

BENJAMIN COLUCCI RIOS
Department of Civil Engineering
University of Puerto Rico
Mayagüez, Puerto Rico 00681

EDUCATION

Ph.D., Transportation Engineering (pavements), Purdue University, August 1984

Tesis: Development of a Method for Establishing Resurfacing Priorities for the Pavement Management System in Indiana

M.S.C.E., Transportation Engineering (pavements) Purdue University, May 1980

Thesis: Effect of Increasing Truck Weights on Pavement Maintenance Costs on Indiana Highways

B.S.C.E. University of Puerto Rico, Mayagüez Campus, May 1978

RESEARCH INTERESTS

Pavement evaluation and management, roughness measurements, structural evaluation-destructive and non-destructing testing, functional evaluation-skid resistant characteristics of traveled surfaces, materials characterization, weigh-in-motion, pavement design, bituminous materials and mixtures.

ACADEMIC EXPERIENCE

Professor, Civil Engineering Department, University of Puerto Rico-Mayagüez Campus, (July 1992 to Present)

Associate Professor, Civil Engineering Department, University of Puerto Rico-Mayagüez Campus, (July 1987 to June 30, 1992)

Assistant Professor, Civil Engineering Department, University of Puerto Rico-Mayagüez Campus, (June 1, 1984 to June 30, 1987)

PUBLICATIONS

1. With J. Colucci, J. Velar and D. Dayton, "Feasibility of Using Crumb Rubber Modifier in Hot-Mix Asphalt Pavement Applications in Puerto Rico", Final Report, Submitted to the Department of Transportation and Public Works, March 1994.
2. With Estudios Técnicos Inc, "Estudio para Determinar el Impacto de Implantar el Reglamento de las Dimensiones y Pesos Máximos de los Vehículos en Puerto Rico", sometido al Departamento de Transportación y Obras Públicas, 18 de febrero de 1994.
3. With Parsons-Brinckerhoff, Inc., "Desarrollo de un Sistema de Administración de Pavimentos, sometido al Ministerio de Obras Públicas de Panamá", Septiembre de 1993.
4. With José L. Pérez Berenguer, "Análisis de Datos de Rugosidad y Desarrollo de Modelos para Estimar la Tendencia del Deterioro de Pavimentos", Submitted to the Civil Infrastructure Research Center, 11 de agosto de 1993.
5. With Jorge Prieto Muñoz, "Desarrollo de Metodología para Evaluar Pavimentos Flexibles con el Equipo FWD", Submitted to the Civil Infrastructure Research Center, August 11, 1993.
6. With Diego Rodríguez Rivera, "Study of the Evaluation of Methodologies for Pavement Evaluation and Management: Roughness (ARAN & DIPStick, Deflection (FWD), Weigh-in-Motion (Weighman) and Crumb Rubber (CRM)", August 1993.
7. With A. López and F. Pantoja, Conceptual Framework for a Pavement Management System for the Puerto Rico Highway and Transportation Authority, VII Panamerican Congress on Traffic and Transportation Engineering, Caracas, Venezuela, September 7-11, 1992.
8. Pavement Management: Puerto Rico Experience, North Atlantic Highway Planning Officials Conference, San Juan, Puerto Rico, August 9-12, 1992.
9. With F. Luyanda, Spanish Translation of "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85", Federal Highway Administration, June 1992.

10. With P. M. Gandhi, "Polishing of Aggregates and Wet Accident Rate in Flexible Pavements" paper presented at the 70th Transportation Research Board Annual Meeting, Washington, D.C., January 1991.
11. With L. Rodríguez, "Analytical Study of Concrete Pavement Behavior", Final Report for the Puerto Rico Highway Authority and Federal Highway Administration, December 1990.
12. With L. Rodríguez, "Analytical Study of Concrete Pavement Behavior", Final Report, U.S. Air Force, Office of Scientific Research, December 1989.
13. With P. M. Gandhi, "Field and Laboratory Investigations of Polishing of Aggregates and Skid Resistance of Flexible Pavements", Final Report for the Puerto Rico Highway Authority and Federal Highway Administration, December 1989.
14. With W. Castro-Hernández and T. López Nieves, "Utilización de Pruebas Rápidas para Evaluar Pavimentos y Determinar sus Necesidades de Rehabilitación", proceedings of the V Pan American Congress of Traffic and Transportation Engineering, Mayagüez, Puerto Rico, July 1988.
15. "Metodología para Establecer Prioridades de Recubrimiento Optimo y su Viabilidad en un Programa de Gerencia de Pavimentos", proceedings of the IV Pan American Congress of Traffic and Transportation Engineering, Santiago, Chile S.A., December 1986.
16. With K.C. Sinha, "Optimal Pavement Management at the Network Level", North American Pavement Management Conference Proceedings, Toronto, March 1985.
17. With K.C. Sinha, "Optimal Pavement Management Approach Using Roughness Measurements", Transportation Research Record Number 1048, January 1985.
18. Colucci-Ríos, B., "Development of a Method for Establishing Resurfacing Priorities for the Pavement Management System in Indiana", Purdue University, FHWA/IN/JHRP-84-10, Volumes 1, 2, and 3, May 1985.
19. "Pavement Management Principles for County Roads", paper submitted to the 67th Annual Purdue Road School, March 1983.
20. With E.J. Yoder and A. Van Wijk, "Evaluation of PAVER Program", Final Report Submitted to the American Works Association (APWA), August 1983.
21. With E.J. Yoder, "Methodology for Estimating Increase in Truck Weights Resulting on Increase in Pavement Maintenance Costs in Indiana Highways", Transportation Research Board Record Number 900, 1983.
22. "The Importance of Pavement Management in the Preservation of our Nation's Highway System", paper submitted to the American Road and Transportation Builder Association (ARTBA), 1982.
23. With E. J. Yoder, and B. Shurig, "Evaluation of Existing Gravel Roads to Determine its Suitability for Resurfacing", Transportation Research Board Record Number 875, 1982.
24. "Regional Design of Pavements", Purdue University, Ground Engineering Report No. 80, August 1980.
25. "Truck Size and Weight Issues", Paper presented at the 66th Annual Purdue Road School, March 1980.
26. With E.J. Yoder and B. Fraczek, "Effect of Raising Load Limits on Pavement and Bridges in Indiana", Purdue University, JHRP No. 79-23, 1979.

COLLABORATORS

GRADUATE STUDENTS ADVISED

Number of students whose thesis has been successfully supervised: twelve (Graduate Committee Member)

Number of graduate students committees that I have presided or currently presiding: six

Total number of graduate students: 18

MY GRADUATE ADVISORS

Dr. Kumares C. Sinha (for my Ph.D.)

Prof. Eldon J. Yoder (for my M.S.C.E.)

AWARDS AND HONORS