## Process Technology Advisory Committee Meeting Minutes

**Wednesday, March 26, 2008**

### Chairperson:
Curt Thompson, Site Training Lead, Solutia Chocolate Bayou, Alvin

### Meeting Date:
March 26, 2008

### Meeting Time:
11:30 a.m. to 1:45 p.m.

### Meeting Place:
Alvin Community College

### Recorder:
Mark Demark, Process Technology Department Chair, ACC

### Industry Members Present:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curtis Thompson</td>
<td>Site Training Lead</td>
<td>Solutia Inc. Chocolate Bayou Alvin</td>
</tr>
<tr>
<td>John Morgan</td>
<td>Offshore Operations Manager</td>
<td>Producer's Assistance Corp. Katy</td>
</tr>
<tr>
<td>Dixie Higgs</td>
<td>Manager Partnered Staffing</td>
<td>Kelly Scientific Resources Freeport</td>
</tr>
<tr>
<td>Jay Permenter</td>
<td>Trainer / Shift Supervisor</td>
<td>INEOS</td>
</tr>
<tr>
<td>(replacing Diane McGinn for this meeting)</td>
<td></td>
<td>Alvin</td>
</tr>
</tbody>
</table>

### ACC Members Present:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Demark</td>
<td>Department Chair, Process Technology</td>
</tr>
<tr>
<td>John Bethscheider</td>
<td>College Provost / Dean of Technical Programs</td>
</tr>
<tr>
<td>Sara Bouse</td>
<td>Continuing Education &amp; Workforce Development</td>
</tr>
</tbody>
</table>

### ACC & Industry Guests:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curtis Crabtree</td>
<td>Adjunct Instructor, Process Technology&amp; Computing</td>
<td>Alvin Community College</td>
</tr>
<tr>
<td>Don Koster</td>
<td>Adjunct Instructor, Process Technology</td>
<td>Alvin Community College</td>
</tr>
<tr>
<td>Jimmie Stewart</td>
<td>Adjunct Instructor, Process Technology &amp; Computing</td>
<td>Alvin Community College</td>
</tr>
<tr>
<td>Melissa Collins</td>
<td>CAPT Associate Director</td>
<td>Center for the Advancement of Process Technology at College of the Mainland (CAPT/COM)</td>
</tr>
<tr>
<td>Joanne Perkins</td>
<td>CAPT Outreach Coordinator</td>
<td>Center for the Advancement of Process Technology at College of the Mainland (CAPT/COM)</td>
</tr>
</tbody>
</table>

### Agenda Item

(see attachment A)

<table>
<thead>
<tr>
<th>Action, Discussion, Information</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Old Business (repeated for new members &amp; guests):</strong></td>
<td></td>
</tr>
</tbody>
</table>

- **Process Technology web page on ACC website**
  - Direct link: [http://www.alvincollege.edu/Current/Process_Tech_Advisory_Committee.cfm](http://www.alvincollege.edu/Current/Process_Tech_Advisory_Committee.cfm)
  - Indirect:
    - go to [www.alvincollege.edu](http://www.alvincollege.edu);
    - click on “Site Map” (upper right corner of screen);
    - click on “Process Technology”; click on “Process Technology Advisory Committee”

- [www.captech.org](http://www.captech.org)
  - Center for the Advancement of Process Technology (CAPT)
  - Resources for educators, students, and industry
  - CAPT / COM is our partner that we have worked with in the past
  - CAPT INC. is a new company started by Joanna Kyle

- [www.gcpta.org](http://www.gcpta.org)
  - Gulf Coast Process Technology Alliance (GCPTA)
  - An industry and education partnership serving the educational needs of the process industries

