

Magdy Akladios, PhD, PE, CSP, CPE, CSHM

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EDUCATION

WEST VIRGINIA UNIVERSITY, MORGANTOWN, WV.

- Doctor of Philosophy, Industrial Engineering (PhD) -- 12/1999.
- Master of Science, Occupational Health & Safety (MS) -- 8/1996.
- Master of Science, Industrial Engineering (Ergonomics) (MSIE) -- 8/1996.
- Master of Business Administration (MBA) -- 8/1995.

CAIRO UNIVERSITY, CAIRO, EGYPT

- Bachelor of Science, Mech. Eng. (Power Generation) (BSME) -- 12/1990.

UNIVERSITY OF LONDON, UNITED KINGDOM

- General Certificate of Education (GCE) -- 5/1985

PROFESSIONAL CERTIFICATIONS

- Certified Safety Professional (CSP). Certificate No.: 15793. Rcv'd: 1999, renewed: 2005.
- Professional Engineer (PE). Cert. No.: 42411. Rcv'd: 1999.
- Certified Professional Ergonomist (CPE). Cert. No.: 1066. Rcv'd: 2001
- Certified Safety & Health Manager (CSHM). Cert. No.: 1692. Rcv'd: 2002
- Certified Member of the Egyptian Syndicate for Mech. Eng. Rcv'd: 1990

HONORS

- Recipient of the WVU Extension Service's 2004 Extension Performance Award for "**Team Program Excellence**"
- Recipient of the WVU Extension Service's 2004 Extension Performance Award for "**Outstanding Advanced Researcher**"
- Recipient of the Industrial Engineers' Honorary Society (**Alpha-Pi-Mu**).
- Chair, "Safety, Health, & Ergonomics in Design, Industry, & Construction" Annual conference, Boston, MA (2000-2002).
- Graduate Fellowship (Teaching Assistant). Management Information Systems class, College of Business & Economics, WVU (August, 1994 - May, 1995).
- Graduate Fellowship (Graduate Research Assistant). Institute for Safety & Health Training (ISHT), WVU (June, 1993 - May, 1995).
- Scholarship recipient, National Institute for Occupational Safety & Health (NIOSH), (1992-1993).
- Merit recipient as an outstanding WVU Employee for 7 consecutive years. I was rated "**Excellent**" in Research, Teaching, and Service from both the P&T committee and Center Director of WVU Extension.

SKILLS

- Excellent PC/MAC computer skills in a wide variety of PC software such as, Word Processing, Spreadsheets, Graphics, database packages, web page design, programming, statistical analysis software, and a variety of Expert System Shells.
- Excellent verbal and writing communication skills in two languages.

EMPLOYMENT EXPERIENCE

University of Houston-Clear Lake, Environmental & Natural Sciences, School of Science & Computer Engineering, Houston, TX -- *Tenure-track Assistant Professor of Industrial Hygiene and Safety, 8/2005-Present*

Teaching Activities:

Served as Graduate/Undergraduate student advisor

Involved in developing online courses

Administered Undergraduate and Graduate courses including:

- Accident Investigation
- System Safety
- Human Factors, Ergonomics, & Workplace Design
- Human Factors Engineering
- Human Factors/Ergonomic Methods and Analysis Techniques
- Techniques of Safety Engineering & Analysis
- OSHA Standards for Construction and General Industry
- Teaching Environmental Safety
- Safety Engineering
- OSHA Standards for the Construction and General Industry (at the conclusion of the course, I provided the students with 30-hr cards for Construction, and 30-hr cards for General Industry)
- Principles of Professional Safety
- Environmental Safety & Health
- Advanced Studies in Safety & Health

Service Activities:

- Actively participated as committee member on School of Science & Computer Engineering web developer search committee
- American Society of Safety Engineers (ASSE) Advisory Committee: served as the Website Committee Representative (2005)
- Board of Certified Professional Ergonomists (BCPE) Website Committee: served as the Webmaster for the board's website.
- North American Agromedicine Consortium (NAAC) webmaster: www.agromedicine.org
- Ergonomics Guideline website: www.ergoguide.org
- Webmaster of the Chairman, Dr. Dennis Casserly's website: <http://sce.cl.uh.edu/casserly/>
- Webmaster of the Associate Dean, Dr. Robert Ferebee's website: <http://sce.cl.uh.edu/ferebee/>

Research/Grant Activities at UHCL (8/2005-Present):

- Co-PI: Correlating Hand Ergonomic Stress to Software Shortcuts. Sponsor: Schlumberger & ExxonMobile. \$57,000.

