Excellent Center Excellent Center of Waste Utilization and Manage

ÈÙ¹Âì¤ÇÒÁà»ç¹àÅÔÈà©¾ÒÐ·Ò§´éÒ¹¡ÒÃ¨Ñ´¡ÒÃ

áÅÐãªé»ÃÐâÂª¹ì¨Ò¡Í§àÊÕÂÍØµÊÒË¡ÃÃÁ¡ÒÃà¡ÉµÃ

Excellent Center of Waste Utilization

and Management (ECoWaste)

¤ÇÒÁà»ç¹ÁÒ¢Í§ÈÙ¹Âì ECoWaste

ÈÙ¹Âì¤ÇÒÁà»ç¹àÅÔÈà©¾ÒÐ·Ò§´éÒ¹¡ÒÃ¨Ñ´¡ÒÃ áÅÐãªé»ÃÐâÂª¹ì¨Ò¡Í§àÊÕÂÍØµÊÒË¡ÃÃÁ¡ÒÃà¡ÉµÃ (Excellent Center of W
ECoWaste à»ç¹Ë¹èÇÂ§Ò¹ÀÒÂãµé¤ÇÒÁÃèÇÁÁ×Í¢Í§Ê¶ÒºÑ¹¾Ñ²¹ÒáÐÐ½Ö¡ÍºÃÁâÃ§§Ò¹µé¹áºº áÅÐ¤³Ð·ÃÑ¾ÂÒ¡ÃªÕÇÀÒ¾áÅÐ
ÈÙ¹Âì¾Ñ¹¸ØìÇÔÈÇ¡ÃÃÁáÅÐà·¤â¹âÅÂÔªÕÇÀÒ¾áËè§ªÒµÔ (äºâÍà·¤) ÊÓ¹Ñ¡§Ò¹¾Ñ²¹ÒÇÔ·ÂÒÈÒÊµÃìáÅÐà·¤â¹âÅÂÔáËè§ªÒµ
â´ÂàÃÔèÁ¨Ò¡¡ÒÃÃÇÁ¡ÅØèÁ¢Í§ÍÒ¨ÒÃâì ¹Ñ¡ÇÔ¨ÑÂáÅÐÇÔÈÇ¡Ã ·ÕèÊ¹ã¨´éÒ¹¡ÒÃºÓºÑ´¹éÓàÊÕÂµÑé§áµè»Õ ¾.È. 2523 â´Âà¹é
¹éÓàÊÕÂ¨Ò¡âÃ§§Ò¹á»é§ÁÑ¹ÊÓ»ÐËÅÑ§ á»é§¢éÒÇ ¹éÓÁÑ¹»ÒÀìÁ ÍÒËÒÃáÅÐ¼Åäáé¡ÃÐ»ëÍ§ â´Âãªéà·¤â¹âÅÂÔáººäÁèãªéÍÒ¡
·ÕèÊÒÁÒÃ¶ºÓºÑ´¹éÓàÊÕÂ áÅÐ¼ÅÔµ¾Å§§Ò¹ä´é´éÇÂ¡ÃÐºÇ¹¡ÒÃà´ÕÂÇ¡Ñ¹ §Ò¹ÇÔ¨ÑÂ¢Í§¡ÅØèÁ¹Õéä´éàÃÔÒèÁ§Ò¹·Ò§´éÒ¹¡
ÈÑ¡ÃÔ¹·Ãì ÀÙÁÔÃÑµ¹ ·Õèà»ç¼Ùéº Ø¡àºÔ¡ ¨Ò¡â¤Ã§¡ÒÃãªé»ÃÐâÂª¹ì¨Ò¡Í§àÊÕÂâÃ§§Ò¹ÍØµÊÒË¡ÃÃÁÍÒËÒÀÃ «Öè§ä´éÃÑ
(AAECP) ã¹¤ÇÒÁÃèÇÁ×Í¢Í§ ASEAN Working Group on Food Waste Materials ã¹àÃÔèÁáÃ¡ áÅÐÍÒ¨ÒÃâì·Ñé§ 2
·èÒ¹ä´é¼ÅÑ¡´Ñ¹¡èÍãËéà¡Ô´¡ÅØèÁÇÔ¨ÑÂà·¤â¹âÅÂÔ¡êÒ«ªÕÇÀÒ¾¢Öé¹ã¹ÊÒÂÇÔªÒà·¤â¹âÅÂÔªÕÇÀÒ¾ ¤³Ð¾ÅÑ§§Ò¹áÅÐÇÑ
µÑé§ÍÂÙè·ÕèÁËÒÇÔ·ÂÒÅÑÂà·¤â¹âÅÂÔ¾ÃÐ¨ÍÁà¡ÅéÒ¸¹ØÃÕ – ºÒ§Á´ áÅÐã¹»Õ 2539 ¡ÅØèÁÇÔ¨ÑÂ¹ÕéÁÕ¡ÒÃ¢ÂÒÂ§
¨Ö§ä´éà»ÃÕèÂ¹ª×èÍà»ç¹ËéÍ§¯ÔºÑµÔ¡ÒÃÇÔ¨ÑÂ´éÒ¹¡ÒÃ¨Ñ´¡ÒÃáÅÐãªé»ÃÐâÂª¹ì¨Ò¡Í§àÊÕÂ (Waste Utilization and Managem
áÅÐä´éÃéÒÂÁÒ·ÕèÁËÒÇÔ·ÂÒÅÑÂà·¤â¹âÅÂÔ¾ÃÐ¨ÍÁà¡ÅéÒ¸¹ØÃÕ – ºÒ§¢Ø¹à·ÕÃ¹àÁ×èÍ»Õ ¾.È. 2543 µèÍÁÒã¹»Õ ¾
ä´éÂ¡ÃÐ´Ñº¢Öé¹à»ç¹ÈÙ¹Âì¤ÇÒÁà»ç¹àÅÔÈà©¾ÒÐ·Ò§´éÒ¹¡ÒÃ¨Ñ´¡ÒÃáÅÐãªé»ÃÐâÂª¹ì¨Ò¡Í§àÊÕÂÍØµÊÒË¡ÃÃÁ¡ÒÃà¡ÉµÃ «Ö