  - Joanna Perkins, Outreach Coordinator [jperkins@com.edu](mailto:jperkins@com.edu)
  - Jerry Duncan, Managing Director [jduncan@com.edu](mailto:jduncan@com.edu)
  - Rita Ames, Administrator [admin@gcpta.org](mailto:admin@gcpta.org)
  - Harry Woods, Public Relations [hwoods@gcpta.org](mailto:hwoods@gcpta.org)
<table>
<thead>
<tr>
<th>Continuing Business:</th>
<th>New Business:</th>
<th>Budget:</th>
</tr>
</thead>
</table>
| • Welcome, Introduction, and Announcements | • Status of CAPT/COM  
• Duties of the Advisory Committee Chairperson - Curt Thompson; and Chairperson Elect - Diane McGinn  
• Elect new members:  
  Jay Permenter - INEOS  
  George Ayala - BPTC  
  Skip Olson - Lyondell/Basell  
• Adopt Vision, Mission & Objectives  
• INEOS presentation to PTAC-1302 (Chad Narvaez)  
• Shell 2008 Donation $7K  
• Spring 2008 High School Forum  
• June 2008 Open House  
• Fall 2008 High School Forum  
• BP $90K donation  
• Equipment needed from Industry  
• Process Simulator  
• Goals 2008  
• Status of Alvin Community College  
• Miscellaneous and open discussion | • Information  
• Approval  
• Information  
• Approval  
• Curt Thompson, Discussion Leader  
• Don Koster  
• Mark Demark  
• Curtis Crabtree  
• Mark Demark  
• Curtis Crabtree  
• Mark Demark  
• Jimmie Stewart  
• Curtis Crabtree  
• Curt Thompson  
• Curt Thompson  
• John Bethscheider  
• All Present  
• All present | • Update | Mark Demark |
| • Meeting Minutes - Dec 12, 2007     | • Adopt Vision, Mission & Objectives  
• INEOS presentation to PTAC-1302 (Chad Narvaez)  
• Shell 2008 Donation $7K  
• Spring 2008 High School Forum  
• June 2008 Open House  
• Fall 2008 High School Forum  
• BP $90K donation  
• Equipment needed from Industry  
• Process Simulator  
• Goals 2008  
• Status of Alvin Community College  
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• Approval  
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• Information  
• Approval  
• Information  
• Approval  
• Information  
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• Information  
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• Information  
• Approval  
• Information  
• Approval | • All present  
• Committee  
• Committee  
• All present  
• All present  
• All present  
• All present  
• All present  
• All present  
• All present  
• All present  | Mark Demark |
| • Information  
• Jay Permenter, new member representing INEOS | | |  
• Melissa Collins  
Joanne Perkins  
• Committee  
| | | Wednesday, Sep 10, 2008 at Solutia. See "Other" under Minutes for future dates.

