

PERSONAL DATA:**NAME:** Adel Mohamed Badawy El Shabasy**ADDRESS:** WORK, Dept. of Design & Production Eng., Faculty of Eng., Ain Shams University,
1 El-Sarayat St. Abdou Basha Square, Abbasia, Cairo 11517, Egypt.

Tel. Cell: ++2 (0100) 143-1567 Work ++2(02) 2682-4445 Fax ++2 (02) 2685-0617

E- Mail: AME10@CASE.EDU ashabasy@hotmail.com**POSITIONS:**

- 25/10/2004
- **Associate Professor**, Design & Prod. Eng. Dept., Faculty of Eng., Ain Shams Univ.
 - **Supervisor** of Advanced Materials Testing Lab., Faculty of Eng., Ain Shams Univ.
 - **Advisor** for the Post graduate students (CHS), Dept. of Design and Prod. Eng., Faculty of Eng., Ain Shams Univ.
 - **Associate Editor**, Ain Shams Engineering Journal (ASEJ), Published by Elsevier
 - **Coordinator of Strategy Planning Committee, Quality Assurance Unit (QAU)**, Faculty of Eng., Ain Shams University

Academic Qualifications:

- 18 July 1994 • **Ph. D.** Mechanical Engineering, under Channel Joint Supervision System between Ain Shams University, Egypt and Aachen University, Aachen, W. Germany. "Mechanical Behaviour of Metallic Materials under Torsional Impact Loading"
- 21 May 1987 • **M. Sc.** Mechanical Engineering (Production Engineering Section), Faculty of Engineering, Ain Shams University, Cairo, Egypt. "Development of Production Techniques for the Manufacture of Solar Absorbers"
- June 1981 • **B.Sc.** Mechanical Engineering (Production Eng. Section), (Very Good & Project Distinction), Faculty of Engineering, Ain Shams University, Cairo, Egypt.

EDUCATION:

- Dec. 2012 • "Teaching and Learning Strategies" Workshop, Ain Shams University, Cairo, Egypt.
- Oct. 2012 • "Preparation the faculties for the Accreditation Visit from NAQAA & the External Revision" program, NAQAA, Cairo, Egypt.
- Sept. 2012 • "The quality in the Educational Organizations and the related Skills" Workshop, QAAC, Ain Shams University, Cairo, Egypt.
- June 2012 • "Academic Advisory for C. H. S." program, Ain Shams University, Cairo, Egypt.
- June 2012 • "Strategy planning." program, NAQAA, Cairo, Egypt.
- March 2007 • "Economics of Funding and Marketing of Scientific Research" program, Ain Shams University, Cairo, Egypt.
- March 2007 • "Teaching Evaluation" program, Ain Shams University, Cairo, Egypt.
- Dec. 2006 • "Machine Condition monitoring" program, Ain Shams University, Cairo, Egypt.
- Nov. 2006 • "Management of Scientific Research" program, Ain Shams University, Cairo, Egypt.
- Nov. 2006 • "Teaching with Technology", program, Ain Shams University, Cairo, Egypt.

- Dec. 2004 • “Time and Stress Management” program, Ain Shams University, Cairo, Egypt.
- Dec. 2004 • “Managerial Skills” program, Ain Shams University, Cairo, Egypt.
- April 2003 • “Excellent in Leadership” program, CWR University, Cleveland, OH, USA.
- Aug. 1988 • “Preparation of University Lecturer” program, Ain Shams Univ., Cairo, Egypt.

PROFESSIONAL EXPERIENCE: ACADEMIC POSITIONS:

- 1/13- Now • **Visiting Professor**, Department of Materials Science and Engineering, Case School of Engineering, Case Western Reserve University, Cleveland, Ohio, USA.
- 8/11 – 9/11 • **Visiting Professor**, Department of Materials Science and Engineering, Case School of Engineering, Case Western Reserve University, Cleveland, Ohio, USA.
- 9/10 • **Visiting Professor**, Department of Materials Science and Engineering, Case School of Engineering, Case Western Reserve University, Cleveland, Ohio, USA.
- 6/09 – 9/09 • **Visiting Professor**, Department of Materials Science and Engineering, Case School of Engineering, Case Western Reserve University, Cleveland, Ohio, USA.
- 6/07 – 6/08 • **Visiting Professor**, Department of Materials Science and Engineering, Case School of Engineering, Case Western Reserve University, Cleveland, Ohio, USA.
- 3/06 – 9/06 • **Visiting Professor**, Department of Materials Science and Engineering, Case School of Engineering, Case Western Reserve University, Cleveland, Ohio, USA.
- 25/10/2004 • **Associate Professor**, Design & Prod. Eng. Dept., Faculty of Eng., Ain Shams Univ.
- 2001- 2003 • **Post Doctor Fellow**, Department of Materials Science and Engineering, Case School of Engineering, Case Western Reserve University, Cleveland, Ohio, USA.
- 26/9/1994 • **Assistant Professor**, Design & Prod. Eng. Dept., Faculty of Eng., Ain Shams Univ.
- 1991- 1993 • **Ph.D. Student**, Institute for Eng. Materials Science, Aachen Univ., W. Germany.
- 25/06//1987 • **Lecturer Ass.**, Dept. of Design & Prod. Eng., Faculty of Eng., Ain Shams Univ.
- 5/05/1982 • **Demonstrator**, Dept. of Design & Prod. Eng., Faculty of Eng., Ain Shams Univ.

PROJECTS AND GRANTS:

- Processing and Mechanical Properties of Amorphous Metal Foil and Laminates
U.S.-Egypt Science & Technology Joint Fund.

APPLIED RESEARCH PROJECTS:

- Foundries and Lead Smelters in Cairo: Air Pollution Problem and Possible Remediation.
- An Integrated Approach to the Environmental Upgrading of Egyptian Small Foundries, (with Emphasis on Lead Smelters).
- Design and Production of Solar Collectors.
- Date Palm Midribs Utilization.

MAIN RESEARCH OR TECHNOLOGY TOPICS:

- Fatigue Coaxing in Bulk Metallic Glass
- Fatigue Behavior of a Nanostructured Composite
- Mechanical Characterization of Amorphous Materials
- Processing and Mechanical Characterization of Amorphous Laminates

- Fatigue Crack Growth and Fracture Mechanics of Composite Laminates
- Production of Natural Fibers Reinforcement Composite Materials
- Welding and Mechanical Characterization of Armored Steel
- Effects of Mixed Mode Loading on Fracture Toughness
- Fatigue and Fracture Behaviour of Advanced Materials
- Fracture and Fatigue Behavior of Metallic Materials
- Fatigue Crack Growth Behaviour of Pearlitic Steel
- Design and Production of Solar Collectors
- Utilization of the Agricultural Residues

MEMBERSHIPS:

- American Society of Materials (ASM)
- Association of Egyptian American Scholars (AEAS)
- Egyptian Organization for Standardization and Quality Control (EOS)
- The Egyptian Society of Advanced Materials and Nanotechnology (ESAMNT)
- Research Team of Materials Eng. and Metallurgy Processes, Ain Shams Univ.
- Egyptian Society for Engineering Innovations
- Educational Professionals Syndicate, Egypt
- The Acoustical Society of Egypt (ASE)
- Engineers Syndicate, Egypt

LANGUAGES:

Arabic, English, and Germany

COMPUTER SKILLS

Microsoft Word, Microsoft Excel, Microsoft Power Point, Microsoft Photoshop

WORKING AS AN ASSISTANT PROFESSOR FOR A PART TIME IN:

- Higher Technological Institute, Tenth of Ramadan City.
- Technical Institute of the Armed Forces, Abbasia, Cairo.
- Obour Higher Institute, Km. 37, Ismailea Road.
- Technical Military College, Abbasia, Cairo.
- Workers University, Nasr City, Cairo.

COURSES TAUGHT:

1- UNDERGRADUATE COURSES

Engineering Drawing, Production Engineering, Engineering History and Technology Transfer, Engineering Metallurgy, Materials Testing, Forming Processes, Welding Processes, Metal Cutting, Materials Engineering, Theory of Metal Forming, B. Sc. Project, Metal Cutting and Metal Forming Machines, Advanced Manufacturing Technology, Materials Fabrication, Materials Production,

Polymers Processing, Senior Seminar, Materials and Processes selection, Ergonomics

2- POST GRADUATE COURSES

Mechanical Metallurgy, Materials Engineering, Composite Materials, Heat Treatment, Welding Joint Design, Welding Equipments, Master of Engineering Applied Research, Mechanical Behavior of Materials, Welding Diploma Project.

