

October Section Meeting: Application of Thermokinetic Modeling to Reactive Systems in Process Industries

Thermo-kinetic modeling is a key step in process safety hazard assessment for chemical industries. The purpose of thermo-kinetic modeling is to scale experimental calorimetry data to quantify hazard scenarios at bulk scale by coupling physical chemistry concepts with chemical engineering transport principles and numerical modeling tools. In this talk, I will start by introducing key concepts that typically encompass thermo-kinetic modeling and how it differs from its well-known cousin, descriptive modeling. Next, I will review specific considerations and common pitfalls that practitioners should be familiarized with. Then, I will use 1-2 case studies to illustrate the typical thought process followed during scale-up of calorimetry data using modeling.

October Section Meeting

- Topic:** Application of Thermokinetic Modeling to Reactive Systems in Process Industries
- Speaker:** Soham Dutta
- Date:** Thursday, October 19th
- Time:** 6:00 – Introduction
6:05 - Career Discussion
6:15 - Technical Presentation
7:15 – Q & A
- Cost:** Free

REGISTRATION REQUIRED. More information can be found on our [website](#).

[Register](#)

After you register, you will receive instructions via email for joining the meeting.



Speaker Biography:

Soham Dutta is an Associate Research Scientist in Core Research and Development, The Dow Chemical Company in Midland MI. His primary responsibility is to serve as a Subject Matter Expert on technical evaluation of hazards posed by Reactive Chemical systems. He uses a combination of physical chemistry, chemical engineering, and numerical modeling tools to support a wide variety of businesses within Dow. He is a member of AIChE's Loss Safety Prevention Symposium and actively participate in chairing technical sessions at the annual Global Congress of Process Safety. He holds an MS and PhD in chemical Engineering from Carnegie Mellon University, Pittsburgh PA.

20 Excel Shortcuts

Do you use Excel often and want to improve your productivity? Use these shortcut keys in Excel to get more done everyday!

Workbook Shortcut Keys

1. To create a new workbook Ctrl + N
2. To open an existing workbook Ctrl + O
3. To save a workbook/spreadsheet Ctrl + S
4. To close the current workbook Ctrl + W
5. To close Excel Ctrl + F4
6. To move to the next sheet Ctrl + PageDown
7. To move to the previous sheet Ctrl + PageUp
8. To go to the Data tab Alt + A
9. To go to the View tab Alt + W
10. To go the Formula tab Alt + M

Row and Column Shortcut Keys

11. To select the entire row Shift + Space
12. To select the entire column Ctrl + Space
13. To delete a column Alt+H+D+C
14. To delete a row Shift + Space, Ctrl + -
15. To hide selected row Ctrl + 9
16. To unhide selected row Ctrl + Shift + 9
17. To hide a selected column Ctrl + 0
18. To unhide a selected column Ctrl + Shift + 0
19. To group rows or columns Alt + Shift + Right arrow
20. To ungroup rows or columns Alt + Shift + Left arrow

Need Section Treasurer

Thank you to Pete Sharpe for his long service as the Treasurer for our Rocky Mountain Section! If anyone is interested in this position, please contact any of the officers for more information.

AIChE Meetings

2023

- Oct 3-4 [2023 Industry 4.0: Digital Transformation Conference](#)
Oak Brook, IL
- Oct 17-19 [6th Int'l Conference on CRISPR Technologies](#)
Boston, MA
- Oct 22-24 [2023 AfroBiotech Conference](#)
Atlanta, GA
- Nov 5-10 [2023 AIChE Annual Meeting](#)
Orlando, FL
- Dec 7 [2023 AIChE Gala](#)
New York, NY

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The objectives of AIChE are to advance chemical engineering in theory and practice, to maintain a high professional standard among its members, and to serve society, particularly where chemical, engineering can contribute to the public interest.

MEETING SCHEDULE

The Rocky Mountain Local Section (RMLS) of AIChE generally meets the second or third Tuesday of every month, September through May.