PTEC Advisory Committee Minutes  
Mar 26, 2008  
Page 2
<table>
<thead>
<tr>
<th>Key Discussion Points</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Old Business (repeated for new members and guests):</strong></td>
<td>Advisory Committee page established on ACC web site. It is updated continuously and serves as a primary communication tool with the Advisory Committee. Our intent is to communicate by email; however, lengthy attachments will be posted to this site.</td>
</tr>
<tr>
<td>▪ Advisory Committee web page on ACC web site <a href="http://www.alvincollege.edu">www.alvincollege.edu</a>; Direct link: <a href="http://www.alvincollege.edu/Current/Process_Tech_Advisory_Committee.cfm">http://www.alvincollege.edu/Current/Process_Tech_Advisory_Committee.cfm</a></td>
<td>These other web sites maintained by the Center for the Advancement of Process Technology (CAPT) and the Gulf Coast Process Technology Alliance (GCPTA) also have valuable information of interest to the Advisory Committee members and meeting guests.</td>
</tr>
<tr>
<td>▪ <a href="http://www.captech.org">www.captech.org</a></td>
<td>See GCPTA Minutes of April 25, 2008, Isle of Capri, Lake Charles, LA</td>
</tr>
<tr>
<td>▪ <a href="http://www.gcpta.org">www.gcpta.org</a></td>
<td>Next GCPTA meeting is Jul 25, 2008, South Shore Harbor, League City, TX</td>
</tr>
<tr>
<td><strong>Continuing Business:</strong></td>
<td>Advisory Committee and all present. Jay Permenter invited as a new member to also represent INEOS.</td>
</tr>
<tr>
<td>▪ Welcome, Introduction, and Announcements</td>
<td>Advisory Committee approved the minutes.</td>
</tr>
<tr>
<td>▪ Meeting Minutes Dec 12, 2007</td>
<td></td>
</tr>
<tr>
<td><strong>New Business:</strong></td>
<td>Melissa Collins and Joanne Perkins led this discussion of how Joanna Kile, the previous Managing Director, had fallen out of favor with College of the Mainland's (COM) administration, and had gone off to form a new organization &quot;CAPT, Inc.&quot; A lawsuit and counter-suit have been filed: who has been wronged, why, and how, etc.; but more importantly, who owns the intellectual property. According to Melissa and Joanne, COM is content to let the intellectual property stay with CAPT/COM, using monies generated from intellectual property sales to further grow CAPT/COM activities. We will see how this turns out.</td>
</tr>
<tr>
<td>▪ Status of CAPT/COM</td>
<td>Diane McGinn was not at the meeting and discussion was tabled.</td>
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<tr>
<td>▪ Duties of Chairperson and Chairperson-Elect</td>
<td>Jay Permenter was elected to also represent INEOS Chocolate Bayou - Alvin</td>
</tr>
<tr>
<td>▪ Elect new members</td>
<td>Curt Thompson is still looking at it (<a href="#">Attachment B</a>). He wants to add a &quot;to do&quot; list of &quot;Action Items, Date of Completion, and Who's Responsible&quot;.</td>
</tr>
<tr>
<td>▪ Adopt Vision, Mission, and Objectives</td>
<td>Don Koster reported that this presentation was too severe. Unfortunately, Chad has left INEOS for work in Colorado, and the feedback loop is broken. Does anyone else have a good presentation of &quot;What New Operators Are Expected To Know And Do&quot;?</td>
</tr>
<tr>
<td>▪ PTAC-1302 Presentation by Chad Narvaez: &quot;What Is Expected of a New Operator&quot;</td>
<td>Mark Demark reported that Shell has donated $7K and the money will be allocated as follows:</td>
</tr>
<tr>
<td></td>
<td>o $2K - Spring High School Forum</td>
</tr>
<tr>
<td></td>
<td>o $3K - Summer Open House</td>
</tr>
<tr>
<td></td>
<td>o $2K - Fall High School Forum</td>
</tr>
<tr>
<td>▪ Shell $7K Donation</td>
<td>Curtis Crabtree will coordinate the High School Forums.</td>
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<tr>
<td>▪ Spring/Fall High School Forums</td>
<td>o Spring High School Forum was held April 9th with Solutia providing the plant tour.</td>
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<td></td>
<td>o Fall High School Forum date is not set yet.</td>
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<td></td>
<td>Dave Corona will coordinate the Summer Open House to be held Tuesday, Jun 17th, 5-8p</td>
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<tr>
<td>Key Discussion Points</td>
<td>Discussion</td>
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<tr>
<td>-----------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</table>
| - Equipment Needed from Industry                          | Jimmie Stewart put together a needs list to connect the new BP trainer; see Attachment A, item IV.F  
                                                                                                                    | Curtis Crabtree put together a list; see Attachment C                                                                                               |
| - Process Simulators                                      | Curt Thompson wanted to know if ACC needed any process simulators. After much discussion, it was determined that the current simulators and tutorials are sufficient, although ACC staff will continue to develop and evaluate new opportunities as they arise. |
| - Goals for 2008                                          | One of the goals for 2008 was for Mark Demark to look at enrollment data to determine if there were significant trends, and if the number of students graduating each term could be predicted. Data is shown in Attachment D. Based on the number of students in each of the 4 terms, it appears that in 2008 and 2009, 25 students ± 7 will complete course work in each of Spring, Summer, and Fall terms. Starting with Spring 2010, this number could increase to 50 ± 15. |
| - Status of ACC                                           | John Bethscheider summarized:  
                                                                                                                    | o Completion of Science / Health Science building (S-bldg)  
                                                                                                                    | o New Arts building in construction  
                                                                                                                    | o Remodeling of H-bldg (the old Science building) for use by Continuing Education Allied Health programs  
                                                                                                                    | o Remodeling of E-bldg, the Student Center  
                                                                                                                    | o Remodeling of A-bldg (Admissions, Registrar, Financial Aid, Business Office, Library, Learning Lab) |
| Other:                                                    | Next meeting is scheduled for Wednesday, Sep 10, 2008 at Solutia. The following will be on the agenda:  
                                                                                                                    | o Adopt Vision, Mission, & Objectives (see Attachment B)  
                                                                                                                    | o BP Process Trainer  
                                                                                                                    | o 6-17-2008 Open House; Fall High School Forum  
                                                                                                                    | o Duties of Advisory Committee Chairperson & Chairperson-Elect  
                                                                                                                    | o Other to be added: more agenda items are solicited  
                                                                                                                    | Meetings are held the second Wednesday of the last month of each quarter 11:30a-1:45p (unless pre-empted by college event or closure). 2008 meetings are: Jun 17, Sep 10, and Dec 10. The meetings rotate to each site: Solutia, Lyondell, INEOS, ACC. |

