



## Professors Spark Student Interest in Science

Dr. Diola Bagayoko starts his “Scientific Method for All” presentation with a simple question. “How did you come to school this morning?” He launches into a series of follow-up questions that immediately captivates the elementary students and engages them in a highly lively and interactive exercise designed to get them to see the many things in their everyday lives made possible through science, technology, mathematics and engineering (STEM).

Later that week, Dr. Bagayoko is in a middle school classroom introducing physics as a discipline of study in his presentation entitled the “Versatility and Wonders of Physics.” Students are engaged with interactive discussions of the far-reaching applications of physics.

“For the wonders of Physics, we viewed clips of galaxies and colorful nebula to first note that astronomy is a part of physics, and to contemplate the magnificence of the ‘wonderful’ universe waiting for these students to study it further in the future,” said Dr. Bagayoko.

Dr. Bagayoko, Distinguished Professor of Physics at Southern Uni-



*Dr. Diola Bagayoko presenting “The Scientific Method for All” to elementary school students at First Baptist Christian School in Slidell, Louisiana.*

versity, is part of the corps of Louisiana Alliance for Simulation-Guided Materials Applications (LA-SiGMA) research scientists that personally engage with Louisiana students in the classroom. The Speaking of Science (SoS) program has a catalog of 130 presentations available in a wide range of disciplines. SoS speakers have reached over 34,000 Louisiana students ranging from pre-K to college students since the program was founded in 2001. The service is free to Louisiana schools.

This is one of the programs run by Louisiana EPSCoR and funded by the National Science Foundation and the Louisiana Board of Regents.

Math, Science and Social Studies Teacher Gretchen Witkowski booked two SoS presentations this year for her fourth grade students at Franklinton Elementary School in rural Washington Parish: “The Scientific Method for All” and “Sticky Materials Inspired by Gecko Lizards,” presented by Dr. Bagayoko and Tulane Associate Professor Dr. Pesika. Both Dr. Bagayoko and Dr. Pesika are members of LA-SiGMA’s Project Execution Team.

“These two scientists have given my students not only scientific knowledge, but have provided a glimpse into the life of a scientist! My stu-

**“My students and I are so grateful for the Speaking of Science program. This direct STEM exposure helps them relate science to real life experiences. It also helps them when choosing career paths. This program sparks an interest in science that I could not bring to the classroom on my own. Thanks to all of the professors who are willing to share their time and talents with us.”**

*- Gwen Johnson, 5th Grade Teacher,  
Our Lady of Prompt Succor School, Chalmette, Louisiana*

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dents were VERY impressed. Both speakers were very patient and made my students comfortable enough to ask questions. Some students started asking questions about how does one become a scientist. That was very exciting!" said Ms. Witkowski.

The talks on Scientific Method and Physics are just two of 17 customized presentations Dr. Bagayoko offers for students ranging from kindergartners to college professors.

Some of his additional topics include: "The Ways and Means for Academic Excellence for All," "Careers in Science and Engineering and the English and Mathematics it Takes," "Learning or Teaching Effective Problem-Solving," and "Ab-initio, Predictive Calculations of Electronic and Related Properties of Materials."

### *New SoS Speakers*

Six researchers have joined the SoS team, bringing several fascinating STEM presentations to the catalog:

**Dr. Jesse Allison**, Assistant Professor of Experimental Music & Digital Media, School of Music, Louisiana

State University:

- "Music in Motion: Laptops, Mobile Phones, and Making the Future of Making Music."
- "Sonic Interventions: Programming for Sound Art, Hybrid Worlds, & Interactive Installations."
- "STEAM: Techniques for using Sonic Arts to Integrate the Arts into STEM and STEM into the Arts."

**Dr. Edgar Berdahl**, Assistant Professor of Experimental Music and Digital Media, School of Music, Louisiana State University:

- "How to Program Computers to Synthesize Musical Sound."
- "Maker Faires, 3D Printing, and Prototyping New Digital Musical Instruments."

**Dr. Dhruva Chakravorty**, Assistant Professor, Department of Chemistry, University of New Orleans:

- "Clean Energy From a Can of Soda!"
- "Using Computers to Cure Diseases."
- "Proteins, Enzymes and Other

Mysteries of the World."

**Dr. Chris Douvris**, Assistant Professor of Chemistry, Department of Chemistry and Physics, McNeese State University:

- "Spectacular Chemistry Experiments in the Classroom (polymers, catalysis and more!"

**Dr. Suniti Karunatillake**, Assistant Professor, Department of Geology & Geophysics, Louisiana State University:

- "Living science fiction on Mars and beyond."
- "Discoveries unimagined by 2001: A Space Odyssey."
- "Discovering Mars."
- "Counting planetary sand grains with computer vision."
- "A story of water on Mars from maps of hydrogen and sulfur."

**Dr. Carl Richter**, Geology Department Head, University of Louisiana at Lafayette:

- "4.6 billion years: a brief history of Earth."
- "What's up with global warming?"
- "The Geology of Louisiana."

**For more SoS information and to book a speaker, contact Susan Jernigan at (225) 342-4253 or [susan.jernigan@la.gov](mailto:susan.jernigan@la.gov). The speaker catalog is available online at <http://web.laregents.org/?p=390>.**