- PI: Teaching Environmental Safety. Sponsor: Texas Commission on Environmental Quality (TCEQ), Austin, Tx, 2007. \$13,000.
- PI: Assessment of Worker Safety in City of Houston Governmental Departments for 2006. Sponsor: City of Houston, Houston, Tx, 2006. \$22,000
- PI: Teaching Environmental Safety. Sponsor: Texas Commission on Environmental Quality (TCEQ), Austin, Tx, 2006. \$22,000.
- PI: Collection and Correlation of Task/Posture Analysis to CTD Injuries at Nursing Homes Facilities in the Houston, Tx Area, 2005-2006. Sponsor: University of Houston-Clear Lake (UHCL). \$2,700.
- Editor/Author chapters in the American Society of Safety Engineers (ASSE) Professional Safety Handbook. Expected publication date: 2008
- I have edited the following chapters:
 1. Regulatory issues related to ergonomics;
 2. Benchmarking and Metric formation;
 3. Best Practices in Ergonomics;
 4. Ergonomics Cost Analysis & Budgeting;
 5. Work Physiology;
 6. Human Factors and Cognitive Ergonomics; and
 7. Industrial Hygiene Regulatory Affairs.

University of Houston-Main Campus, Houston, Tx – Adjunct Professor, 5/2007-Present.

- Developed, and administering academic courses in topics such as, Engineering Economy.

College of the Mainland, Mainland, Tx -- Instructor, 2/2007-Present.

- Developed, and administering regional and statewide occupational safety & health training programs in topics such as, Pandemic Planning, Ergonomics, etc.

Texas Engineering Extension Service, Texas A&M University, Mesquite, Tx -- Instructor, 6/2005-Present.

- Developed, and administering regional and statewide occupational safety & health training programs in topics such as, Asbestos, Industrial Hygiene, occupational health hazards in construction, OSHA Regulations, Respiratory Protection, Ergonomics, etc.

Expert Witness, 9/2001-Present.

- Respond to attorneys' questions on cases related to S&H matters, IH, ergonomics, etc.
- Conduct (by request) ergonomics walkthroughs, noise assessments, etc.

West Virginia University, Safety & Health Extension (SHE), Morgantown, WV -- Clinical Associate Professor, received: 5/2005. 5/2005-8/2005

In addition to expanding on my activities as an Assistant Professor, and an Instructor prior to that, I was also involved in the following efforts in Teaching, Service, and Research:

Teaching Activities

- Undergraduate and Graduate lectures at West Virginia University, in departments of Ind. Hygiene, Engineering, and Business and Economics.
- Served on Graduate Thesis/Dissertation defense committees.
- Worked in teams in arranging, developing, and administering hundreds of regional and statewide occupational safety & health training programs in topics such as, asbestos, industrial hygiene, occupational health hazards in construction, OSHA regulations, respiratory protection, ergonomics, etc.
- Course director and lead instructor for OSHA Training & Outreach Center Region III for Construction and Ergonomics courses.

Service Activities at SHE-WVU

- Developed and computerized pay increase logic for all S&HE-WVU
- Served on a number of committees at WVU including:
 - WVU University-wide Student Evaluation of Instruction Committee
 - WVU-ES Global Education Task Force Committee
 - WVU-ES Promotion & Tenure committee (Chairman/member)
 - SHE continuous improvement committee (member)
 - Graduate student Master's and PhD defense committees
 - New hire interview committees
- Coordinator of OSHA Region III Training Institute Construction classes (OSHA 510, 500, & 502)
- Coordinator of OSHA Region III Training Institute Ergonomics classes (OSHA 2250, & 7000)
- Worked in teams to create and maintain S&HE home page
- Conducted Ergonomics evaluations in a variety of industrial and construction facilities, and provided technical support and problem solving services as requested by client groups.
- IH consultations to unions/industry to solve IH & occupational health problems such as noise monitoring, area and personal air sampling, respirator fit testing, and writing reports based on the findings.
- Established and maintained valuable working relationships with a variety of fall prevention leaders, other extension faculty, state and federal staff.

Research Activities/Grants & Contracts at S&HE-WVU (covers 1996-2005):

- BackPocket, 2001-2005, participant, \$ amount unknown. Development of an audit tool to be used on Construction sites.
- Development of an Expert System to Assist Designers in Equipment Development, 1998-2002, Co-Principal Investigator, NEETC/DOE/DOD, \$1.5million
- Organizational Intervention for Fall Prevention, 1994-2005, Researcher, NIOSH/CPWR \$1.6million
- Small Business Safety Outreach, 1997-2002, Researcher, WV Division of Workers' Compensation, \$1.2million
- Development of two Questionnaires for Construction, 2000-2001, PI, NIOSH, \$10,000
- Factors Determining Success and Failure of Labor Management Safety Committees Research, 1997-Present, Researcher, WV Division of

- Workers' Comp., \$214,991
- Small Construction Safety Leadership Program, 1997-1999, Researcher, OSHA Susan Harwood Training Grant, \$175,000
 - Development of a Web Based Artificial Intelligence System for Safety and Health Issues in Equipment Design, 1998-2004, Co-PI, DOD, \$750,000.
 - International Union of Operating Engineers (IUOE), 1997, Researcher, Construction Safety Hazard Curriculum development (10 hr.): \$45,000
 - Highway Work Zone Safety Manual, 1997, Researcher, Laborers' Safety & Health Training Fund/USDOT, \$33,000
 - Perceived Ergonomic Discomforts among Drywall Carpenters and Finishers, 1998, Researcher, NIOSH, \$15,000
 - Task-Based Exposure Model for Const., 1993-1995, Researcher, NIOSH/CPWR, \$124,000