¨Ò¡ÒÃÇÔ¨ÑÂáÅÐ¾Ñ²¹ÒÍÂèÒ§µèÍà¹×èÍ§ÁÒà»ç¹àÇÅÒ¡ÇèÒ 20 »Õ ¢Í§ÈÙ¹Âì ECoWaste ·ÓãËé§Ò¹·Ò§´éÒ¹¡êÒ«ªÕÇÀÒ¾·Õèà
«Öè§à´ÕÁà»ç¹à¾ÕÂ§ÅÑ¡É³Ð¡ÒÃ¼ÅÔµ¡êÒ«ªÕÇÀÒ¾â´Â¢Ò´¤ÇÒÁà¢éÒã¨·Ò§ÇÔ·ÂÒÈÒÊµÃìÍÂèÒ§á·é¨ÃÔ§ ·Ò§ÈÙ¹Âì ECoW
áÅÐÁÕà·¤â¹âÅÂÕã¹ÃÐ´ÑºÍØµÊÒË¡ÃÃÁâ´´à´è¹ã¹ÀÙÁÔÀÒ¤¹Õé¢Í§àÍàªÕÂ ÁÕ¡ÒÃãªé»ÃÐâÂª¹ì¨Ò¡ÒºÓºÑ´¹éÓàÊÕÂáÅÐ¡ÒÃ½

ÇÔÊÑÂ·ÑÈ¹ì

ECoWaste ÁØè§ÊÙè¤ÇÒÁà»ç¹ÈÙ¹Âì ªÑé¹¹Ó¢Í§ÀÙÁÔÀÒ¤ ã¹¡ÒÃ¾Ñ²¹Òà·¤â¹âÅÂÕ¡ÒÃ¨Ñ´¡ÒÃ¢Í§àÊÕÂÍØµÊÒË¡ÃÃÁ¡ÒÃà¡ÉµÁ
áÅÐà»ç¹áËÅè§¾ÅÑ§§Ò¹·´á·¹

