

Life of the Mind

FYS 100

Daytripper Discussion

August 18, 2014

SERF 307

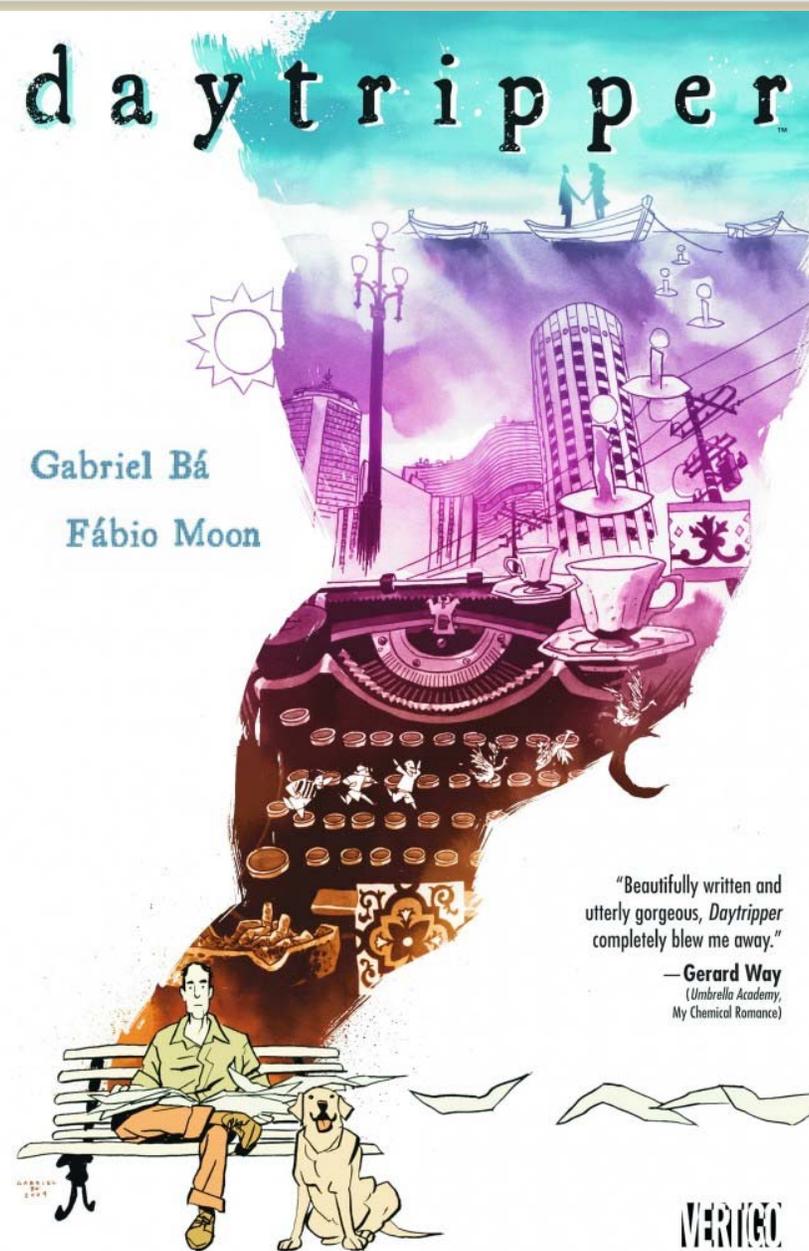
3:00-4:00

David Keffer, Professor
Dept. of Materials Science &
Engineering

University of Tennessee
Knoxville, TN 37996-2100

dkeffer@utk.edu

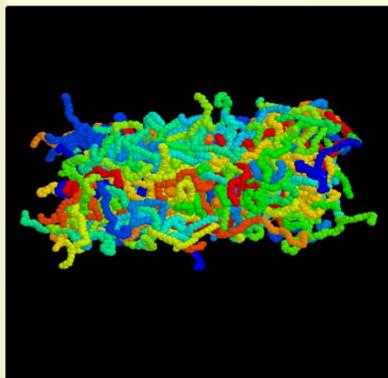
<http://clausius.engr.utk.edu/>



David Keffer : molecular-level materials modeler



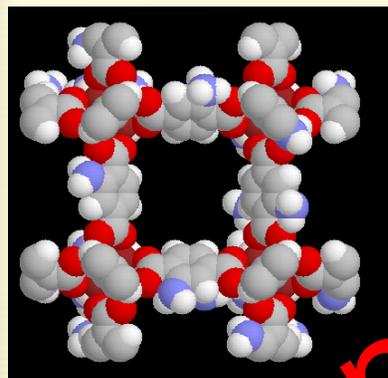
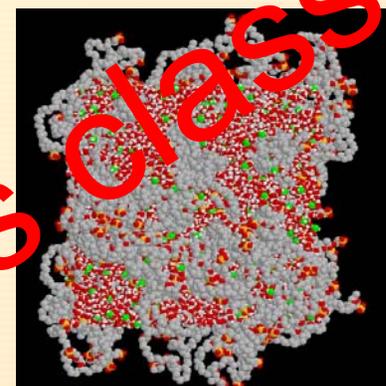
Apply molecular simulation to develop structure/property relationships