Safety & Health Extension, West Virginia University, Morgantown, WV -- *Clinical Assistant Professor, 10/2000 - 8/2005.*

- Provided technical support, assistance, and training for S&HE staff
- Worked in teams with the college of engineering to develop an expert system to assist designers with producing safer designs.
- Carried out assessments of emerging workplace technologies.
- Developed and administered surveys leading to publishable papers.
- Advised on solutions related to computer hardware and software systems.
- Evaluated the health hazards that are involved in the implementation and testing of a new technology for underground hazardous waste barriers.
- Performed risk assessments on a variety of designs on construction sites related to the implementation of new HAZMAT technologies.
- Conducted economic and cost/benefit analysis associated with the impact of implementing ergonomics solutions and programs in the workplace.

Safety & Health Extension, West Virginia University, Morgantown, WV--
Instructor, 9/1996 - 9/2000.

- Conducted economic and cost/benefit analysis associated with the impact of implementing fall safety solutions and S&H programs in the workplace.
- Instructed EPA-accredited asbestos worker/supervisor courses
- Assisted with preparing, writing, & submitting of grant proposals/reports
- Collected and analyzed data for safety research purposes.
- Developed, maintained, entered data to surveys, and analyzed results.
- Performed research in support of request for information from WV employers, as well as in support of grant and contractual agreements requiring such research.
- Carried out epidemiological research on injuries and illnesses in WV and other work populations using available computerized databases such as CFOI, IMIS, FACE, etc.
- Conducted Quantitative (Porta-Count)/Qualitative fit-testing of respirators.
- Performed Job Safety Analysis and Ergonomics investigations.
- Designed, developed, and tested ventilation systems
- Conducted Indoor Air Quality surveys.
- Developed, maintained, and expanded Databases used for management

- Created and maintained a number of marketing brochures for S&HE.
- Conducted Safety Analysis Review Systems (SARS) for DOE sites

College of Engineering & Mineral Resources, Department of Industrial & Management Systems Engineering, West Virginia University, Morgantown, WV. -
- Adjunct Professor, May/2001 – August/2005.

- Served as Graduate/Undergraduate student advisor
- Served on a number of graduation defense committees
- Administered Undergraduate and Graduate courses including:
 - Safety for Engineers
 - Engineering Economy
 - Noise Control
 - Probabilities and Statistics for Engineers

Polycel Corporation, Somerville, NJ–QC/Assurance, 11/91-6/92.

- Inspected products on seven production lines, and finishing departments.
- Conducted QA/QC tests on products and incoming materials.
- Provided assistance in trouble shooting and production decisions.
- Provided support to management in worker supervision/safety inspections.

Hoffritz for Cutlery, Bridgewater, NJ–Assistant Manager, 1/91-11/91.

- Assisted manager in the supervision of subordinates in customer services/sales.
- Conducted sale promotions, merchandising and drafted inventory reports.
- Assisted manager with employee payroll, schedules, & administrative reports.

Harmony Trading Co. Cairo, Egypt–Assistant Mngr (Family Business), 1/90-1/91

- Supervised subordinates responsible for customer service and sales.
- Conducted sales promotions/merchandising.
- Prepared inventory reports.
- Assisted manager with preparing supply/demand sheets for merchandise and shipments

Publications / Information Dissemination

Journals:

1. **Akladios, M.** "Engineering Safety Education," aimed at the *Journal of Professional Safety*.
2. **Akladios, M.** "Safety Education for Engineers," aimed at the *Journal of Professional Safety*.
3. **Akladios, M.;** Winn, G., August, 2007. "Moving Critical Information Upstream to Design Engineers and Downstream to Workers," *Journal of Professional Safety*. August, 2007.
4. Gopalakrishnan, K.; Winn, G.; **Akladios, M.;** and Rajaarunprasad. "What a Safety Manager Must Know About Verification and Validation of Software-Expert Systems." *Journal of Professional Safety*. August, 2005, Vol. 80, No. 8.

5. Winn, G; **Akladios, M**; Gopalakrishnan, B; Becker, P. October 2002. "Texpert: A Tool for Safety Professionals & Design Engineers." Journal of Professional Safety. October, 2002. Pp: 32-37.
6. Becker, P. (Editor); Flanagan, M.E.; **Akladios, M.** 2001. "Development of an ACGIH Const. Industry Silica Exposure Database Overview" Journal of Applied Occupational & Environmental Hygiene. Volume 16(8). Pp: 781-783(3), 2001. ISSN: 1047-322X
7. Becker, P; Fullen, M; **Akladios, M.**; Hobbs, G. September, 2001. "Prevention of Construction Falls by Organizational Intervention" Injury Prevention Journal. Vol.: 7, Supplement I, Pp: 64-67
8. Becker, P; Fullen, M; **Akladios, M.**, Carr, M.; and Lundstrom, W. February 2001. "Use of a Hand Held Computer to Audit Construction Fall Prevention Effectiveness" International Journal of Computer-Integrated Design and Construction (CIDAC). Special Issue on Computerized Safety Management. Volume 3(1), February 2001, Pp: 16-24. ISSN: 1466-5115
9. Pan, Christopher S.; Chiou, Sharon S.; Hsiao, Hongwei; Becker, P; and **Akladios, M.** 2000. "Assessment of Perceived Traumatic Injury Hazards during Drywall Taping and Sanding" International Journal of Industrial Ergonomics. Volume 25, 2000, Pp: 621-631