¾Ñ¹¸¡Ô¨

·Ó¡ÒÃÇÔ¨ÑÂáÅÐ¾Ñ²¹Ò à¾×èÍ¡ÒÃ»ÃºÃØ§¡ÃÐºÇ¹¡ÒÃ¼ÅÔµã¹ÍØµÊÒË¡ÃÃÁà¡ÉµÃãËéÁÕ¡ÒÃãªé·ÃÑ¾ÂÒ¡ÃÍèÒ§ÁÕ»ÃÐÉ
â´Âà©¾ÒÐ´éÒ¹¡ÒÃºÓºÑ¢Í§àÊÕÂáÅÐ¡ÒÃ¼ÅÔµ¡êÒ«ªÕÇÀÒ¾ à¾×èÍÊÃéÒ§Í§¤ì¤ÇÒÁÃÙé áÅÐà·¤â¹âÅÂÕ·Õèà¢ÒÒÐÊÁ ¾Ñ

à»éÒËÁÒÂ

ÈÙ¹Âì ECoWaste ¨ÐÁØè§à¹é¹¡ÒÃÇÔ¨ÑÂà¾×èÍ¡ÒÃ¾Ñ²¹Òà·¤â¹âÅÂÃÕ/¡ÒÃÍÍ¡áºº¡ÒÃ¼ÅÔµ¡êÒ«ªÕÇÀÒ¾·Ò§ÇÔÈÇ¡ÃÃÁ §Ò¹ÇÔ
áÅÐ¾×é¹°Ò¹·Ò§´éÒ¹ÇÔÈÇ¡ÃÃÁ à¾×èÍ¾Ñ²¹ÒãËéÃÐºº·Ó§Ò¹ä´éÍÂèÒ§àµçÁ»ÃÐÊÔ·¸ÔÀÒ¾ÊÙ§ÊØ´ áÅÐà¾ÔèÁ»ÃÐÊÔ·¸ÔÀÒ
¹Í¡¨Ò¡¹ÕéÂÑ§ÈÖ¡ÉÒ¡ÒÃ¨Ñ´¡ÒÃ¢Í§àÊÕÂáÅÐ¡ÒÃ¹Ó¢Í§àÊÕÂä»ãªé»ÃÐâÂª¹ì ÃÇÁ¶Ö§¡ÒÃÅ´»ÃÔÁÒ³¢Í§àÊÕÂã¹ÍØµÊÒÈ¡ÃÃÁà¡
ÁÕà»éÒËÁÒÂ·ÕèÊÓ¤Ñ- à¾×èÍÊè§àÊÃÔÁ¡ÒÃÇÔ¨ÑÂáÅÐ¾Ñ²¹Ò ¶èÒÂ·Í´à·¤â¹âÅÂÃÕä»ÊÙè¡ÒÃãªé§Ò¹ã¹àªÔ§¾Ò³ÔªÂì ÃÇÁ·Ñ
Å´¡ÒÃ¾Öè§¾Òà·¤â¹âÅÂÃÕ¨Ò¡µèÒ§»ÃÐà·È Å´¡ÒÃ¹Óà¢éÒ¾ÅÑ§§Ò¹àª×éÍà¾ÅÔ§ áÅÐÅ´¡ÒÃÊÙ-àÊÕÂà§Ô¹µÃÒÍÍ¡Í¡»ÃÐà·È à¾

¡ÅØèÁ§Ò¹ÇÔ¨ÑÂ (Key Research Areas)

§Ò¹ÇÔ¨ÑÂáÅÐ¾Ñ²¹Òã¹¡ÅØèÁ¹Õéà¹é¹ 4 á¹Ç·Ò§ËÅÑ¡ ¤×Í

- ¡ÅØèÁ§Ò¹ÇÔ¨ÑÂ´éÒ¹¨ØÅÔ¹·ÃÕÂìÈÖ¡ÉÒ (Microbiological and Biochemical Aspect)
à¾×èÍÈÖ¡ÉÒ¢éÍÁÙÅ¾×é¹°Ò¹·Ò§´éÒ¹¨ØÅÔ¹·ÃÕÂìáÅÐªÕÇà¤ÁÕà¡ÕèÂÇ¡ÑºÇ¹¡ÒÃÂèÍÂÊÅÒÂÊÒÃÍÔ¹·ÃÕÂìã¹ÊÀÒÇÐäÁèã
áÅÐº·Ò·¤ÇÒÁÊÑÁ¾Ñ¹¸ì¢Í§¨ØÅÔ¹·ÃÕÂìã¹ÃÐººÓºÑ´¹éÓàÊÕÂáººäÁèãªáéÍÒ¡ÒÈ