3- TRAINING COURSES

- “Welding Technology and Welding Inspection”
- “Pipes and Special Fitting for Water Pipe line”
- “Failure Analysis in Mechanical Equipment”
- “Heat Treatment and Quality Control”
- “Corrosion Control and prevention”
- “Mechanical Testing of Materials”
- “Metallographic Examination”

LIST OF PUBLICATIONS:

- Hala A. Hassan, **Adel B. El-Shabasy**, John J. Lewandowski, “The effect of mixed mode I/II on the fracture toughness and fracture behavior of nano-structured metal matrix composites”, Mater. Sci. Eng. A, 559, pp. 897-901, 2013.
- **Adel B. El-Shabasy**, Hala A. Hassan, and John J. Lewandowski, “Effects of Load Ratio, R, and Test Temperature on High Cycle Fatigue Behavior of Nano-Structured Al-4Y-4Ni-X Alloy Composites”, Mater. Sci. Eng. A, 558 (12), pp. 211-216, 2012.
- Hala A. Hassan, **Adel B. El-Shabasy**, and J.J. Lewandowski, “The effects of changes in test temperature and loading conditions on fracture toughness of a β toughened Zr-based bulk metallic glass composite”, Mater. Sci. Eng. A, 540, pp. 97-101, 2012.
- **Adel B. El-Shabasy**, Hala A. Hassan, and John J. Lewandowski, “Effects of Composition Changes on Strength, Bend Ductility, Toughness, and Flex bending Fatigue of Iron based Metallic Glass Ribbons”, Met. & Matr. Trans. A, 43 (8), pp. 2697-2705, 2012.
- **Adel B. El-Shabasy** and John J. Lewandowski, “Fatigue Coaxing in Zr-based Bulk-Metallic Glass”, Scrip. Mater., 62, pp. 481-484, 2010.
- **Adel B. El-Shabasy**, Hala A. Hassan, Yi Liu, Dingqiang Li, and John J. Lewandowski, “High Cycle Fatigue Behavior of a Nanostructured Composite Produced via Extrusion of Amorphous Al₈₉Gd₇Ni₃Fe₁ Alloy Powder”, Mater. Sci. Eng. A 513-514, pp. 202-207, 2009.
- Hala A. Hassan, **Adel B. El-Shabasy**, and J.J. Lewandowski, Putting the heat on nano-composite aluminium alloys, Metal Powder Report, Vol. 64, No. 5, pp. 28-34, 2009.