Peer Blind-Reviewed Publications (other than Journals):

1. **Akladios, M.**; et al. (Editor of the "Applied Scientific and Engineering Principles" section; Work in progress, expected publication date: 2008. Safety Professional Handbook. American Society of Safety Engineers (ASSE).
2. **Akladios, M.**, Author of the "Ergonomic Hazards and Repetitive Strain Injuries" chapter; Work in progress, expected publication date: 2008. Safety Professional Handbook. American Society of Safety Engineers (ASSE).
3. **Akladios, M.** "Successful Ergonomic Programs" Cumulative Trauma Disorder News – Workplace Solutions for Repetitive Stress Injuries. October 2005 issue.
4. Technology Safety Data Sheet (TSDS): Pit Viper Systems: DOE OST TMS #2195. February 2000.
5. **Akladios, M.**, September, 1999. "The Rescuers--Emergency Response Planning and Training-Cover Story." Environmental Protection Magazine. September 1999, pp: 14-22.
6. **Akladios, M.**; and Gopalakrishnan, B., August, 1998. "Development of an Expert System to Help Design for Worker Safety." Society of Photo-Optical Instrumentation Engineers' (SPIE) International Technical Working Group Newsletter -- Robotics & Machine Perception. Vol. 7, No. 2, pp: 5. Bellingham, WA.
7. Pan, C. S.; Chiou, S.; Hsiao, H.; J. T. Wassell; Becker, P.; and **Akladios, M.**, 1998. "Exposure Investigation during Drywall Hanging." Advances in Occupational Ergonomics & Safety. IOS Press, Vol.2, pp. 237-240.

Peer Reviewed Presentations:

1. **Akladios, M.** June 2007. "TSDS as an Educational Tool for Non-S&H

- Majors.” Paper presented at the American Society of Safety Engineers Conference-Academic Forum, June 2007. Orlando, FL.
2. **Akladios, M.** December 2004. “OSHA Ergonomic Guidelines for Nursing Homes.” Paper presented at the National Ergonomics Conference & Exposition, December 2004. Las Vegas, NV.
 3. **Akladios, M.** May 2004. “OSHA Ergonomic Guidelines for Nursing Homes.” Paper presented at the West Virginia Health Care Association Annual Conference, May 2004. Stonewall Jackson Resort, Roanoke, WV.
 4. Becker, P., Fullen, M., **Akladios, M.**, October, 2003. “Prevention of Construction Falls by Organizational Intervention.” Paper presented at the National Occupational Injury Research Symposium 2003. Pittsburgh, Pa.
 5. Becker, P., Fullen, M., **Akladios, M.**, June, 2003. “Fall-Safe Partnership: Results of Organizational Intervention Research to Prevent Construction Falls.” Paper presented at the National Occupational Research Agenda Symposium 2003–Working Partnerships: Applying Research to Practice. Arlington, Va.
 6. Fullen, M.; Becker, P.; **Akladios, M.** May, 2002. “Prevention of Construction Falls by Organizational Intervention.” Paper presented at the 6th World Conference of Injury Prevention and Control. Montreal, Canada.
 7. **Akladios, M.**; McMullin, D.; and Becker, P., October, 2001. “Safety by Design & Future Developments.” Paper presented at the International Society of Photo-Optical Instrumentation Engineers (SPIE) Conference, 2001. Boston, MA.
 8. **Akladios, M.** May 2001. “Agromedicine Online.” Paper presented at the 4th Annual Meeting of the WV Agromedicine Prog. Flatwoods, WV.
 9. Caporali, S.; **Akladios, M.**; and Becker, P., November, 2000. “A User-Friendly Program for Multi-Task Analysis.” Paper presented at the International Society of Photo-Optical Instrumentation Engineers (SPIE) Conference, 2000. Boston, MA.
 10. **Akladios, M.**; McMullin, D.; and Becker, P., November, 2000. “Advances in Safety by Design.” Paper presented at the International Society of Photo-Optical Instrumentation Engineers (SPIE) Conference, 2000. Boston, MA.
 11. Becker, P; Fullen, M; and **Akladios, M.**, 2000. “Fall-Safe Intervention & Research” Paper presented at the National Occupational Injury Research Symposium (NOIRS) Conference, October, 2000. Pittsburgh, Pa.
 12. Becker, P; Fullen, M; **Akladios, M**; and Carr, M., 2000. “Development of a Computerized Audit Tool for Control of Construction Falls.” Paper presented at the National Occupational Injury Research Symposium (NOIRS) Conference, October, 2000. Pittsburgh, Pa.
 13. McMullin, D.; **Akladios, M.**; Gopalakrishnan, B.; Myers, W.; and Becker, P., 2000. “Development, Validation, and Limitations of an Expert System for Hazardous Waste Remediation Technology.” Paper presented at the 44th Annual Human Factors & Ergonomics Society Meeting-14th International Ergonomics Association Conference, 8/00. San Diego, CA.
 14. **Akladios, M.**; Gopalakrishnan, B.; R.; and McMullin, D., September, 1999. “Safety by Design–The Expert Systems Approach.” Paper presented at the 1999 International Society of Photo-Optical Instrumentation Engineers