- ¡ÅØèÁ§Ò¹ÇÔ¨ÑÂ´éÒ¹¶Ñ§»¯Ô¡Ã³ì¾Ñ²¹Ò (Reactor and Process Development) ´Óà¹Ô¹§Ò¹à¡ÕèÂÇ¡ÑºÒÃ¾Ñ²¹Ò¶Ñ§»¯Ô¡Ã³ì³ª¹Ó
ÈÖ¡ÉÒà»ÃÕÂºà·ÕÂº»ÃÐÊÔ·¸ÔÀÒ¾ÊÒã¹¡ÒÃÓºÑ´¹éÓàÊÕÂ ÈÖ¡ÉÒáÅÐ¾Ñ²¹Ò¡ÃÁÇÔ¸Õã¹¡ÒÃàÊÔèÁµé¹ÃÐºº (Start up) áÅÐ´Ù
·´ÊÍº»ÃÐÊÔ·¸ÔÀÒ¾ÒÃÓºÑ´¹éÓàÊÕÂª¹Ô´µèÒ§æ ã¹¶Ñ§»¯Ô¡Ã³ì ÈÖ¡ÉÒáÅÐ¾Ñ²¹Ò¶Ñ§»¯Ô¡Ã³ì¡Ó¨Ñ´¡ÊÒ«äÎâ´Ãà¨¹«ÑÅä¿´ìã¹¡é
ÃÇÁ·Ñé§¢ÂÒÂ¼Å¡ÒÃÇÔ¨ÑÂ·Õèä´é¨Ò¡ËéÍ§»¯ÔºÑµÔ¡ÒÃà¾×èÍ¹Óä»ãªé¨ÃÔ§ã¹ÃÐ´ÑºÍØµÊÒÈ¡ÃÃÁ

- ¡ÅØèÁ§Ò¹ÇÔ¨ÑÂ´éÒ¹ÃÐºº¤Çº¤ØÁáÅÐá°º¨ÓÅÍ§·Ò§¤³ÔµÈÒÊµÃì (Computational Aids and Process Optimization) ´Óà¹Ô¹§Ò¹à
·ÕèÊÒÁÒÃ¶·Ó¹ÒÂÊÀÒÇÐã¹ÃÐººÓºÑ´¹éÓàÊÕÂáººäÁèãªáéÍÒ¡ÒÈä´éÍÂèÒ§áÁè¹ÂÓáÅÐÃÇ´àÃçÇ áÅÐ¾Ñ²¹ÒÃÙ»á°º¡ÒÃ¤ºº¤Ø

- ¡ÅØèÁ§Ò¹ÇÔ¨ÑÂ´éÒ¹ÊÔè§áÇ´ÅéÍÁáÅÐ¡ÒÃ¨Ñ´¡ÒÃ (Environmental Research and Management) ÈÖ¡ÉÒ¶Ö§¤ÇÒÁà»ç¹ä´é
áÅÐ¤ÇÒÁàËÁÒÐÊÁ¢Í§¡ÒÃ¹Óà·¤â¹âÅÂÃÕ·Õèä´é¨Ò¡ËéÍ§»¯ÔºÑµÔ¡ÒÃä»ÊÃéÒ§áÅÐãªé§Ò¹¨ÃÔ§ã¹ÃÐ´ÑºÍØµÊÒÈ¡ÃÃÁ
ÈÖ¡ÉÒáÅÐ»ÃÐàÁÔ¹¼Å¡ÃÐ·º¢Í§¡ÒÃ¡èÍÊÃéÒ§ÃÐººÓºÑ´¹éÓàÊÕÂ·Ñé§ã¹á§èÈÀÒÇÐáÇ´ÅéÍÁ àÈÃÉ°¡Ô¨ áÅÐÊÑ§¤Á ÈÖ¡ÉÒáÅ
ÃÇÁ·Ñé§¡ÒÃµÔ´µÒÁáÅÐµÃÇ¨»ÃÐàÁÔ¹âÃ§§Ò¹ÍØµÊÒÈ¡ÃÃÁ ÃÐººÓºÑ´¹éÓàÊÕÂáººµèÒ§æ ·Ñé§ã¹á§è¡ÒÃãªé·ÃÑ¾ÂÒ¡ÃÁ ¡ÒÃ

