



Teacher Summer Research Program For Secondary Math and Science Teachers Pre Service Teachers

Texas A&M University - Dwight Look College of Engineering

Name _____ Date _____
(Last) (First) (M.)

Summer Contact Information:

School Address:

Street _____

District Name _____

City _____

School Name _____

State/Zip _____

Street _____

Phone (____) _____

City/State/Zip _____

Email address _____

Phone (____) _____

Email address _____

Are you a US citizen or permanent resident? Y N If no, what is your citizenship? _____

College Degrees earned or pursuing:

Courses _____

Institution	Degree and year earned; or degree pursuing and year earned	Major Subject

What educational experiences in science, engineering, or mathematics have you had outside the college classroom? Please describe: _____

Program Sponsors



What will you be certified to teach in Texas? _____

What laboratory research experience have you had? _____

What research program(s) have you participated in? _____

How long was the research experience? _____ Area of Research _____

If you were to compare your knowledge of engineering to other math/science teachers in your school, how would you rank your knowledge?

_____ Very knowledgeable _____ Somewhat knowledgeable _____ Not very knowledgeable

Define engineering from your current knowledge (do not use an outside source, such as a dictionary, for the following questions).

Describe as many types of engineering/engineers as you know up to 3.

Describe at least 3 engineering solutions that have made a difference in your life.

Below is a listing of some engineering research areas (and project titles). From this listing, please select and rank your top 3 research areas of interest. More details of each project are listed on the E3 website (see "Faculty Research" link).

- _____ 1. Aerospace Engineering: "Multifunctional Material Systems and Structures"
- _____ 2. Chemical Engineering: "Microfluidic Bio-encapsulations"
- _____ 3. Chemical Engineering: "Fabrication of Thin Films of Nanoporous Materials via Self-Assembly and Controlled Crystallization"
- _____ 4. Nuclear Engineering: "Thermal Hydraulic Studies for Reactor Safety"
- _____ 5. Civil Engineering: "Biological Degradation of Emerging Contaminants"
- _____ 6. Electrical and Computer Engineering: "RF / Microwave Integrated Circuits on Silicon"
- _____ 7. Electrical and Computer Engineering: "Computer-Aided Design on Multi-Core Parallel Computing Platforms"
- _____ 8. Electrical and Computer Engineering: "Microelectronics and Microelectromechanical Systems"
- _____ 9. Industrial and Systems Engineering: "Supply Chain Revenue Management: Theory and Practice"
- _____ 10. Mechanical Engineering: "Biodiesel Combustion and Its Influence on NO_x Emissions"
- _____ 11. Mechanical Engineering: "Time-stress-temperature-moisture Behaviors of Multi-layered FRP Composites"
- _____ 12. Mechanical Engineering: "Nanomaterials and Thin Films"
- _____ 13. Mechanical Engineering: "Optical Induced Thermal Energy Transport in Nano-Optical Systems with Pulsed Light Sources"

ESSAY: Please prepare a one page essay which discusses each of the following topics:

- Why do you want to participate in this program?
- What do you hope to gain?
- Describe professional leadership roles you have held.
- How would you expect to take this experience back to your campus, faculty, students?
- Specific examples are useful.

I hereby certify that _____ is a secondary math or science
Applicant Name
teacher in the _____ School District.
District Name

Math or Science Faculty Signature: _____

I hereby certify that the above information is correct to the best of my knowledge:

Applicant Signature: _____

TO BE CONSIDERED FOR THIS PROGRAM, YOUR COMPLETED APPLICATION PACKAGE SHOULD INCLUDE :

- Complete Application with signatures from:
 - Math and science faculty member
 - Applicant
- One page Essay

All applications should be **received** by **March 12, 2009**. Selection notification will be by **April 3, 2009**.

Application should be sent to:

E³ Teacher Summer Research Program
204 Zachry Engineering Building
TAMU 3127
College Station, TX 77843-3127

Phone: (979) 847-8887 or (979) 847-9048
FAX: (979) 847-8654
Email: jqhodge@tamu.edu
Website: <http://e3.tamu.edu>

Sponsored by: Dwight Look College of Engineering, the Texas Engineering Experiment Station and the National Science Foundation

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Summer 2009**