- **Adel B. El-Shabasy** and John J. Lewandowski, “Effects of Microstructural Change, Loading Condition, and Test Temperature on Toughness of Fully Pearlitic Eutectoid Steel used in Transportation Industry”, *Mater. Sci. Tech.*, 25 (3), pp. 369-378, 2009.
- Hala A. Hassan, **Adel B. El-Shabasy**, and M. H. Abdel-Latif, “Utilization of the Agricultural Residues in Natural Fiber Polymer Composites (NFPCs) ”, Third Ain Shams University International Conference on Environmental Engineering (ASCEE3), Vol. IV, pp. 25-40, Cairo, Egypt, April 2009.
- Hala A. Hassan, **Adel B. El-Shabasy**, and J.J. Lewandowski, “Fracture and Fatigue Crack Growth of Nano-Composite Aluminum Alloys”, 1st International Joint Conference on Materials Science, Nanotechnology and Biotechnology, Jan. 4-6, 2009, Cairo, Egypt.
- Hala A. Hassan, **Adel B. El-Shabasy**, and J.J. Lewandowski, “Fracture and Fatigue Crack Growth of Nano-Composite Aluminum Alloys”, 2008 World Congress on Powder Metallurgy and Particulate Materials, June 8-12, 2008, Washington, DC, USA.
- **Adel B. El-Shabasy** and John J. Lewandowski, “Effects of Load-Ratio and Test Temperature on Fatigue Crack Growth of Fully Pearlitic Eutectoid Steel”, *International Journal of Fatigue*, 26 (3), pp. 305-309, 2004.
- **Adel B. El-Shabasy**, “Bond Shear Strength of Adhesive Bonded Laminates (ABL)”, *Ain Shams Univ., Scientific Bulletin, Faculty of Eng.*, 39 (2), pp. 367-381, 2004, Hakim Press, English, Egypt.
- **Adel B. El-Shabasy** and John J. Lewandowski, “Effect of Changes in Notch Radius and Mixed Mode Loading on Toughness of Fully Pearlitic Eutectoid Steel”, *MS & T 2003, TMS Fall Meeting, and 45th ISS Conference*, Chicago, Illinois USA, November 9-12, 2003, English, USA.
- **Adel B. El-Shabasy** and John J. Lewandowski, “Effects of Load-Ratio, R, and Test Temperature on Fatigue Crack Growth Behavior of Fully Pearlitic Eutectoid Steel”, *MS & T 2003, TMS Fall Meeting, and 45th ISS Conference*, Chicago, Illinois USA, November 9-12, 2003, English, USA.
- S.H. Saniour, **A.M.B. El-Shabasy** and E. Ismail, “Effect of Microwave oven Drying on Some Properties of Phosphate-Bonded Investment Materials”, *Egyptian Dental Journal*, 47(1), pp. 475-483, 2001, Dar El-Hekma Press, English, Egypt.
- S.H. Saniour, **A.M.B. El-Shabasy** and Y.A. Fai-ek, “Evaluation of Some Mechanical Properties of Ethylene Vinyl Acetate Mouth Guard Materials”, *Egyptian Dental Journal*, 46 (10), pp.1839-1846, 2000, Dar El-Hekma Press, English, Egypt.
- N.A. El-Mahallawy, M.A. Taha, A.Z. Serag and **A. B. El-Shabasy**, “Status and Environmental Upgrading of Small Foundries in Greater Cairo”, *Cairo 7th International Conference on Energy and Environment*, Cairo, Egypt, 2000, English, Egypt.
- J.D. Ramsey, H. Besheer, N. El-Mahallawy, M. Taha and **A. B. El-Shabasy**, “Safety, Health and Environmental Impact from Egyptian Small Foundries”, *14th Annual International Occupational Ergonomics and Safety Conference*, Florida, Orlando, USA, 1999, English, USA.

- **El-Shabasy A. B.** and El-Mously H. I., “Study of the Variation of Tensile Strength across the Cross section of Date Palm Leaves`Midrib”, The 5th European Conference on Advanced Materials and Processes (EROMAT 97), Maastrich, Holland, 21-23 April 1997, English, Holland.

Books

- Materials Eng., Part II, Testing, 1st Ed.1998, 2nd Ed. 2013,.Books World Press, Cairo, Egypt.
- Engineering Materials and Testing, 2005-2010, Ministry of Higher Education, Cairo, Egypt.
- Modern Methods in Manufacturing, 1999: 2005, El-Hakim Press, Cairo, Egypt.
- Machining Materials and Processes, 1997, Ministry of Education, Books Sector, Cairo, Egypt.