§Ò¹ºÃÔ¡ÒÃáÅÐãËé¤Ó»ÃÖ¡ÉÒ´éÒ¹ÊÔè§áÇ´ÅéÍÁ

ÇÑµ¶Ø»ÃÐÊ§¤ì

ÈÙ¹Âì¤ÇÒÁà»ç¹àÅÔÈà©¾ÒÐ·Ò§´éÒ¹¡ÒÃ¨Ñ´¡ÒÃáÅÐãªé»ÃÐâÂª¹ì¨Ò¡¶Í§àÊÕÂÍØµÊÒÈ¡ÃÃÁ¡ÒÃà¡ÉµÃ ÁÕÊèÇ¹§Ò¹ºÃÔ¡ÒÃÇÔ

- Êè§àÊÃÔÁ¡ÒÃãªéÍ§¤ì¤ÇÒÁÃÙéã¹¡ÒÃ¨Ñ´¡ÒÃáÅÐãªé»ÃÐâÂª¹ì¨Ò¡¶Í§àÊÕÂâ´Âà¹é¹ÍØµÊÒÈ¡ÃÃÁ¡ÒÃà¡ÉµÃ ´éÇÂà·¤â¹âÅÂÃÕ¡Ô
à¾×èÍãËéä´é¾ÅÑ§§Ò¹¨Ò¡ÊÕ«ªÕÇÀÒ¾áÅÐªèÇÃÃÑ¡ÉÒÊÔè§áÇ´ÅéÍÁ

- ºÃÔ¡ÒÃáÅÐãËé¤Ó»ÃÖ¡ÉÒ´éÒ¹¡ÒÃ¨Ñ´¡ÒÃÊÔè§áÇ´ÅéÍÁ µÅÍ´à»ç¹·Õè»ÃÖ¡ÉÒã¹¡ÒÃÍ¡áººÃÐººÓºÑ´¹éÓàÊÕÂ

- ÃÑº·´ÊÍºáÅÐÈÖ¡ÉÒÇÔ¨ÑÂÃèÇÁ¡ÑºË¹èÇÂ§Ò¹µèÒ§æ·ÕèÊ¹ã¨

- à»ç¹Ë¹èÇÂ§Ò¹»ÃÐÊÒ¹§Ò¹áÅÐ¨Ñ´½Ö¡ÍºÃÁ à¾×èÍ¶èÒÂ·Í´¤ÇÒÁÃÙéáÅÐ»ÃÐÊº¡ÒÃ³ì¨Ò¡Ùéà ªÕèÂÇªÒ-ÊÙè¡ÒÃãªé§Ò¹¨ÃÔ§

¡ÒÃÍÍ¡áºº

- ÃÑº»ÃÐàÁÔ¹áÅÐÈÖ¡ÉÒ¤ÇÒÁà»ç¹ä»ä´éã¹¡ÒÃ¡èÍÊÃéÒ§ÃÐºººÓºÑ´¹éÓàÊÕÂ
- ãËé¤Ó»ÃÖ¡ÉÒ ÍÍ¡áºº áÅÐ¡èÍÊÃéÒ§ÃÐºººÓºÑ´¹éÓàÊÕÂ
- ãËé¤Ó»ÃÖ¡ÉÒ´éÒ¹¡ÒÃãªé»ÃÐâÂª¹ì¨Ò¡ê«ªÕÇÀÒ¾

¡ÒÃãËé¤Ó»ÃÖ¡ÉÒ

- ãËé¤Ó»ÃÖ¡ÉÒã¹¡ÒÃ¤Çº¤ØÁ´ÙáÅ¡ÒÃ´Óà¹Ô¹ÃÐºººÓºÑ´¹éÓàÊÕÂ
- ÃÑº´ÙáÅáÅÐµÔ´µÒÁÃÐºººÓºÑ´¹éÓàÊÕÂ
- µÃÇ¨»ÃÐàÁÔ¹áÅÐá¡éä¢ÃÐºººÓºÑ´¹éÓàÊÕÂ·ÕèÅéÁàËÅÇ
- ãËé¤Ó»ÃÖ¡ÉÒã¹¡ÒÃàÃÔèÁµé¹ÃÐºººÓºÑ´¹éÓàÊÕÂ (Startup)
- ãËé¤Ó»ÃÖ¡ÉÒã¹¡ÒÃ´Óà¹Ô¹¡ÒÃÅ´¡ÒÃãªéÊÒÃà¤ÁÕã¹ÃÐºººÓºÑ´¹éÓàÊÕÂ
- à»ç¹µé¹

