FACULTY ACCOMPLISHMENTS 2018
The Cal Maritime Library is pleased to present this compilation of publications, presentations, exhibits, and patents created by Cal Maritime faculty and staff between April 2017 – April 2018. Also included this year are descriptions of the 2017-18 Cal Maritime Scholar events, part of an interdisciplinary lecture series which began in 2015.

We would particularly like to thank those faculty who mentored and partnered with Cal Maritime students in these efforts, noted in the related citations.

Michele Van Hoeck
Dean of the Library
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tr>
<td>Khalid Bachkar</td>
<td>Associate Professor, International Business and Logistics</td>
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<tr>
<td>Kristen Bloom</td>
<td>Company Commandant, Office of the Commandant</td>
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<td>Christopher Brown</td>
<td>Scientific Program Manager of Golden Bear Research Center &amp; Adjunct Faculty, Transportation and Engineering Management</td>
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<td>Steven Browne</td>
<td>Professor, Marine Transportation</td>
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<td>Tamara Burback</td>
<td>Maritime Vocational Instructor II, Marine Transportation</td>
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<td>Nelson Coates</td>
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<td>Colin Dewey</td>
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<td>E. M. Ekanayake</td>
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<td>Ali Moradmand</td>
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<td>Tomas Oppenheim</td>
<td>Assistant Professor, Mechanical Engineering</td>
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<td>Alexander Parker</td>
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<td>Amy Parsons</td>
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<td>Samuel Pecota</td>
<td>Interim Academic Dean</td>
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<td>Katherine Sammler</td>
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<td>Sarah Senk</td>
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<td>Frank Yip</td>
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Bachkar, Khalid
Associate Professor, International Business and Logistics

• Publications


Bloom, Kristen
Company Commandant, Office of the Commandant

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Brown, Christopher
Scientific Program Manager of Golden Bear Research Center & Adjunct Faculty, Transportation and Engineering Management

• Publications


Browne, Steven
Professor, Marine Transportation

• Publications


*Cal Maritime student
Burback, Tamara  
Maritime Vocational Instructor II, Marine Transportation

*Publications*


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**Cal Maritime Scholar Series**  
2017-18 Presenter

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**Master and Commander: What Does a Ship Captain Actually Do?**  
November 2, 2017

According to the Master’s Handbook on Ship’s Business, “the master is in ultimate command of the vessel and has various levels of authority over all aboard. Regardless of fault, the master may be directly, even personally, responsible for all actions, procedures, and incidents connected with the vessel.” These responsibilities include ensuring the ship’s compliance with all relevant laws, including foreign and international laws. Since the last edition of this handbook was published, the Department of Homeland Security has been created, environmental laws have been expanded, and remote monitoring capabilities require new cybersecurity precautions. At this Cal Maritime Scholar event, **Captain Tamara Burback** discussed the new edition of the Master’s Handbook on Ship’s Business she recently authored.
Coates, Nelson
Assistant Professor, Sciences and Mathematics

• Publications


• Presentations

• Patents


*Cal Maritime student
How can you make the sail on your boat convert sunlight into electricity? How can you use the heat from your body to charge your cell phone? How can we better prevent nuclear weapons from being smuggled into ports in the United States? The answers to these questions lie in a technology called ‘solution-processed semiconductors’ which are a promising new class of materials that allow scientists to combine materials with diverse electrical, thermal, and optical properties. At this Cal Maritime Scholar event, Dr. Nelson Coates discussed solution-processed semiconductors and presented research focused on addressing these questions.

Dewey, Colin
Assistant Professor, Culture and Communication

• Publications


• Presentations


Ekanayake, E. M.
Adjunct Faculty, Transportation and Engineering Management

• Publications


Hanson, Margot  
Associate Librarian, Library  
• Presentations  

Hartman, Bruce  
Lecturer, International Business and Logistics  
• Publications  
• Presentations  

Hartman, Lauren  
Lecturer, Culture and Communication  
• Exhibitions  


**Presentations**


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Higgins, Abigail  
**Assistant Professor, Sciences and Mathematics**

**Publications**


**Presentations**


**Kreta, Stephen**  
*Vice President, Student Affairs*  
**• Publications**  

**Lewis, Tony**  
*Assistant Professor, International Business and Logistics*  
**• Publications**  

**• Presentations**  

**McNie, Elizabeth**  
*Assistant Professor, Marine Transportation*  
**• Publications**  


**Metz, Jennifer**  
Lecturer, Global Studies and Maritime Affairs  
- **Presentations**


**Moradmand, Ali**  
Lecturer, Sciences and Mathematics  
- **Publications**

Oppenheim, Tomas  
Assistant Professor, Mechanical Engineering  
• Presentations  

Parker, Alexander  
Associate Professor, Sciences and Mathematics  
• Publications  


• Presentations  

Parsons, Amy  
Associate Professor, Culture and Communication  
• Presentations  

Pecota, Samuel
Interim Academic Dean

• Publications


• Presentations

Reiman, Fred
Maritime Vocational Lecturer, Marine Transportation

• Publications

Runyon, Nicole
Adjunct Faculty, Transportation and Engineering Management

• Presentations
Runyon, N. A. (2017, October). Alumni discussion on maritime industry. Panel Discussion Lead at Women on the Water, Great Lakes Maritime Academy, Traverse City, MI.

*Cal Maritime student
Runyon, N. A. (2017, April). *Don’t go to the dark side — Integrating quality into your course design*. Presented at OLC Innovate, New Orleans, LA.

**Sammler, Katherine**

*Assistant Professor, Global Studies and Maritime Affairs*

- **Publications**
  


- **Presentations**
  


Political geographers like Dr. Kate Sammler investigate the legal demarcation of coastlines in a world of rising seas, the ownership and management of rain and fog, and the privatization of outer space exploration. In all areas, her work considers the role of science, law, and power in defining global commons, access, and equity. At this Cal Maritime Scholar event, Dr. Sammler summarized ongoing research projects addressing the inherent mismatch of legal and political systems as they are traced atop a dynamic natural world. She also discussed her academic journey from physics to geography and how her research on power and territory incorporates this broad training.


Senk, Sarah
Assistant Professor, Culture and Communication
• Publications

• Presentations


Simons, Julie
Assistant Professor, Sciences and Mathematics
• Publications

• Presentations

Sinha, Aparna
Assistant Professor, Culture and Communication
• Presentations

Sinha, A. (2018, April) *Unconscious bias training*. Presented at the California Faculty Association, San Francisco State University, CA.

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**Storz, Ryan**  
Assistant Professor, Engineering Technology  
**Publications**  

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**Trevisan, Cynthia**  
Professor, Sciences and Mathematics  
**Publications**  

**Presentations**  


Spying on Algae: Using Drones to Monitor and Predict Harmful Algae Blooms

March 15, 2018

Harmful algae blooms (HAB) have increased in the last several decades, resulting in public health risks and economic damage. Currently, the most reliable method of HAB and toxin identification is via surface water sampling, even though the local nature of this testing limits large scale monitoring and prediction. What if a remote sensing instrument, in conjunction with a drone, could carry out regular missions to estimate HAB concentrations over wider areas? At this Cal Maritime Scholar event, Dr. Wil Tsai discussed development of an instrument that would allow researchers to observe the development of blooms at much higher spatial and temporal resolution than current remote sensing systems.


Tsai, William
Assistant Professor, Mechanical Engineering

• Presentations

Van Hoeck, Michele  
Dean of the Library  

• Publications  

Yip, Frank  
Associate Professor, Sciences and Mathematics  

Presentations  


*Cal Maritime student*
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2018