Posters presented in refereed international conference

- **Adel B. El-Shabasy**, Hala A. Hassan, W. H. Wang, and John J. Lewandowski, “Fracture and Fatigue of Fe₇₈Si₉B₁₃ Metallic Glass Ribbons” Poster presentation, MS&T’08, Materials Science & Technology 2008 Conference and Exhibition, October 5-9, 2008, Pittsburgh, Pennsylvania, USA.
- Hala A. Hassan, **Adel B. El-Shabasy** and John J. Lewandowski, “The Effect of Mixed Mode I/II on the Fracture toughness and Fracture Behavior of Nano-structured Metal Matrix Composites”, Poster presentation, MS&T’08, Materials Science & Technology 2008 Conference and Exhibition, October 5-9, 2008, Pittsburgh, Pennsylvania, USA.
- **Adel B. El-Shabasy**, Hala A. Hassan, and John J. Lewandowski, “High Cycle Fatigue Behavior of a Nanostructured Composite Produced via Extrusion of Amorphous Al₈₉Gd₇Ni₃Fe₁ Alloy Powders”, Poster presentation, 2008 World Congress on Powder Metallurgy and Particulate Materials, June 8-12, 2008, Washington, DC, USA.
- Hala A. Hassan, **Adel B. El-Shabasy**, and J.J. Lewandowski, “Fracture and Fatigue Crack Growth of Nano-Composite Aluminum Alloys”, Poster presentation, 2008 World Congress on Powder Metallurgy and Particulate Materials, June 8-12, 2008, Washington, DC, USA.
- **Adel B. El-Shabasy**, Hala A. Hassan, and John J. Lewandowski, “Effects of Load Ratio, R, and Temperature on High Cycle Fatigue Behavior of Nanostructured Al₈₉Gd₇Ni₃Fe₁ Composite”, Poster presentation, 6th Annual Research SHOWCASE, April 16-17, 2008, Case Western Reserve University, Cleveland, OH, USA.
- Hala A. Hassan, **Adel B. El-Shabasy**, and J.J. Lewandowski, “Effects of Changes in Test Temperature and Notch radius on Fracture and Fatigue Crack Growth of Nano-Composite Aluminum Alloys”, Poster presentation, 6th Annual Research SHOWCASE, April 16-17, Case Western Reserve University, Cleveland, OH, USA.
- Dingqiang Li, Hala A. Hassan, **Adel B. El-Shabasy**, and J.J. Lewandowski, “Effect of Sensitization on the Microstructure and the Mechanical Properties of 5xxx Aluminum Alloys”, 6th

Annual Research SHOWCASE, April 16-17, 2008, Case Western Reserve University, Cleveland, OH, USA.

- **Adel B. El-Shabasy**, Hala A. Hassan, W. H. Wang, and John J. Lewandowski, “Effects of Composition Changes on Strength, Bend Ductility, and Toughness of Iron based Metallic Glass Ribbons”, Poster presentation, International Symposium on Surface Hardening of Stainless Steels, October 22-23, 2007, Cleveland, OH, USA.
- **Adel B. El-Shabasy**, Hala A. Hassan, W. H. Wang, and John J. Lewandowski, “Effects of Composition Changes on Strength, Bend Ductility, and Toughness of Iron based Metallic Glass Ribbons”, Poster presentation, MS&T’07, Materials Science & Technology 2007 Conference and Exhibition, September 16-20, 2007, Detroit, MI, USA.
- **Adel B. El-Shabasy** and John J. Lewandowski, “Effects of Changes in Test Temperature and Notch Root Radius on Fracture Toughness of Fully Pearlitic Eutectoid Steel”, TMS 132nd Annual Inter. Meeting & Exhibition, March 2-6, 2003, San Diego, California, USA.
- **Adel B. El-Shabasy** and John J. Lewandowski, “Effects of Mixed Mode Loading on Fracture Toughness of Fully Pearlitic Eutectoid Steel”, TMS 132nd Annual International Meeting & Exhibition, San Diego, March 2-6, 2003, California, USA.
- **Adel B. El-Shabasy** and John J. Lewandowski, “Effects of Load-Ratio, R, and Test Temperature on Fatigue Crack Growth Behavior of Fully Pearlitic Eutectoid Steel”, TMS Fall Meeting, October 2002, Columbus, Ohio, USA.
- S. H. Saniour, **A. M. B. El-Shabasy** and Y. A. Fai-ek, “Evaluation of Some Mechanical Properties of Fabricated and Non- fabricated Mouth Guards”, World Congress on Sports Dentistry and Dental Traumatology, June 2001, Boston, Massachusetts, USA.
- S. H. Saniour, **Adel M. B. El-Shabasy** and Y. A. Fai-ek, “Evaluation of Some Mechanical Properties of Ethylene Vinyl Acetate Mouth Guard Materials”, 2nd Arab International Congress for Pedodontic & Preventive Dentistry, Nov. 2000, Alexandria, Egypt.
- **Adel B. El-Shabasy** and John J. Lewandowski, “Effects of Changes in Test Temperature and Notch Root Radius on Fracture Toughness of Fully Pearlitic Eutectoid Steel”, First Annual Research SHOWCASE, April 4, 2003, Case Western Reserve University, Cleveland, Ohio, USA.