·´ÊÍºáÅÐ»ÃÐàÁÔ¹¼Å

- ·´ÊÍºáÅÐ»ÃÐàÁÔ¹¤ÇÒÁÊÒÁÒÃ¶ã¹¡ÒÃ¼ÅÔµ¡êÒ«ªÕÇÀÒ¾¨Ò¡ÇÑÊ´Ø ¢Í§àÊÕÂµèÒ§æ
- ·´ÊÍº¤ÇÒÁà»ç¹¾ÔÉ¢Í§ÊÒÃµèÒ§æµèÍ¡ÃÐºÇ¹¡ÒÃ¼ÅÔµ¡êÒ«ªÕÇÀÒ¾
- ·´ÊÍº¡ÒÂâèÍÂÊÅÒÂâ¢Í§àÊÕÂ·ÕèÊÀÒÇÐµèÒ§æ ã¹ÃÐ´ÑºËéÍ§»¯ÔºÑµÔ¡ÒÃ
- ÃÑºµÃÇ¨»ÃÐàÁÔ¹»ÃÐÊÔ·¸ÔÀÒ¾¢Í§ÃÐºººÓºÑ´¹éÓàÊÕÂ
- µÃÇ¨»ÃÐàÁÔ¹¡ÒÃãªé·ÃÑ¾ÂÒ¡Ã áÅÐ¡ÒÃ¼ÅÔµ¢Í§àÊÕÂ¢Í§ÃÐººµèÒ§æ
- á¡éä¢ Å´¡ÒÃ¡èÍãËéà¡Ô´¢Í§àÊÕÂã¹¢Ñé¹µÍ¹µèÒ§¢Í§¡ÃÐºÇ¹¡ÒÃ¼ÅÔµ
- à»ç¹·Õè»ÃÖ¡ÉÒã¹¡ÒÃ»ÃÑº»ØÃ§¡ÃÐºÇ¹¡ÒÃ¼ÅÔµ à¾×èÍÅ´»ÃÔÁÒ³¢Í§àÊÕÂ
- à»ç¹·Õè»ÃÖ¡ÉÒã¹¡ÒÃ¨Ñ´¡ÒÃ¢Í§àÊÕÂáÅÐ¡ÒÃãªé»ÃÐâÂª¹ì¢Í§àÊÕÂ

ÍºÃÁ/ÊÑÁÁ¹Ò

- ÃÑº¨Ñ´½Ö¡ÍºÃÁ ÊÑÁÁ¹Ò ¡ÒÃãªé»ÃÐâÂª¹ì¨Ò¡Í§àÊÕÂ»ÃÐàÀ·µèÒ§æ

- ¨Ñ´ÍºÃÁ ´éÒ¹à·¤¹Ô¤¡ÒÃ´ÙáÅÃÐººÓºÑ´¹éÓàÊÕÂáºäÁèãªéÍÒ¡ÒÈ

- ÍºÃÁÊÑÁÁ¹Òà·¤¹Ô¤·Ò§´éÒ¹à ×éÍ¢Í§ÃÐººÓºÑ´áºäÃéÍÒ¡ÒÈ

ÃÒ§ÇÑÅ·Õèä´éÃÑº

ÃÐ´Ñº»ÃÐà·È

- ÃÒ§ÇÑÅ¼§Å§Ò¹ÇÔ¨ÑÂÃÐ´ÑºªÁàªÂ¨Ò¡ÊÀÒÇÔ¨ÑÂáËè§ªÒµÔ»ÃÐ¨Ó»Õ 2545 ÊÒ¢ÒÇÔÈÇ¡ÃÃÁÈÒÊµÃì áÅÐÍØµÊÒÈ¡ÃÃÁÇÔ ÍÒ¡ÒÈ»ÃÐÊÔ·¸ÔÀÒ¾ÊÙ§áºµÃÖ§à«ÅÅìÊíÒËÃÑºâÃ§§Ò¹ÍØµÊÒÈ¡ÃÃÁ ”