**Chairperson Signature:**

Curt Thompson, Site Training Lead  
Solutia Chocolate Bayou, Alvin

**Date:**

Mar 26, 2008

**Next Meeting:**

Tuesday,  
Jun 17, 2008 at ACC
ATTACHMENT A - AGENDA
Alvin Community College Process Technology Advisory Committee Meeting
Wednesday, March 26, 2008
Held at Alvin Community College (Bldg S, Room 119)

AGENDA

I. Welcome, Introductions, and Lunch...................................................................................................11:30

II. Old Business (all present).................................................................................................................. 11:45
    A. Approve minutes of Dec 12, 2007 meeting
    B. Status at/of CAPT - CAPT staff invited
    C. Announcements, notices, and current events - important advisory committee news (Alvin Community College, GCPTA, etc.)

III. Continuing Business (all present)...................................................................................................12:00
    A. Discuss duties of the Advisory Committee Chairperson - Curt Thompson & Chairperson-Elect Diane McGinn
       (Attachment F to minutes of June 13, 2007 when this subject was first discussed)
    B. Elect new members if present:
       George Ayala      BP Refining & Petrochemicals      Texas City
       Skip Olson       Lyondell Refining                Houston
    C. Adopt Vision, Mission, and Objectives - Curt Thompson
       (Attachment B to minutes of Dec 12, 2007 when this subject was last discussed)
    D. INEOS presentation to PTAC-1302 classes - Don Koster
       "What Is Expected of a New Operator"
    E. Other - All

IV. New Business (A-F Mark Demark & Curtis Crabtree)........................................................................12:45
    A. Shell 2008 $7,000 donation
    B. Spring 2008 High School Forum - Wed Apr 9, 8a - 3:30p; Plant Visit - Solutia; lunch - ACC
    C. June 2008 Summer Community Open House
    D. Fall 2008 High School Forum
    E. BP $90,000 donation to build Operator Training Unit
    F. Need 3-phase transformer 30 to 45 KVA (1st choice); Delta 480 / Delta 240 with 120 volt center tap
       (2nd choice); 480 volt Delta to 208Y with a 120 volt tap, safety disconnect switch for the transformer,
       500 feet of wire to connect the transformer primary, and 80 feet of 1" conduit; all used is OK.
    G. Process simulator for Alvin Community College (Curt Thompson)
    H. Goals for 2008 (Curt Thompson)

V. Miscellaneous & Open Discussion (All)..........................................................................................1:30

VI. Wrap Up (All) (next meeting Tue 6/17/2008 11:30a - 1:45p @ ACC).................................................1:45
ATTACHMENT B
ALVIN COMMUNITY COLLEGE PROCESS TECHNOLOGY DEPARTMENT
VISION, MISSION, and OBJECTIVES

OUR VISION

Alvin Community College will be recognized by industry, students, government, community, and academia as the pre-eminent learning center for Process Technology.

OUR MISSION

Mutually attract students and employers, supported by government, community, and academia in a program of learning that will prepare our students to be superior hires and to obtain responsible positions in the Processing Industries.

OUR STRATEGY

Work with the Center for the Advancement of Process Technology (CAPT), the Gulf Coast Process Technology Alliance (GCPTA), employers, and others to determine employer needs for the number of Process Technicians and their required knowledge and skills.

Design a curriculum that will cost effectively train students in the knowledge and skills required by industry.

Work with high schools and other education providers to make them aware of our program, and identify candidates interested in pursuing careers as Process Technicians.

Work with industry and academia to identify qualified instructors who can endorse our vision, embrace our Mission, further develop our strategy, and have the energy, experience, and resourcefulness to teach and prepare our students for employment.

As a department, stay abreast of new technologies and industry needs to improve our curriculum and provide industry with highly qualified employees.

Seek the necessary funding and equipment donations from industry, government, and other private sources to insure that the College has the necessary resources to achieve its vision.