- (SPIE) Conference, Boston, MA.
15. Pan, C. S., Chiou, S., Hsiao, H., Becker, P., and **Akladios, M.** "Assessment of Perceived Traumatic Injury Hazards during Drywall Painting." Paper presented at the 14th Annual International Occupational Ergonomics and Safety Conference, 1999.
 16. Becker, P.; **Akladios, M.**; Hobbs, G.; and Fullen, M., March, 1999. "Fall Prevention in Construction by Organizational Intervention." *Implementation of Safety and Health on Construction Sites*. Paper presented at the 2nd CIB W99 International Conference for the Implementation of Safety and Health on Construction Sites, Honolulu, HI.
 17. Fullen, M., Becker, P., and **Akladios, M.**, "Fall Prevention by Organizational Intervention." Paper presented at the International Fall Prevention Society, Cologne, Germany, 1998.
 18. **Akladios, M.**; Gopalakrishnan, B.; Becker, P.E.; Bird, A.; Carr, M.; Garcia, R.; McCullom, D.; McMullin, D.; Myers, W.R.; Venneti, V.; and Zayas, J., November, 1998. "Development of an Expert System to Help Design for Worker Safety." Paper presented at the 1998 International Society of Photo-Optical Instrumentation Engineers (SPIE) Conf., Boston, MA.
 19. Pan, C. S.; Chiou, S.; Hsiao, H.; Becker, P.; and **Akladios, M.**, May, 1998. "Evaluation of Drywall Hanging Tasks Using a Questionnaire." Paper presented at the 1998 American Industrial Hygiene Association Conference and Exposition (AIHA), Atlanta, GA.
 20. Becker, P.; **Akladios, M.**; and Lundstrom, W., October, 1997. "Fall Prevention in Construction by Organizational Intervention." Paper presented at the National Occupational Injury Research Symposium (NOIRS), Morgantown, WV.

Peer Reviewed Conference Proceedings:

1. **Akladios, M.** June 2007. "TSDS as an Educational Tool for Non-S&H Majors." Paper published in the American Society of Safety Engineers Conference Proceedings, June 2007. Orlando, FL.
2. **Akladios, M.** December 2004. "OSHA Ergonomic Guidelines for Nursing Homes." Conference Proceedings of the National Ergonomics Conference & Exposition, Las Vegas, NV.
3. Becker, P., Fullen, M., **Akladios, M.**, September 2003. Prevention of Construction Falls by Organizational Intervention. Abstract submitted and accepted for inclusion in conference Proceedings at the International Conference on Structural Engineering and Construction, Rome, Italy. However, travel to conduct presentation was not feasible by authors.
4. Fullen, M.; Becker, P.; **Akladios, M.** May, 2002. Prevention of Construction Falls by Organizational Intervention. Paper published in the conference proceedings of the 6th World Conference of Injury Prevention and Control. Montreal, Canada. Pp: 317-319.
5. **Akladios, M.**; McMullin, D.; and Becker, P., October, 2001. Safety by Design & Future Developments. Paper published in the proceedings of the International Society of Photo-Optical Instrumentation Engineers