- ÃÒ§ÇÑÅâ¤Ã§¡ÒÃ´Õà´è¹´éÒ¹¾ÅÑ§§Ò¹ãËÁèáÅÐËÁØ¹àÇÕÂ¹¢Í§»ÃÐà·Èä·Â»ÃÐ¨Ó»Õ 2546 »ÃÐàÀ· off-grid àÃ×èÍ§ “ â¤Ã§¡ÒÃ¼ÅÔµ¡êÒ«ªÕÇÀÒ¾¨Ò¡ÃÐººíÒºÑ´¹éÓàÊÕÂäÃéÍÒ¡ÒÈáºµÃÖ§¿ÔÅìÁ¨ØÅÔ¹·ÃÕÂì ” ¨Ò¡¡ÃÁ¾Ñ²¹Ò¾ÅÑ§§Ò¹·´ á

- ÃÒ§ÇÑÅÊÀÒÇÔ¨ÑÂ »ÃÐàÀ·ÃÒ§ÇÑÅÇÔ·ÂÒ¹Ô¾¹¸ìÃÐ´ÑºªÁàªÂ ã¹ÊÒ¢ÒÇÔ·ÂÒÈÒÊµÃì¡ÒÂÀÒ¾áÅÐ¤³ÔµÈÒÊµÃì »ÃÐ¨Ó»Õ ¡ÒÃ¾Ñ²¹Ò¡ÒÃà¡Ô´¿ÔÅìÁªÕÇÃÐËÇèÒ§¡ÒÃàÃÔèÁµé¹ÃÐººíÓºÑ´¹éÓàÊÕÂã¹¶Ñ§»¯Ô¡Ã³ìáººÅÙ¡¼ÊÁ ” â´Â ´Ã. àº-¨¾Ã ÊÇ à»ç¹ÍÒ¨ÒÂÂì·Òè»ÃÖ¡ÉÒ

- âÃ§§Ò¹ªÅà¨ÃÔ- ä´éÃÑºÃÒ§ÇÑÅ Taguchi’s Prize ÊÓËÃÑºÀÒ¤àÍ¡ª¹´Õà´è¹·Ò§´éÒ¹à·¤â¹âÅÂÂÕªÕÇÀÒ¾ â´Âä´éÃÑº¡ÒÃ ã¹àÃ×èÍ§¡ÒÃ¨Ñ´¡ÒÃâÃ§§Ò¹áÅÐºÓºÑ´¹éÓàÊÕÂ¨Ò¡âÃ§§Ò¹¼ÅÔµá»é§ÁÑ¹ÊÓ»ÐËÅÑ§ ¾Ô¸ÕÁÍºÃÒ§ÇÑÅÇÑ¹·Õè 3 ¡ØÁÀÒ¾Ñ¹

ÃÐ´Ñº¹Ò¹ªÒÒµÔ

- ÃÒ§ÇÑÅ Seed Award 2005 (»ÃÐ¨Ó»Õ¾.È. 2548) ¨Ò¡ SEED (Supporting Entrepreneurs for Environment and Development) ·Õ IUCN - The World Conservation Union, UNEP and UNDP ÃèÇÁ¡ÑºÍ§¤ì¡ÃµèÒ§æ ä´éãËé¡ÒÃÊ¹ÑºÊ¹Ø¹ã¹â¤Ã§¡ÒÃ “Cows t Kilowatts” ·ÕèàÊ¹Íâ¤Ã§¡ÒÃâ´Â Global Network for Environment and Economic Development Research (NGO) »ÃÐà·Èä¹ ÃèÇÁ¡Ñº Ë¹èÇÂ§Ò¹ã¹»ÃÐà·È ä´éá¡è Centre for Youth áÅÐ Family and the Law áÅÐ Sustainable Ibadan Project (UN-HABITAT Programme) ·Õèãªéà·¤â¹âÅÂÂÕÃÐººÓºÑ´áºµÃÖ§¿ÔÅìÁ¨ØÅÔ¹·ÃÕÂì¹Ô´äÁèãªéÍÒ¡ÒÈ (Anaerobic Fixed Film - AFF) ¢Í§ÈÙ¹Âì ·Õè¡ÅØèÁä´é·Ó¡ÒÃÇÔ¨ÑÂ¾Ñ²ÒåÐÁÕ¤ÇÒÁàªÕèÂÇªÒ- â´Â·ÕÁ¹Ñ¡ÇÔ¨ÑÂ¢Í§ÈÙ¹Âïì·ÓË¹éÒ·ÕèÃÑº¼Ô´ªÍ§Ò¹´éÒ¹¡ÒÃÍ¡áºº ÃÇÁ¶Ö§à»ç¹·Õè»ÃÖ¡ÉÒáÐ¡ÒÃ½Ö¡Í°ÃÁºØ¤ÅÒ¡Ã

