ¡µìãªéä´é¨ÃÔ§

¹Í¡¨Ò¡¹ÕéËéÍ§»¯ÔºÑµÔ¡ÒÃ Remediation ÂÑ§Ê¹ã¨ÈÖ¡ÉÒ¡ÒÃ¡Ó¨Ñ´ÊÕ·Õè»¹à»×éÍ¹ã¹ÍØµÊÒË¡ÃÃÁÍÒËÒÃ à¾×èÍãËéä´éÍÒËÒÃ·
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ÇÑµ¶Ø»ÃÐÊ§¤ì

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à¾×èÍ¾Ñ²¹ÒÇÑÊ´ØàËÅ×Í·Ôé§·Ò§¡ÒÃà¡ÉµÃà»ç¹µÑÇ´Ù´«Ñº·ÕèÁÕ»ÃÐÊÔ·¸ÔÀÒ¾ÊÙ§ÊØ´ã¹¡ÒÃºÓºÑ´¹éÓàÊÕÂ /ÊÕ·Õè»¹à»

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à¾×èÍÈÖ¡ÉÒ¡ÒÃºÓºÑ´¹éÓàÊÕÂ/´Ô¹·Õè»¹à»×éÍ¹âÅËÐË¹Ñ¡áÅÐÊÒÃÍÔ¹·ÃÕÂìâ´ÂãªéÁ¾×ª

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à¾×èÍÈÖ¡ÉÒ¡ÒÃ¡Ó¨Ñ´ÊÕã¹ÍØµÊÒË¡ÃÃÁÍÒËÒÃâ´ÂãªéÇÑÊ´Ø·ÕèÁÕÍÂÙèã¹»ÃÐà·È

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à¾×èÍ¾Ñ²¹ÒÃÐººÓºÑ´¹éÓàÊÕÂ·ÕèÁÕ»ÃÐÊÔ·¸ÔÀÒ¾ áÅÐ¶èÒÂ·Í´ÊÙèÀÒ¤ÍØµÊÒË¡ÃÃÁ

§Ò¹ÇÔ¨ÑÂ·Õè´Óà¹Ô¹¡ÒÃÍÂÙè

¡ÒÃ¾Ñ²¹ÒµÑÇ´Ù´«Ñº¨Ò¡ÇÑÊ´ØàËÅ×Í·Ôé§·Ò§¡ÒÃà¡ÉµÃà¾×èÍºÓºÑ´¹éÓàÊÕÂ·Õè»¹à»×éÍ¹âÅËÐË¹Ñ¡áÅÐÊÒÃÍÔ¹·ÃÕÂì/ÊÕ

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¡ÒÃºÓºÑ´ºÔÊ¿Õ¹ÍÅàÍ¨Ò¡¹éÓ´×èÁâ´ÂãªéàÀéÒÅÍÂªÒ¹ÍéÍÂ

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¡ÒÃ¹Ó¹Ô¡à¡ÔÅáÅÐâ¤ÃàÁÕÂÁ¨Ò¡¹éÓàÊÕÂâÃ§ªØºâÅËÐ¡ÅÑºÁÒãªéãËÁèâ´ÂãªéÊØÂÁÐ¾ÃéÒÇà»ç¹µÑÇ´Ù´«Ñº

¡ÒÃºÓºÑ´¹éÓàÊÕÂ/´Ô¹·Õè»¹à»×éÍ¹âÅËÐË¹Ñ¡áÅÐÊÒÃÍÔ¹·ÃÕÂìâ´Âãªé¾×ª (Wetland/Phytoremediation)

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¡ÒÃºÓºÑ´¹éÓàÊÕÂ¨Ò¡âÃ§§Ò¹ÊÔè§·Íâ´Âãªéµé¹¸Ù»ÄÒÉÕ

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¡ÒÃºÓºÑ´´Ô¹·Õè»¹à»×éÍ¹âÅËÐá¤´àÁÕÂÁâ´ÂãªéË-éÒáËéÇËÁÙ

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¡ÒÃ¡Ó¨Ñ´ÊÕã¹ÍØµÊÒË¡ÃÃÁÍÒËÒÃâ´Âãªéç×Ê´Ø·ÕèÁÕÍÂÙèã¹»ÃÐà·È

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¡ÒÃºÓºÑ´ÊÕ¹éÓàª×èÍÁâ´Âãªéà¶éÒÅÍÂªÒ¹ÍéÍÂ/¶èÒ¹¡ÑÁÑ¹µìà¶éÒÅÍÂªÒ¹ÍéÍÂ

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¡ÒÃ´Ù´«ÑºÊÕàÁÅÒ¹ÍÂ´Ô¹â´Âãªéä¤µÔ¹¢¹Ò´¹Òâ¹

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¡ÒÃºÓºÑ´ÊÕ¹éÓÁÑ¹ÃÓ¢éÒÇâ´Âãªé´Ô¹¢ÒÇ