- (SPIE) Conference. Boston, MA.
6. Caporali, S.; **Akladios, M.**; and Becker, P., November, 2000. A User-Friendly Program for Multi-Task Analysis. Paper published in the proceedings of the International Society of Photo-Optical Instrumentation Engineers (SPIE) Conference, 2000. Boston, MA.
 7. **Akladios, M.**; McMullin, D.; and Becker, P., November, 2000. Advances in Safety by Design. Proceedings of the International Society of Photo-Optical Instrumentation Engineers (SPIE) Conference, 2000. Boston, MA.
 8. Becker, P; Fullen, M; and **Akladios, M.**, 2000. "Fall-Safe Intervention & Research." Proceedings of the National Occupational Injury Research Symposium (NOIRS) Conference, October, 2000. Pittsburgh, Pa.
 9. Becker, P; Fullen, M; **Akladios, M**; and Carr, M., 2000. "Development of a Computerized Audit Tool for Control of Construction Falls" Proceedings of the National Occupational Injury Research Symposium (NOIRS) Conference, October, 2000. Pittsburgh, Pa.
 10. McMullin, D.; **Akladios, M.**; Gopalakrishnan, B.; Myers, W.; and Becker, P., 2000. Development, Validation, and Limitations of an Expert System for Hazardous Waste Remediation Technology. Proceedings of the 44th Annual Human Factors & Ergonomics Society Meeting/14th International Ergonomics Association (IEA) Conference, August, 2000. San Diego, CA.
 11. **Akladios, M.**; Gopalakrishnan, B.; R.; and McMullin, D., September, 1999. Safety by Design–The Expert Systems Approach. International Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Proceedings of Intelligent Systems in Design and Manufacturing II. SPIE Vol. 3833. Boston, MA.
 12. Pan, C. S., Chiou, S., Hsiao, H., Becker, P, and **Akladios, M.** Assessment of Perceived Traumatic Injury Hazards during Drywall Painting, 14th Annual International Occupational Ergonomics and Safety Conference, 1999. Proceedings of *Advances in Occupational Ergonomics and Safety*, Orlando, FL, Vol. 3, June, 1999.
 13. Becker, P.; **Akladios, M.**; Hobbs, G.; and Fullen, M., March, 1999. Fall Prevention in Construction by Organizational Intervention. *Implementation of Safety and Health on Construction Sites*. Pp: 917-924. Proceedings of the 2nd CIB W99 International Conference for the Implementation of S&H on Construction Sites, Honolulu, HI.
 14. **Akladios, M.**; Gopalakrishnan, B.; Becker, P.E.; Bird, A.; Carr, M.; Garcia, R.; McCullom, D.; McMullin, D.; Myers, W.R.; Venneti, V.; and Zayas, J., Nov., 1998. Development of an Expert System to Help Design for Worker Safety. Proceedings of the 1998 International Society of Photo-Optical Instrumentation Engineers (SPIE) Conference, Boston, MA. Intelligent Systems in Design & Manufacturing. SPIE Vol. 3517, pp: 240-250
 15. Pan, C. S.; Chiou, S.; Hsiao, H.; Becker, P.; and **Akladios, M.**, May, 1998. Evaluation of Drywall Hanging Tasks Using a Questionnaire. Proceedings of the 1998 American Industrial Hygiene Association Conference (AIHA), Atlanta, GA. Pp. 66.

Other Publications, Posters, Newsletters, and Other Scholarly Work:

1. **Akladios, M.** December 2007. "Engineering Safety Education." By

- Design: A Technical Publication of the American Society of Safety Engineers Engineering Practice Specialty, 2007.
2. **Akladios, M.** October 2007. "Safety Education for Engineers." The Educator: A Technical Publication of the American Society of Safety Engineers Academics Practice Specialty, 2007 Vol. 7, No.1 October 2007.
 3. **Akladios, M.** October 2005. Education, Enforcement Hallmarks of Effective Program. Cumulative Trauma Disorders (CTD) News. Vol. 14, No. 10. 2005 LRP Publications.
 4. Anderson, J. October, 2005. Runaway Health Costs May Drive Employers to Wellness Programs. **Akladios, M.** quoted. *The Ergonomics Report-Online.* An online advertisement-free ergonomics news source published by Ergoweb Inc., available by paid annual subscription at www.ergonomicsreport.com.
 5. **Akladios, M.** June, 2004. Effects of Exposure to the Sun. West Virginia Farm Bureau News – A Quarterly Newsletter.
 6. **Akladios, M.** Mountaineer Spirit, November 1st 2001. A day in the Life of WVU–Saving Lives.
 7. **Akladios, M.** June, 2000. Swimming Pool Safety. *Extension News.* Hancock County Extension Office, West Virginia University.
 8. Whaley, D.A.; Halverson, J.; Muntaner, C.; Saltman, J.; Yuill, C.; **Akladios, M.**; and Becker, P. April, 2000. "Evidence Suggesting Socioeconomic Factors Contributing to Disparities in Health Status, West Virginia Coal Communities, Using Geographic Information Systems Mapping of Coronary and Chronic Lung Disease Mortality Data." Poster presented at the Toxicology & Risk Assessment Conference.
 9. Akladios, M. 2000. Safety & Health-Important Issues. Westover Rotary Club. "Bridging the Gap" January 26, 2000.
 10. **Akladios, M.**; and Becker, P.E., 1999. A Profile of Construction Laborers' Fatalities Due to Falls. Monograph. Center to Protect Worker's Rights (CPWR), 85 pp. Washington, DC.
 11. **Akladios, M.**; and Becker, P.E., 1999. A Profile of Construction Roofers' Fatalities Due to Falls. Monograph. Center to Protect Worker's Rights (CPWR), 62 pp. Washington, DC.
 12. **Akladios, M.**; and Becker, P.E., 1999. A Profile of Construction Painters' Fatalities Due to Falls. Monograph. Center to Protect Worker's Rights (CPWR), 65 pp. Washington, DC.
 13. **Akladios, M.**; and Becker, P.E., 1999. A Profile of Construction Carpenters' Fatalities Due to Falls. Monograph. Center to Protect Worker's Rights (CPWR), 82 pp. Washington, DC.
 14. **Akladios, M.**, Sep.-Oct. 1999. Fire Extinguishers. Homespun News–Harrison County Family & Consumer Science Newsletter. Clarksburg, WV
 15. Whiteman, D. and **Akladios, M.** "PPE for Pesticide Applicators" Video Tape, WVU-ES, 1999. WV Pesticide Recertification Video, 2001.
 16. **Akladios, M.** (June, 1999). Getting Out the Bugs: Step-by-Step Hazard Control. Wellness Letter. Vol. XIX, No. 8.
 17. Becker, P.; Fullen, M.; **Akladios, M.**; Della-Giustina, J.; and Moore, R., May, 1999. Fall-Safe Partnership–Intervention & Research. Center to Protect Worker's Rights (CPWR), Wash., DC.