¼Å§Ò¹ÇÔªÒ¡ÒÃ (Selected Publications)

ÃÐ´Ñº¹Ò¹ªÒÒµÔ

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§Ò¹ÇÔ¨ÑÂ·Õè´Óà¹Ô¹¡ÒÃã¹ªèÇ§»Õ ¾.È . 2549-2551

- â¤Ã§¡ÒÃÊè§àÊÃÔÁ¡ÒÃ¼ÅÔµ¡êÒ«ªÕÇÀÒ¾à¾×èÍà»ç¹¾ÅÑ§§Ò¹·´á·¹ã¹âÃ§§Ò¹ÍØµÊÒË¡ÃÃÁ¡ÒÃà¡ÉµÃ

- ¡ÒÃÊè§àÊÃÔÁ¡ÒÃà¡Ô¿ÔÅìÁªÕÇã¹ªèÇ§àÃÔèÁµé¹ÃÐºººÓºÑ´¹éÓàÊÕÂäÃéÍÒ¡ÒÈáººÅÙ¡¼ÊÁ

- ¡ÒÃµÃÇ¨ÊÍºµÔ´µÒÁ¡ÅØèÁ»ÃÐªÒ¡Ã¨ØÅÔ¹·ÃÕÂì Syntrophic Acetogenic Bacteria ã¹ÃÐºººÓºÑ´¹éÓàÊÕÂáººäÃéÍÒ¡ÒÈâ´ÂãªéÂ 1 hybridization

- ¡ÒÃ¢ÂÒÂ¢¹Ò´¢Í§¶Ñ§»¯Ô¡Ã³ìÊÓËÃÑº¡ÒÃ¼ÅÔµ¡êÒ«ªÕÇÀÒ¾â´ÂãªéÂ·ÄÉ®Õ¡ÒÃ¤Ó¹Ç³¾ÅÈÒÊµÃì¢Í§äËÅ Computational fluid

- ¡ÒÃ»ÃÐÂØ¡µìãªéÂ¶Ñ§»¯Ô¡Ã³ìäÁèãªéÍÒ¡ÒÈáººÅÙ¡¼ÊÁÊÓËÃÑº¡ÒÃ¼ÅÔµ¡êÒ«ªÕÇÀÒ¾ áÅÐºÓºÑ´¹éÓàÊÕÂ¨Ò¡âÃ§§Ò¹ÍØµÊÓ

- ÃÙ»áºº¡ÒÃàÃÔèÁµé¹ÃÐºº·ÕèàËÁÒÐÊÁµèÍ¡ÅØèÁ¨ØÅÔ¹·ÃÕÂìã¹¿ÔÅìÁªÕÇ à¾×èÍÊè§àÊÃÔÁ»ÃÐÊÔ·¸ÔÀÒ¾¡ÒÃ·Ó§Ò¹¢Í§¶

- á¹Ç·Ò§¡ÒÃÅ´¡ÒÃÊÙ-àÊÕÂá»é§ÁÑ¹ÊÓ»ÐËÅÑ§´éÇÂâ¾Êä«â¤Å¹

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- ¡ÒÃµÃÇ¨ÊÍºàª×éÍ¨ØÅÔ¹·ÃÕÂì·ÕèÁÕªÃÇÔµâ´ÂãªéÂ carboxyfluorescein diacetate (cFDA) à¾×èÍãªéã¹¡ÒÃ»ÃÐàÁÔ¹¤Ø³ÊÁºÑµÔ¢Í§àª×éÍ¨ØÅÔ¹·ÃÕÂìµÑé§µé¹ÊÓËÃÑºÃÐºººÓºÑ´¹éÓàÊÕÂáººäÁèãªéÍÒ¡ÒÈ

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- ¡ÒÃ·Ó¤ÇÒÁÊÐÍÒ´¡êÒ«ªÕÇÀÒ¾â´ÂÇÔ¸Õ·Ò§ªÕÇÀÒ¾´éÇÂ Biofilter

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