SEVENTH ANNUAL
MATERIALS & MANUFACTURING
SUMMER TEACHERS’ INSTITUTE

CONNECTING MANUFACTURING TO CONNECTICUT’S NEW STATE SCIENCE STANDARDS (NGSS)

TUESDAY-THURSDAY,
JULY 23-25, 2019

SOUTHERN CONNECTICUT STATE UNIVERSITY & MILFORD’S PLATT TECHNICAL HIGH SCHOOL
Materials Manufacturing Summer Teachers’ Institute

Co-Directors:

Christine Broadbridge, Ph. D.
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Tuesday, July 23, 2019

Southern Connecticut State University

Registration and Breakfast
(Academic Science Building, SCI 210)

8:00 – 8:30 Sign in, breakfast and networking

8:30 – 9:00 Welcome
Robert Prezant, Ph.D. | Provost & VP for Academic Affairs, SCSU
Ellen Durnin, Ph.D. | Dean of the School of Business, SCSU
Kris Lorch | President, Alloy Engineering

9:00 – 9:15 Physical & Chemical Properties of Materials:
Christine Broadbridge, Ph.D. | Executive Director, Research & Innovation
A Practical Approach

Bridging Problem Solving to Manufacturing
(Academic Science Building, SCI 210)

9:15 – 9:30 Think-Pair-Share
Peter Dimoulas | Science teacher, Bethel High School
How is NGSS different from previous Marjorie Drucker | Science Consultant, Drucker Educational Consulting, LLC
instructional models?

9:30 – 10:00 Teaching and Learning in a STEM
Peter Mclaren | Executive Director, Next Gen Education, LLC
Focused World: Preparing Today’s
Students for Tomorrow’s Jobs

10:00 – 10:10 Short break

10:10 – 10:30 Introduction to Platt Tech
Dave Tuttle | Chair of Manufacturing Technologies, Platt Tech High School

10:30 – 11:30 NGSS Activity outline
Peter Dimoulas | Science teacher, Bethel High School
Marjorie Drucker | Science Consultant, Drucker Educational Consulting, LLC

Networking Lunch
(Academic Science and Laboratory Building, lower level)

11:30 – 12:00 Welcome and guest Speakers
Colleen Bielitz, Ph.D. | Assoc. Vice President, Strategic Initiatives & Outreach
Jim Gildea | Director of Manufacturing, Bigelow Tea
Dr. Melissa Hickey | Director of Literacy/Reading, CT State Dept. of Ed

12:00 – 12:45 Networking Lunch

Holo-Krome
(61 Barnes Industrial Park N, Wallingford, CT 06492)

12:45 – 1:30 SCSU Shuttles to Holo-Krome
61 Barnes Industrial Park N, Wallingford, CT 06492

1:30 – 3:30 Tours of Holo-Krome
Ralph Larsen | General Manager, Holo-Krome

3:30 – 3:45 Details for Day 2

3:45 Return to SCSU
Sign in and Breakfast

8:00 – 8:30  Sign in, breakfast  
The needs of employers: *Skill sets, certifications, and employer needs*  
*Lori-Lynn Chatlos* | Business Services Specialist, CT Department of Labor

8:30 – 10:00  Safety Review  
*Machining Process, Tools and Properties; Shop Math*  
*Dave Tuttle* | Chair of Manufacturing Technologies, Platt Tech High School

10:00 – 10:10  Short break

Bridging Problem Solving to Manufacturing  
(In Shop)

10:10 – 12:00  Begin production  
*Dave Tuttle* | Chair of Manufacturing Technologies, Platt Technical HS  
*Greg AmEnde* | Instructor, Manufacturing Technologies, Platt Technical HS  
*Drew Most* | Chair of Manufacturing Technologies, Bullard Havens Technical HS

Working Lunch

12:00 – 1:00  Case Study: *Solving Die Cast Manufacturing & Design Problems*  
*Larry Smith* | SVP of Manufacturing & Engineering, Bridgeport Fittings

Bridging Problem Solving to Manufacturing  
(In Shop)

1:00 – 2:30  Continue production  
*Dave Tuttle* | Chair of Manufacturing Technologies, Platt Technical HS  
*Greg AmEnde* | Instructor of Manufacturing Technologies, Platt Technical HS  
*Drew Most* | Chair of Manufacturing Technologies, Bullard Havens Technical HS

Coffee and the Classroom Connection Part I  
(In Shop)

2:30 – 3:45  Coffee Break and Practicum Discussion  
*Peter Dimoulas* | Science teacher, Bethel High School  
*Marjorie Drucker* | Science Consultant, Drucker Educational Consulting, LLC
**Sign in and Breakfast**

8:00 – 8:30  
Sign in, breakfast

Welcome remarks  
David Telesca | Principal, Platt Technical High School

8:30 – 8:45  
Review of Days 1 & 2  
Dave Tuttle | Chair of Manufacturing Technologies, Platt Technical High School

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**Bridging Problem Solving to Manufacturing**

*(In Shop)*

8:45 – 11:30  
Continue production  
Dave Tuttle | Chair of Manufacturing Technologies, Platt Technical High School  
Greg AmEnde | Instructor, Manufacturing Technologies, Platt Technical High School  
Drew Most | Chair of Manufacturing Technologies, Bullard Havens Technical High School

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**Working Lunch**

11:30 – 12:30  
Women in Manufacturing  
Kris Lorch | President, Alloy Engineering

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**Bridging Problem Solving to Manufacturing**

*(In Shop)*

12:30 – 1:30  
Finish production  
Dave Tuttle | Chair of Manufacturing Technologies, Platt Technical High School  
Greg AmEnde | Instructor of Manufacturing Technologies, Platt Technical High School  
Drew Most | Chair of Manufacturing Technologies, Bullard Havens Technical High School

1:30 – 1:40  
Coffee Break

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**Classroom Connection Part II**

*(In Shop)*

1:40 – 2:40  
Educators present their demonstration/experiment ideas/plans  
Peter Dimoulas | Science teacher, Bethel High School  
Marjorie Drucker | Science Consultant, Drucker Educational Consulting LLC

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**Wrap Up**

*(In Shop)*

2:40 – 3:00  
Surveys  
Carol Jenkins | Program Coordinator, Division of Research and Innovation
Sponsors and Acknowledgements

Southern Connecticut State University
Platt Technical High School; Milford, CT
Division for Research and Innovation, SCSU
New Haven Manufacturers Association
CRISP at SCSU/Yale
Southern Connecticut State University Bookstore
Fairfield Community Foundation
Robert & Yvonne Klancko
  Alloy Engineering
  Bridgeport Fittings
  Bigelow Tea
  Schwerdtle Stamp
  Holo-Krome

Thank you to our incredible sponsors, speakers, keynotes, workshop facilitators and all of our attendees at 7th annual The Materials and Manufacturing Summer Teachers’ Institute.

We are deeply grateful to our sponsors and friends who provide funds and resources that are essential for us to be able to annually host this Institute.