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¹Ò§ »ÃÐä¾ ¸ØÃÐ¡Ô¨

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¹Ò§ÊÒÇ ÊÔÃÔ¡Ò-¨¹ì ¹Øè¹»ØÂ

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¹Ò§ÊÒÇÍÃØ³Õ ÊÔÁÐÃÑµ¹Á§¤Å

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¹Ò§ÊÒÇ»ÔâÐÇÃÃ³ ËÅÕªÒµÔ (ÈÖ¡ÉÒµèÍ)

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¹Ò§ÊÒÇÃØ¨ÔÃÒ ´Åà¾ç- (ÈÖ¡ÉÒµèÍ)

§Ò¹ºÃÔ¡ÒÃ

ÃÑºãËé¤Ó»ÃÖ¡ÉÒ ÍÍ¡áºº µÔ´µÑé§ ÃÐººÓºÑ´¹éÓàÊÕÂÍØµÊÒËì¡ÃÃÁ¡ÒÃ¾Ô¾ì ¹éÓàÊÕÂ·ÕèÁÕÊÕ áÅÐ/ËÃ×Í âÅËÐË¹Ñ¡»¹à»×éÍ¹ áÅÐâÃ§¾Ô¾ìÊ¡ÃÕ¹·Õèã ªéËÁÖ¡°Ò¹éÓ à»ç¹µé¹ ÊèÇ¹éÓàÊÕÂ·ÕèÁÕÊÕ/ËÃ×ÍâÅËÐË¹Ñ¡»¹à»×éÍ¹ ä´éá¡è âÃ§§Ò¹¼ÔµÊÕâ» à»ç¹µé¹

¹Í¡¨Ò¡¹ÕéÂÑ§ãËéºÃÔ¡ÒÃ·Ò§ÇÔªÒ¡ÒÃáÅÐ¨Ñ´½Ö¡ÍºÃÁÊÑÁÁ¹Ò à¾×èÍà¼Âá¾ÃèáÅÐãËé¤ÇÒÁÃÙé¡Ñº¼Ùé»ÐÍº¡ÒÃ ¼Ùé·Õ

¼Å§Ò¹à¼Âá¾ÃèÃ¹ÇÒÃÊÒÃÃÐ´Ñº¹Ò¹ÒªÒµÔ

-

Ewecharoen, A., Thiravetyan, P., Wendel, E. and Bertagnolli, H. Nickel adsorption by sodium polyacrylate-grafted activated carbon, J. of Hazardous Materials (in press) (impact factor 2007 = 2.337).

-

Simaratanamongkol, A., Thiravetyan, P. (2010) Decolorization of melanoidin by activated carbon obtained from bagasse bottom ash, J of Food Engineering, 96, 14-17. (impact factor 2007 = 1.848).

-

Aworn, A., Thiravetyan, P. and Nakbanpote, W. (2009) Preparation of CO2 activated carbon from corncob for monoethylene glycol adsorption, Colloids and Surfaces A: Physicochemical and Engineering Aspects,333, 19-25 (impact factor 2007 = 1.601)

-

Suksabye, P., Nakajima, A., Thiravetyan, P. , Baba, Y. and Nakbanpote, W. (2009) Mechanism of Cr(V) adsorption by coir pith studied by ESR and adsorption kinetic, J. of Hazardous Materials,161, 1103-1108. (impact factor 2007 = 2.337)

-

Leechart, P., Nakbanpote, W. and Thiravetyan, P. (2009) Application of ‘waste’ wood shaving bottom ash for adsorption of azo reactive dye, J. of Environmental Management, Vol. 90, 912-920. (impact factor 2007 = 1.446)

-

Suksabye, P., Thiravetyan, P. , Nakbanpote, W. (2008) Column study of chromium (VI) adsorption from electroplating industry by coconut coir pith, J. of Hazardous Materials, Vol. 160, 56-62 (impact factor 2007 = 2.337)

-

Aworn, A., Thiravetyan, P. and Nakbanpote, W. (2008) Preparation and characteristics of agricultural waste activated carbon by physical activation having micro- and mesopores, J. of Analytical and Applied Pyrolysis,82,279-285. (impact factor 2007 = 2.12)

-

Ewecharoen, A., Thiravetyan, P. and Nakbanpote, W. (2008) Comparison of nickel adsorption from electroplating rinse water by coir pith and modified coir pith, Chemical Engineering Journal, 137, 181-188. (impact factor 2007 =1.707)

-

Nilratnisakorn, S., Thiravetyan, P. and Nakbanpote, W. (2007) Synthetic reactive dye wastewater treatment by Narrow-leaved cattails (Typha angustifolia Linn.): effects of dye, salinity and metals, Science of the Total Environment, 384, 67-76. (impact factor 2007 = 2.182)