THE PROGRAM

To achieve the vision and accomplish the mission, the staff of Alvin Community College have created a curriculum that will challenge you, the student, expand your expertise, and qualify you to seek a position as a Technician in the Processing Industries.
ATTACHMENT C
MATERIALS REQUEST FROM AREA PLANTS

Following items will be used as teaching aids for ACC Process Technology.

Materials for classroom:
• Assorted highlighters
• Pens & pencils
• Staplers
• Hole punch
• Note pads

Chapter 2 Valves:
1. List cutaway valves available in the plant
2. Valve cutaways to purchase
3. Valve packing material
4. List of cutaways & valve examples at ACC:
   1) Gate cutaway
   2) High pressure gate cutaway
   3) 1" 150 gate cutaway
   4) Orbit valve cutaway
   5) Various steam traps cutaway
   6) 1" 150 ball
   7) ¾" 150 screw gate
   8) ½" 800 socket weld gate
   9) 1 ½" 3-way ball
   10) 2 – ¾” 150 socket weld gate
   11) 1 ½” bronze gate
   12) 2 – 2” butterfly
   13) Needle valves
   14) Ball
   15) Safety valve

Chapter 3 Piping & Vessels:
1. Pipe examples:
   a. Prepare pipe pieces of various schedule sizes 2" long
   b. Label by size and schedule
   c. 2", 4", 6" of schedule 10, 40, 80
   d. Include a piece of cast iron pipe
   e. Include 2 socket weld pipe (1 welded; 1 not welded)
   f. Include lined pipe
2. Fitting examples:
   a. Various selection including carbon steel & stainless
3. Gasket examples:
   a. Various selection

   b. Include lethal service
   c. Various materials & designs
   d. Label by size and pressure service
   4. Flanges: (1 each)
      a. 150 #
      b. 300 #
      c. 600 #
   5. Pictures of storage tanks roof designs
      a. Cone roof
      b. Floating roof
   c. Other designs of interest in the plant
   d. Vessel vent systems
   e. Dike walls and signage

Chapter 4: Pumps
1. Coupling examples
2. Labyrinth ring & carbon seals
3. Photos & video of seal flush systems

Chapter 5: Compressors
1. Photos of compressor damage
2. 

Chapter 6: Turbines & Motors
1. Photos of turbine damage
2. Motor cutaway (AC & DC)
3. Video of 4160 volt motor startup with sound

Chapter 7: Heat Exchangers:
1. Tube repair samples:
   a. Various plugs
   b. Samples of tubing materials & designs
   c. Photos or video of hydro blasting

Chapter 8: Cooling Towers:
1. Photos or video of analyzer house
2. Photos or video of auxiliary equipment and vessels focus on safety and signage
Chapter 9: Boilers
1. Photos or video of boiler:
   1) Walk thru showing boiler, feed water, flash tank, blowdowns, instruments
   2) Photos of burners
   3) Photos of steam traps showing pipe loop
   4)

Chapter 10: Furnace
1. Photos of internal damage
2.

Chapter 11: Instruments
1. Examples of various meters (defunct & decontaminated)
   1) Mag-meter, ultrasonic, vortex, thermal, Coriolis,
   2)

Chapter 12: Process Diagrams
1. Set of P&ID's of discontinued process:
2.

Chapter 13: Utilities
1.

Chapter 14: Reactors
2. Example of Rx sequence & interlock (a couple of pages for demo)
3.

Chapter 15: Distillation
1. Photos of internals
2. Photos of damage
3.

Chapter 16: Extractions 7 other Separations
1.

Chapter 17: Plastics
1.
<table>
<thead>
<tr>
<th>Approximate # of Students</th>
<th>Gender / Age</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; 47</td>
<td>Student number 171 100%</td>
<td>Black 17 9.9%</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; 25</td>
<td>Male 136 79.5%</td>
<td>Caucasian 108 63.2%</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; 22</td>
<td>Female 35 20.5%</td>
<td>Hispanic 40 23.4%</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; 23</td>
<td>Age range 18 - 53</td>
<td>Native American - Alaskan 2 1.2%</td>
</tr>
<tr>
<td>171</td>
<td>Avg age 27</td>
<td>Asian / Pacific Islander 3 1.8%</td>
</tr>
<tr>
<td>68% confidence level</td>
<td>Median age 34</td>
<td>Unknown 1 0.5%</td>
</tr>
</tbody>
</table>