

## Summer Physical Science Institute for Middle Level Teachers

Chandrasekhar, McClure, Keller, Volkmann

**University of Missouri, Columbia, July 5 -23, 2004**

Rm 127 Physics Building and Chemistry Dept UG labs

“An application a day keeps the blahs away”

**Lunch** = catered lunch

Day, Date	Mornings, 9:00- 12:30			Afternoons, 1:30 - 4	
Mon, July 5	Physics I: Static Electricity		Lunch	Pre Test (1 hr)	Math ; Sci. Ed. I. Implementation
Tue, July 6	Chemistry I. Elements I – Structure of the Atom, Spectroscopy Lab	11:30 Wouter Montfroofj talk;	Lunch	Spectroscopy Lab, cont'd	Sci. Ed. II. Nuts and Bolts
Wed, July 7	Chemistry II. Elements II			Sci. Ed. III. Miscon. Particulate Nature of Matter	Elements II, continued
Thu, July 8	Physics II. BBS			Physics III. Understanding Batteries	
Fri, July 9	Chemistry III. Electrochemical cells	11:30 Galen Suppes talk;	Lunch	Chemistry IV. Corrosion	
Weekend -- work at home!!					
Mon, July 12	Chemistry IV. Chemical Reactions (Bruce's Birthday)	11:30 Rainer Glaser's talk	Lunch	Physics IV. Simple Circuits	Sci. Ed. IV. Misconceptions on Circuits
Tue, July 13	Physics V. Simple Circuits			Circuits Problems and activities	
Wed, July 14	Physics VI. Simple Circuits			Circuits Problems	
Thu, July 15	Physics VII. Resistors & Capacitors			Building Equipment	
Fri, July 16	Physics VIII. Resistors and Capacitors	11:30 Paul Miceli talk;	Lunch	Resistors and Capacitors Problems	
Weekend -- work at home!!					
Mon, July 19	Chemistry V. Classifying materials as insulators, conductors and semiconductors			Physics IX. Magnets and Magnetism I	
Site Visits and interviews by Overall Project Evaluator -- July 21 and 22					
Tue, July 20	Chemistry VI. Magnetic Materials I			Physics X. Magnets and Magnetism II	
Wed, July 21	Chemistry VII. Magnetic Materials II			Chemistry VIII. Argon – case study of the discovery of noble gases	
Thu, July 22	Sci Ed. V. Transforming cookbook labs to inquiry			Chemistry IX. Materials Analysis – Magnetic Materials	
Fri, July 23	Post test		Lunch	Sci. Ed. VI. Implementing activities in classrooms – discussion. Evaluation Survey, Schedule of Follow-up sessions;	
Meera Chandrasekhar: Physics, Math Review, Problems				<a href="mailto:meerac@missouri.edu">meerac@missouri.edu</a>	
Steve Keller (SK): Chemistry				<a href="mailto:kellers@missouri.edu">kellers@missouri.edu</a>	
Bruce McClure (BAM): Chemistry				<a href="mailto:mcclureb@missouri.edu">mcclureb@missouri.edu</a>	
Mark Volkmann (MJV): Science Education				<a href="mailto:volkmannmj@missouri.edu">volkmannmj@missouri.edu</a>	
Mark Ehlert: Overall Project Evaluator				<a href="mailto:ehlertm@missouri.edu">ehlertm@missouri.edu</a>	