-

Nakbanpote, W., Goodman, B. A. and Thiravetyan, P. (2007) Copper adsorption on rice husk derived materials studied by EPR and FTIR, Colloid and Surface A: Physicochemical and Engineering Aspects, Vol. 304, 7-13. (impact factor 2007

=1.601)

-

Dolphen, R., Sakkayawong, N., Thiravetyan, P. and Nakbanpote, W. (2007) Adsorption of synthetic reactive dye wastewater onto modified chitin , J. of Hazardous Materials, Vol. 145, 250-255. (impact factor 2007 =2.337)

-

Suksabye, P., Thiravetyan, P. , Nakbanpote, W. and Chayabutra, S. (2007) Chromium removal from electroplating wastewater by coir pith, J. of Hazardous Materials, Vol. 141, 637-644. (impact factor 2007 = 2.337)

-

Aworn, A., Thiravetyan. P. and Nakbanpote, W. (2005) Recovery of gold from gold slag by wood shaving fly ash, J. of Colloid and Interface Science, Vol. 287, 394-400. (impact factor 2007 =2.309)

-

Sakkayawong, N., Thiravetyan, P. and Nakbanpote, W. (2005) Adsorption mechanism of synthetic reactive dye wastewater by chitosan, J. of Colloid and Interface Science, Vol. 286, 36-42. (impact factor 2007 = 2.309)

-

Netpradit, S., Thiravetyan, P., Nakbanpote, W. , Rattanakajhonsakul, K., Tantarawong and S., Jantarangsri, P. (2004) Waste metal hydroxide sludge as a new adsorbent, Environmental Engineering Science, Vol. 21, No. 5, 575-582. (impact factor 2007 = 0.944)

-

Songkroah, C., Nakbanpote, W. and Thiravetyan, P. (2004) Recovery of silver-thiosulphate complexes by chitin, Process Biochemistry, Vol. 39, 1553-1559. (impact factor 2007 = 2.336)

-

Inthorn, D., Singhtho. S., Thiravetyan, P. and Khan, E. (2004) Decolorization of basic, direct and reactive dyes by pre-treated narrow-leaved cattail (Typha angustifolia Linn.), Bioresource Technology, Vol. 94, 299-306. (impact factor 2007 =3.103)

-

Netpradit, S., Thiravetyan, P. and Towprayoon, S. (2004) Adsorption of 3 azo reactive dyes by metal hydroxide sludge: Effect of temperature, pH and electrolytes Journal of Colloid and Interface Science, Vol. 270, No. 2, 255-261. (impact factor 2007 =2.309)

-

Netpradit S., Thiravetyan, P. and Towprayoon, S. (2004) Evaluation of metal hydroxide sludge for reactive dye adsorption in a fixed-bed column system, Water Research, Vol. 38, No. 1, 71-78. (impact factor 2007 =3.103)

-

Netpradit, S., Thiravetyan, P. and Towprayoon, S. (2003) Application of ‘Waste’ metal hydroxide sludge for adsorption of azo reactive dyes, Water Research, Vol. 37, No. 4, 763-772. (impact factor 2007 = 3.103)

-

Nakbanpote, W., Thiravetyan, P., and Kalambaheti, C. (2002) Comparision of gold adsorption by Chlorella vulgaris, rice husk and activated carbon, Minerals Engineering, 15, 549-552. (impact factor 2007 = 0.939)

-

Nakbanpote, W., Thiravetyan, P. and Kalambaheti, C. (2000) Preconcentration of gold by rice husk ash, Minerals Engineering, Vol. 13, No. 4, 391-400. (impact factor 2007 = 0.939)

-

Wilawan, S., Thiravetyan, P. and Tanticharoen, M. (2000) A possible mechanism of Zn2+ uptake by living cells of Penicillium sp., Biotechnology Letters, Vol. 22, No. 21, 1709-1712. (impact factor 2007 = 1.222)

Í¹ØÊÔ·¸ÔºÑµÃ

-

Thiravetyan, P., Nakbanpote, W., Netpradit, S. and Thiraket, P. (2005) Wastewater containing color and/or heavy metals system and process to treatment of wastewater containing color and/or heavy metals (Petty Patent No. 1887).

-

Thiravetyan, P., Dolphen, R., Sakkayawong, N. and Nakbanpote, W. (2007) Process of modified chitin by sodium hyperchlorite (Petty Patent No. 4003).

-

Thiravetyan, P., Leechart, P., Suksabye, P. and Nakbanpote, W. (2009) Process of preparation of coir pith as an adsorbent in cylinder container for treatment of heavy metal from industrial factory (Petty Patent No. 4900).

ÊÍº¶ÒÁÃÒÂÅÐàÍÕÂ´à¾ÔèÁàµÔÁä´é·Õèâ·Ã. 02-470-7536-7