CONFERENCES:

- Association of Egyptian American Scholars 39th Annual Conference, “The Role of Modern Science and Emerging Technologies in Economic Development of the New Egypt”, Dec. 25-27, 2012, NRC, Cairo, Egypt.
- The 6th International Scientific Conference of The Military Technical College (The 15th International Conference on Applied Mechanics and Mechanical Engineering), May 29-31, 2012, Cairo, Egypt.

- 1st Workshop on Oil Field Chemistry “WOC”, Faculty of Engineering, Ain Shams University, May 2, 2012, Cairo, Egypt.
- 15th Conference for Petroleum, Mineral Resources & Development, Egyptian Petroleum Research Institute, April 8-10, 2012, Cairo, Egypt.
- ندوة "رؤية مستقبلية للطاقة وترشيدها للاستخدام"، 17 مارس 2012، جامعة عين شمس، القاهرة، مصر.
- Association of Egyptian American Scholars 38th Annual Conference, “A Roadmap for Higher Education and Scientific Research in Egypt, Future Outlook”, Dec. 26-28, 2011, Ain Shams University, Cairo, Egypt.
- Third Ain Shams International Conference on Environmental Engineering (ASCEE3), April 12-14, 2009, Cairo, Egypt.
- 1st International Joint Conference on Materials Science, Nanotechnology and Biotechnology, Jan. 4-6, 2009, Cairo, Egypt
- Association of Egyptian American Scholars 35th Annual Conference, “Cooperation among Scholars in Egypt and Abroad, Strategies & a Vision for Modern Education”, Dec. 27-29, 2008, Cairo, Egypt.
- International Workshop on Acoustics and Vibration in Egypt, October 11, Cairo, Egypt.
- 2008 World Congress on Powder Metallurgy and Particulate Materials, June 8-12, 2008, Washington, DC, USA.
- 6th Annual Research SHOWCASE, April 16-17, 2008, Case Western Reserve University, Cleveland, OH, USA.
- International Symposium on Surface Hardening of Stainless Steels, October 22-23, 2007, Cleveland, OH, USA.
- MS&T'07, Materials Science & Technology 2007 Conference and Exhibition, September 16-20, 2007, Detroit, MI, USA.
- 12th International Conference on Aerospace Sciences and Aviation Technology, ASAT-12, May 29-31, 2007, Cairo, Egypt
- Second Ain Shams University International Conference on Environmental Engineering, ASCEE 2, April 10-12, 2007, Cairo, Egypt.
- The First Conference on Scientific Research for Development, “Towards a Strategy for Application”, Ain Shams University, March 25-27, 2007, Cairo, Egypt.

- Association of Egyptian American Scholars 17th Bi-Annual Conference, “Enhancement of Higher Education and Scientific Research in Egypt”, Dec. 26-27, 2006, Cairo, Egypt.
- First Workshop of the Advanced Materials & Applied Nanotechnology Group, “Relevance between Advanced Materials & Nanotechnology”, November 26- 27, 2006, Cairo, Egypt.
- International Workshop on Acoustics and Vibration in Egypt, November 4- 5, 2006, Cairo, Egypt.
- Association of Egyptian American Scholars Bi-Annual Conference, “The Role of Science and Technology in the Future of Egypt”, Dec. 29-30, 2004, Cairo, Egypt.
- TMS Fall Meeting, and 45th ISS Conference Chicago, Illinois USA, November 9-12, 2003
- TMS 132nd Annual Inter. Meeting & Exhibition, San Diego, California USA, March 2-6, 2003
- TMS Fall Meeting Columbus, Ohio USA, October 6-10, 2002
- World Cong. On Sports Dentistry and Dental Traumatology, Boston, USA, June 2001
- 2nd Arab Int. Congress for Pedodontic & Preventive Dentistry, Alexandria, Egypt, Nov. 2000
- 14th Annual Int. Occupational Ergonomics and Safety Conf., Florida, Orlando, USA, 1999
- Cairo 7th Int. Conference on Energy and Environment, Cairo, Egypt. March 2000
- The 5th European Conference (EURO MAT’ 97), Maastrich, Holland, 21-23 April 1997