Chemical Technology Program at Santa Monica College (SMC)

Minutes – Industry Advisory Board Meeting
Tuesday, April 29, 2025 at 6:05 PM - 7:16 PM

I. Call to Order – 6:05pm

The Chemical Technology Program Industry Advisory Board (IAB) meeting was held via Zoom. Dr. Karol Lu, Project Manager, called the meeting to order at 6:05pm on Tuesday, April 29, 2025.

II. **Welcome & Introductions** – 1:05pm

Dr. Jennifer Hsieh welcomed *four members* [initially] from industry and *one program faculty* member in attendance. Mr. Robert Giasolli attended the meeting later. There was a total of five members in attendance for the majority of the meeting. Four advisory committee members as well as faculty members introduced themselves; Robert Giasolli introduced himself upon arrival:

In attendance – Name, Title, and Association

*Jared Ashcroft, Ph.D., Professor and Director of Micro Nano Technology Center, Pasadena City College
Chineche DeLaRosa, Technical Training Manager, Kite Pharma
Pamela Eversole-Cire, Ph.D., Professor and Program Director of CIRM Bridges Program, Pasadena City College
**Robert Giasolli, VP Clinical Engineering & Chief Technology Officer, Cagent Vascular
Aurora Gutierrez, Senior Chemist –Los Angeles Laboratory, U.S. Customs and Border Protection

Sarah Kurtoic, Ph.D., Associate Professor and Program Faculty, Santa Monica College
Jennifer Hsieh, Ph.D., Chair of Physical Sciences Department, Santa Monica College
Karol Lu, Ed.D., Project Manager, Santa Monica College

*Note: early departure at 6:53pm
**Note: late arrival at 6:13pm

III. Agenda Overview – 6:09pm

Karol Lu reviewed the meeting agenda, which included curriculum presentations, discussion of program goals, labor market information, funding opportunities, and formal voting procedures.

IV. New Business – 6:11pm

a. Program Updates

Dr. Sarah Kurtoic, Program Faculty, presented the proposed Certificate of Achievement (CoA)
Initial certificate title: Chemical Technology Research Skills (name subject to feedback)

- Required courses (12 units total):
  - CHEM 11 - General Chemistry I (5 units)
  - CHEM 12 - General Chemistry II (5 units)
  - CHEM 55 - Introduction to Chemical Instrumentation (2 units): Emphasis on practical, hands-on use of HPLC, GC-MS, IR, and UV-Vis instruments
- Student learning outcomes:
  - Understanding principles of spectroscopic and chromatographic methods
  - Hands-on operation of instruments
  - Data evaluation and identification of errors
  - Application of analytical techniques to solve problems
  - Emphasis on communication skills, lab notebook documentation, and independence
- Goal: Equip students with foundational laboratory experience prior to organic chemistry

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Sarah Kurtoic also presented plans for a second CoA and eventually, an associate degree. Proposed future courses may include (subject to IAB feedback):

- Advanced Chemical Instrumentation
- Science Literacy / Scientific Communication
- Chemistry of Hazardous Materials
- Manufacturing Practices and Quality Control
- Internship or alternative research experience (SCI 10) or Independent Study

b. Open Discussion – 6:23pm

Dr. Jared Ashcroft and other IAB members expressed preference for technician-focused training for industry. Members want the skills learned in the program to emphasize workplace readiness 'soft skills' including communication, time management, critical thinking, ability to follow standard operating procedures (SOPs), perform calculations, laboratory safety and include manufacturing-relevant training with flexibility across industries. Dr. Pamela Eversole-Cire suggests incorporating workplace skills mentioned by other members into all newly developed courses so that students are exposed to the expectations throughout the program. Jared Ashcroft, Robert Giasolli, and Chineche DeLaRosa stressed the importance of familiarity with the workplace laboratory and weaving SOP writing and communication into instrumentation and science literacy courses. Members suggest replacing *Chemistry of Hazardous Materials (proposed for the second certificate),* with a practical safety and lab skills course (e.g., making standard solutions).

c. Labor Market Information and Voting Procedure for Certificate of Achievement – 6:56pm

Karol Lu presented the endorsement brief by the Los Angeles Center of Excellence (LA COE) for TOP CODE 0954 and 0955 Chemical Technology. The program was endorsed by the LA COE and met two out of the three endorsement criteria. The endorsement brief reports that there is an occupational demand in the LA region. Karol Lu outlined the timeline for a certificate program approval and the voting procedure to approve a CoA.

Mr. Robert Giasolli motion to have an open discussion on the proposed title of the CoA – Chemical Technology Research Skills. The motion was seconded by Pamela Eversole-Cire. The motion to have an open discussion on the naming of the first certificate passed unanimously. (In favor: 4, Opposed: 0, Abstain: 0)

d. Open Discussion – 7:06pm

Committee members and Jennifer Hsieh made recommendations on possible titles for the first CoA with the required courses as proposed. Suggestions include Chemical Technology Research Skills, Applied Chemical Sciences, Chemical Technician Skills.

V. **Vote for Certificate of Achievement** – 7:12pm

a. **Title of the Certificate of Achievement:** Robert Giasolli made a motion to recommend the naming of the certificate as *Certificate of Achievement in Chemical Technician Skills.* This motion was seconded by Chineche DeLaRosa. The motion passed unanimously. (In favor: 4, Opposed: 0, Abstain: 0)

b. **Certificate of Achievement – Chemical Technician Skills:** Robert Giasolli made a motion to recommend the *Certificate of Achievement in Chemical Technician Skills* as presented to the committee by Sarah Kurtoic (requirements listed below). This motion was seconded by Chineche DeLaRosa. The motion passed unanimously. (In favor: 4, Opposed: 0, Abstain: 0)

- Required courses (12 units total):
  - CHEM 11 - General Chemistry I (5 units)
  - CHEM 12 - General Chemistry II (5 units)
  - CHEM 55 - Introduction to Chemical Instrumentation (2 units)

VI. **Action Items**

- Faculty to develop curriculum for the second certificate based on IAB feedback and reframe certificate titles/descriptions to better align with technician careers
- Integrate soft skills and practical laboratory procedures into instructional design
- Present the second certificate framework and required courses at the next IAB meeting

VII. **Announcements** – 7:15pm

Karol Lu announced that IAB meetings will be held twice annually. Next Meeting Date, and Time – TBA

VIII. **Adjournment** – 7:16pm

Minutes recorded and submitted by Karol Lu, Ed.D., Project Manager, pending approval.