18. Pan, C., Becker, P.E., **Akladios, M.**, Survey of Ergonomic Hazards in Drywall Installation & finishing, 1998.
19. **Akladios, M.**, October, 1998. Office Ergonomics—How to Avoid Injury. Presented at West Virginia University's Extension Service Annual Conference, Jackson's Mill, WV.
20. **Akladios, M.**, October, 1998. Finding the Best Equipment for Your Home. Wellness Letter. Vol. XVIII, No. 10.
21. **Akladios, M.** (co-author), Highway Work Zone Safety Manual, WVU, 123 pp., 1997.
22. Johnson, C., Etherton, S., Becker, P., **Akladios, M.**, Kriesky, J. Survey of Labor-Management Safety Committees in WV, 1997.
23. **Akladios, M.**, Becker, P., Survey of Hazardous Waste Technology Developers, 1997.
24. **Akladios, M.**; Becker, P.; & Lundstrom, W., October, 1997. A Profile of Construction Laborers' Fatalities Due to Falls. Poster Presented at the West Virginia University Extension Service Annual Conference, Jackson's Mill, WV.
25. **Akladios, M.**; Becker, P.; & Lundstrom, W., October, 1997. A Profile of Construction Laborers' Fatalities Due to Falls. Poster Presented at the National Occupational Injury Research Symposium-NOIRS, Morgantown, WV
26. Becker, P.E.; Lundstrom, W; **Akladios, M.** "Contractors' Guide to Managing Construction Falls," West Virginia University 175 pp., 1996.

Unpublished work:

1. **Akladios, M.**; Chittibabu, S.; Winn, G.; and Myers, W. Work-in-Progress: "Validating Expert Systems to Human Experts and TSDS." Aimed at the: Journal of Professional Safety.
2. Becker, P.; Fullen, M.; Takacs, B.; and **Akladios, M.** Work-in-Progress: "Fall Safe research," Journal undetermined as of yet.
3. **Akladios, M.**; Winn, G; and Becker, P. Object Oriented Applications in Safety by Design. Paper was targeted for the International Society of Photo-Optical Instrumentation Engineers Conference.
4. Caporali, S.; **Akladios, M.**; and Becker, P. Advancements in Developing User-Friendly Program for Multi-Task Analysis. Paper targeted for the International Society of Photo-Optical Instrumentation Engineers (SPIE).
5. **Akladios, M.**; and Becker, P. Real Life Examples – Successful Fall Prevention Case Studies in the Construction Industry.
6. **Akladios, M.** Currently Available Safety and Health Techniques.
7. **Akladios, M.** "TSDS as an Education Tool for Non-S&H Majors." An abstract for a paper presentation.

Software Developed:

1. **Akladios, M.**; Caporali, S.; and Becker, P., November, 2000. A User-Friendly Program for Multi-Task Analysis—NIOSH Lifting Formula. 2000
2. Becker, P.E. **Akladios, M.** Carr, M., Lundstrom, W., Fullen, M., Audit Tool for Determination of Contractor Management of Fall Hazards, July, 1998.
3. Carr, M.; **Akladios, M.**; Gopalakrishnan, B.; Becker, P., Winn, G.: Texpert, a Web Based Expert System to Help Design for Worker Safety

(prototype). Online WWW at: <<http://www.computercomp.com/texpert/>>

TRAINING

- State of Texas Higher Education: EEO-Sexual Harassment/Discrimination (10/13/2007)
- State of Texas Higher Education: Fraud Awareness & Prevention (8/31/2007)
- State of Texas Higher Education: External Consulting (8/31/2007)
- OSHA Courses 225, 500, 501, 502, 503, 510, 511, 521, and US-Navy EM-385
- Summer Internship (1995), UPS, implementing logistics principles.
- Popular Education/Adult Learning courses
- Scaffolding train-the-trainer courses
- OSHA 29 CFR 1910.120 (40-hour HAZWOPER).
- Traffic safety courses (National Network of Employers for Traffic Safety)

REFERENCES

- Dr. Dennis Casserly, SCE, Chairman, Division of Environmental Sciences, UHCL: casserly@uhcl.edu. T: 281-283-3775
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- Dr. Wafik Iskander, Chairman/Professor, Department of Industrial & Management Systems Engineering (IMSE), College of Engineering, WVU: wiskander@faculty.coe.wvu.edu T: 304-293-4607
- Dr. B. Gopalakrishnan, Professor, College of Engineering, IMSE, WVU: gopal@cemr.wvu.edu T: 304-293-4607 Ex: 3709
- Dr. Gary Winn, Program Coordinator, Professor, College of Engineering, Safety & Env. Mgmt, WVU: gwinn@wvu.edu T: 304-293-2742 Ex: 3744
- Dr. Paul Becker, Associate Director, WVU-ES: pbecker2@wvu.edu