polymers at equilibrium and under flow (PE, PET)

polymeric materials

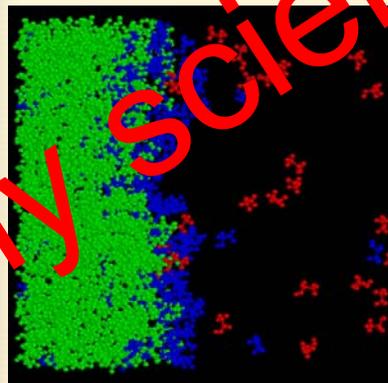
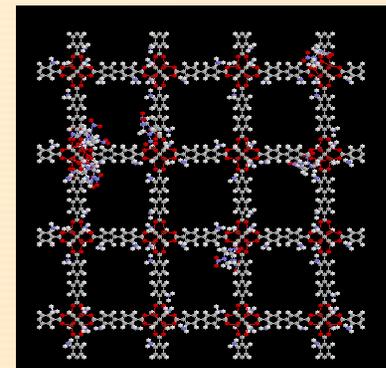
polymer electrolyte membranes (PEMs) in fuel cells



hydrogen sorption in metal-organic frameworks (MOFs)

nanoporous materials

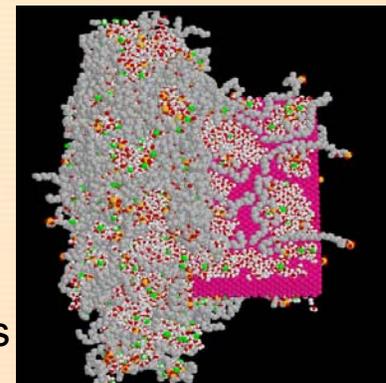
Sensing of RDX, TATP and other explosives in MOFs



near critical vapor-liquid interface structure

interfacial systems

fuel cell electrode/electrolyte interfaces



Only science slide in this class!

Introductions

- **Stand up**
- **Introduce yourself**
- **Hometown**
- **Major**
- **Share Something About Yourself**

Student Responses

- Distribute the grading sheets
- My appreciation of Daytripper grew through seeing the breadth of responses it was able to induce in you all.
- There were poems, short, stories, drawings, paintings, digital photo manipulations and three-dimensional renderings—a really amazing range.
- A couple, visual examples...

Student Responses

Only when you accept that one day you'll die can you let go....



*...and make the **best** out of life.*

Does anyone else feel like this?

Student Responses



Look around you. These are your peers for your next four years. They have amazing hidden talents. Get to know them.

First Exercise – Reactions to Daytripper

- Have you ever played the game Scattergories?
- You have to think up something in a category that no one else will think of.
- If the challenge is to think of an animal that starts with the letter “f”, many people might say fox or flamingo. Fewer would say fennec.



a fennec, native to N. Africa

For Daytripper, individually write down two things.

- A unique reaction that no else is likely to have
- A common reaction that you think everyone will agree with

Second Exercise – Beyond Reactions

- Break into groups of three
 - Consider the following three issues
 - Provide justification for your observations
 - Prepare a comment for each to share with the rest of the class
-
- **Purpose**
What is the most important piece of information that the book is attempting to transfer from the authors to the reader?
-
- **Non-linear Format**
What are your thoughts about the non-linear format of the narrative? What was its purpose? Did it succeed? How would the novel have been different if the chapters were presented in chronological order?
-
- **Repetition of Death**
What are your thoughts about the repeated and contradictory deaths in the narrative? What was its purpose? Did it succeed?

Third Exercise –Following where the Discussion Leads

- **time permitting, large class discussion**
- **Does this book apply to engineering majors?**
- **What did you think about the graphic novel format?**
- **In light of the themes of Daytripper, what do you want to accomplish during your roughly four years at UT?**

Parting Thought

- Today, we have participated in an exercise in critical thinking.
- Every day at UT there are such opportunities.
- Be open to them.

“Self-education in any shape...is preferable to a system of teaching, which professing so much really does so little for the mind...How much better...is it for the active and thoughtful intellect...to eschew the college and university altogether, than to submit to a drudgery so ignoble.”

--Robert Frost

taken from *Robert Frost: The Poet as Philosopher*

by Peter J. Stanlis, ISI books, Wilmington, DE, 2007, p. 200.