

# STEM Society Meeting, September 13, 2016

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## **1 About the STEM Society and the STEM Society Website**

STEM is an abbreviation for Science, Technology, Engineering and Mathematics. The acronym STEM is commonly associated with K-12 education, but our use of the term is only slightly bound to this meaning. There are over one hundred people on the mailing list, although a much smaller group attends any one meeting. We meet on the second Tuesday of each month at the Trailside Center at 99th and Holmes in Kansas City, Missouri. The meetings are open to all. The start time is 6PM. We make presentations, have discussions, and have demonstration experiments. These relate to Science,

the History of Science, Mathematics, Engineering, Philosophy and Technology at all levels. The topics have ranged from a technical discussion of the Mathematics of General Relativity to scientific experiments for young students.

These meeting notes contain links to many other documents, which may be viewed or downloaded by clicking the link. A partial list of documents can be reached by clicking the heading **Documents**. The meeting notes may also be viewed in an archive file (archive.pdf), which is in the list of documents. Many of the documents are PDF files. They may be viewed or downloaded to the computer by clicking, provided Adobe Reader, or another program capable of reading PDF files, is present. There are many more documents available at the site than are listed under **Documents** because the documents.htm file is not at all up to date. The last time I checked, about March 2014, there were about 350 document files on the site. We are in the process of creating better techniques for finding documents and authors. The first meeting of the STEM Society was in November of 2006. For several years we used the content management program called Joomla. It had a fancy looking interface, but was hard to use. It overran the space somehow at our internet provider Bluehost. So we now have a very simple HTML site. It is not so slick looking as Joomla, but is very easy to maintain and modify.

**The web site is:**

<http://www.stem2.org/>

**Direct to the documents list:**

<http://www.stem2.org/je/documents.htm>

**Direct to the archive file:**

<http://www.stem2.org/je/archive.pdf>

## **2 The September 13, 2016 Meeting Announcement**

The September meeting of the STEM Society will take place on the second Tuesday of the month, September 13, 2016, at the Trailside Center at 99th

and Holmes in Kansas City, Missouri. The starting time is 6PM. Also look at our website for past meeting notes:

**The web site is:**

<http://www.stem2.org/>

Possible Topics and Discussions:

(a) Jim Emery will give a brief (less than 10 minutes) preliminary discussion of the concept of the potential function. I present this as motivation for an explanation of the concept of voltage given to beginning students of electronics in place of the usual introduction of voltage as "pressure" in a water pipe, which I have never thought of as a very good analogy. I will probably talk about this in more detail at a future meeting.

I will present this using a portable blackboard. Presenting a lecture using a blackboard simplifies and improves teaching very much as opposed to a computer presentation. Both techniques have of course advantages, which we can talk about.

(b) Tom Grant will give a lecture on the indians of the Southwest and some of their history and technology. This is a topic which he introduced in a preliminary form a couple of meetings back.

(c) As always, attendees are free to bring, and should bring additional topics, things, ideas, and presentations, which, subject to time constraints, can be presented. You can let me know at the meeting if you have material to present.

Perhaps using a blackboard and posters can make such ad hoc presentations easier in the future.

### **3 2016 Spencer Award, American Chemical Society**

2016 SPENCER AWARD CEREMONY SELECTED WINNER: Dr. Agnes Rimando.

Please mark Friday, September 16, and Saturday, the 17th, 2016 on your calendar for the Spencer Award Ceremony!! The ceremony will take place

at UMKC's Pierson Auditorium located in the Atterbury Student Success Center, UMKC, 50th & Holmes. There will be additional activities on Saturday in cooperation with neighboring ACS sections supported by an ACS Innovated Project grant.

Friday, September 16, 2016:

1:30-4:30pm: Take a tour of Linda Hall Library Historical Manuscripts (Galileo, daVinci, Newton) on your own anytime between 1:30 and 4:30pm

3:00-5:00pm: Poster Set Up

5:00-6:00pm: Social Hour including Beverages and Light Hors doeuvres; Poster Session

6:00pm: Collaborator Remarks/Salutations by Dr. Dennis Mediros, UMKC

6:15pm: Dr. Agnes Rimandos Acceptance Address: Think of Pterostilbene When You Eat Blueberries

7:00pm: Dinner (prepared by Chef Stephen Lupardus, Wine and Dessert included)

8:00pm: Employment Outlook for Chemists presented by Dr. Peter Dorhout, VP of Research, Kansas State University

COST: \$20. for members; Students who RSVP will be FREE and Professors and H.S. Teachers may bring 2 students FREE of charge; additional students are \$10 each.

\*Please Note: Dinner is also FREE for students participating in the Poster Session.

## 4 Rich Kaufman: Suggestions for Meeting Topics

Several things come to mind:

(1) A mention of the telescope available on Friday nights for viewing atop Royall Hall, UMKC.

(2) A realistic discussion of the Dakota Access Pipeline controversy focusing on the need for such a pipeline.

## 5 Jim Emery: Introduction to the Concept of the Potential Function

Using our new blackboard, I introduced a small elementary part of my document called **The Potential Function**.

<http://www.stem2.org/je/potential.pdf>

## 6 Tom Grant: The Gallinagenocide

<http://www.stem2.org/je/gallinagenocide.pdf>