LIST OF COURSES

Graduate Courses taken (in chronological order):

1. Advanced Computer Programming (BASIC)
2. Foundation Probability & Statistics
3. System Safety Engineering I
4. Industrial Hygiene Engineering
5. Advanced Analysis of Engineering Data
6. System Safety Engineering II
7. Industrial Ergonomics
8. Medical Aspects of Environmental Health
9. Epidemiology Principles and Practices
10. Safety & Health Measurement Instrumentation
11. Noise and Ventilation Control Technology
12. Human Factors Engineering
13. Advanced Design of Industrial Experiments
14. Human Factors Systems Design
15. Advanced Problems in Human Factors

16. Advanced Engineering Economy
17. Properties of Air Pollutants
18. Fire Protection Engineering
19. Industrial Hygiene Air Sampling & Analysis
20. Occupational Toxicology
21. Seminar in Economics
22. Financial Accounting for Decision Making
23. Managerial Control
24. Managerial Finance
25. Economic Decision Making
26. Organizational Behavior and Ethics
27. Introduction to Management Science
28. Marketing Management
29. Marketing Strategy
30. Legal and Regulatory Environment
31. Economic Policy
32. Corporate Financial Administration
33. Management Information Systems
34. Operational Mgmt & Applied Quant. Analysis
35. Seminar in Personal Finances Planning
36. Seminar in Organizational Processes
37. Policy and Strategy
38. Summer Internship in Management (UPS)
39. Expert Systems (VPX)
40. Advanced Independent Studies in Marketing

Undergraduate Courses taken (in chronological order):

1. Chemistry (GCE)
2. English Literature I (GCE)
3. English Literature II (GCE)
4. Mathematics–Syllabus B (GCE)
5. Biology (GCE)
6. Physics (GCE)
7. Production Technology
8. Mechanics
9. Physics
10. Descriptive Geometry
11. Engineering Drawing
12. Engineering Society
13. English Language
14. Threshold of Engineering
15. Mathematics & Mechanics
16. Material & Production Technology
17. Machine Design and Drawing I
18. Engineering Thermodynamics I
19. Mechanics of Deformable Solids I
20. Electrical Engineering & Electronics I
21. Basic Civil Engineering

22. Mathematics I
23. Chemistry
24. Structural Mechanics & Mechanical System Dynamics
25. Material & Production Technology
26. Fluid Mechanics I
27. Mathematics III
28. Construction of Machine Elements
29. Electrical Engineering & Electronics II
30. Heat Engines
31. Heat Transfer
32. Fluid Mechanics & Applications II
33. Mathematics III
34. Electrical Engineering & Electronics III
35. Mechanics of Deformable Solids II
36. Machine Design II
37. Steam Engineering
38. Combustion Engines
39. Fluid & Gas Mechanics & Applications
40. Mechanical Vibration
41. Automatic Control
42. Energy Conversion & Economics
43. Power Generation from Gas Turbines (Thesis)
44. Engineering Thermodynamics II
45. Refrigeration & Air Conditioning
46. Production Technology II

Academic courses I taught to graduate/undergraduate students (in Chronological order):

1. Noise monitoring, control, and hearing conservation
2. Industrial engineering economy, depreciation, and taxation
3. Safety engineering principals and applications for Engineers
4. Statistical Analysis for Industrial Engineers
5. System Safety
6. Accident Investigation Techniques
7. Human Factors, Ergonomics, & Workplace Design
8. Human Factors Engineering
9. Techniques of Safety Engineering & Analysis
10. Teaching Environmental Sciences
11. Human Factors/Ergonomics, Methods & Techniques
12. Safety Engineering
13. OSHA Standards for Construction and General Industries
14. Principles of Professional Safety
15. Environmental Safety & Health
16. Advanced Studies in Safety & Health

Partial list of courses I taught to professionals (in alphabetical order):

1. Asbestos Abatement
2. Back Safety
3. Climate effects and control
4. Computer Programs, Databases, and Spreadsheets
5. Confined Space
6. Ergonomics (principals, disorders, and controls)
7. Fire Extinguisher Training
8. Fire Prevention
9. Hazard Communication
10. Hearing Protection
11. Illumination
12. Internet (The Basics)
13. Lead in construction for safety managers
14. Lead Safety and Abatement
15. Lock out/Tag out
16. Material Handling
17. Medical Surveillance
18. Noise Exposure and Controls
19. OSHA (An introduction)
20. Personal Protective Equipment
21. Presentation Techniques and Power Point
22. Principles of Ergonomics
23. Respiratory Protection
24. Stairways/Ladder Safety
25. Standards (Development of the OSHA standards)
26. Toxicology
27. Upper Extremity Musculo-Skeletal Disorders
28. Written Safety Programs