David George Tepke, M. S., E.I.T.

201 Transportation Research Building University Park, PA 16802

Phone: 814-865-4856; Fax: 814-865-3039; Email: dgt110@psu.edu

EDUCATION

Ph. D. candidate in Structural and Concrete Materials Engineering (current). The Pennsylvania State University. M.S. in Structural Engineering (May 2001). The Pennsylvania State University. GPA 3.96/4.0 B.S. in Civil Engineering (August 1999). The Pennsylvania State University. GPA 3.99/4.0 Business (August 1994 – May 1996). Indiana University of Pennsylvania. GPA 3.81/4.0

Relevant coursework includes:

- Design of Concrete Structures
- Behavior and Design of Reinforced Concrete Members
- Reinforced Concrete Slabs
- Concrete Materials / Properties
- Portland Cement Concrete and Aggregates
- Design of Prestressed Concrete Structures
- Design of Metal Structures
- Advanced Structural Design
- Design of Steel Structures
- Finite Element Analysis
- Structural Matrix Analysis
- Structural Analysis
- Structural Analysis by Classical Methods
- Bridge Engineering

- Foundation Engineering
- Highway Engineering
- Introduction to Engineering Materials
- Introduction to Geotechnical Engineering
- Civil Engineering Management
- Instrumentation and Data Acquisition in Civil Engineering

WORK EXPERIENCE

GRADUATE RESEARCH ASSISTANT. The Pennsylvania State University, University Park, PA. (9/99-Present) Current Ph. D. research deals with the application of performance-based specifications in the development of high-performance concrete transportation structures. Mixture designs will be developed and tested; subsequently, full-scale in-situ testing will be completed on Pennsylvania bridge elements. The research program will address all necessary items for the production of high-performance transportation structures. As senior research assistant, duties include employee management, preparation of test schedules, investigation and experimentation, data interpretation, and state / federal research agency and external university interaction. Outcome from this research has the potential to produce transportation structures that last beyond 75 years, while reducing life-cycle costs. M.S. research dealt with the concrete maturity method for in-situ portland cement concrete strength. This is a non-destructive test method that employs the principal that specific concrete mixtures that have reached equal extents of hydration have equal relative strengths.

UNDERGRADUATE ASSISTANT. The Pennsylvania State University, University Park, PA. (9/98-9/99) Assisted a graduate candidate in research dealing with the effects of permeability reducing admixtures on reinforced concrete highway slabs. Specific responsibilities included analysis, extracting core samples, aiding in test preparation and completion.

MASONRY LABORER. <u>Bundy Masonry</u>, Delmont, PA. (5/98-8/98, 5/96-8/96, 5/95-8/95)
Responsibilities included scaffold construction, preparation of materials, batch processing, stockpiling, and finishing.

HONORS/ ACTIVITIES

Member of the American Concrete Institute (ACI), 1999-present

Student Member of the American Society of Civil Engineers (ASCE), 1997-present

Phi Kappa Phi, National Honor Society, Penn State University Chapter (Top 5%), 1997-present

Chi Epsilon, National Civil Engineering Honor Society, Penn State University Chapter, 1997-present

Tau Beta Pi, National Honor society, Penn State University Chapter, 1997-present

Golden Key National Honor Society, 1998-present

Dean's List, 1994-present

Paper presented at the 2001 Transportation Research Board Meeting (with co-author) given recognition as one (of five) of the most practical papers in Division 2 (Cement & Concrete)

Recipient of the CMT Laboratories Graduate Fellowship in Civil Engineering, October, 2000

Recipient of the Graduate Scholar's Fellowship, Penn State, April 2000

Recipient of the Evan Pugh Scholar Award (awarded to top ½% of class), Penn State, March 1999

Recipient of the Holtzer Memorial Scholarship, College of Engineering, Penn State, 1997

Recipient of the Engineering General Scholarship, Bechtel Power Corporation, 1997

Recipient of the Dean's S&T Bank Excellence in Business Scholarship, 1995

Recipient of the Pennsylvania State Athletic Conference Scholar Athletic Award, 1995

Technical Writing Workshop, Penn State, 1997

Member of the Indiana University of Pennsylvania Varsity Football Team, 1994-1996

COMPUTER SKILLS

STAAD III, SAP2000, AISI BEAM, AutoCAD, SOFTDESK, ADCAD, Matlab, Windows, Excel, Word, HTML, Power Point, Front Page, FORTRAN 90, BASIC, Kaleidagraph, HYPERWARE (data acquisition), and Shilstone Concrete Mixture Design program