RESUME

NAME: Laila A. El-Guebaly
http://fti.neep.wisc.edu/UWNeutronicsCenterOfExcellence

EDUCATION:
B.S., 1970, Nuclear Engineering, University of Alexandria - Egypt
B.S., 1976, Physics, University of Alexandria - Egypt
M.S., 1973, Nuclear Engineering, University of Wisconsin - Madison
Ph.D., 1979, Nuclear Engineering, University of Alexandria – Egypt.

PROFESSIONAL EXPERIENCE:

June 2016 – present	Emeritus Academic Staff, Engineering Physics Department, University of Wisconsin-Madison
September 2014 – June 2016	Distinguished Research Professor, Engineering Physics Department, University of Wisconsin-Madison
May 2006 – Sept. 2014	Research Professor, Engineering Physics Department, University of Wisconsin-Madison
October 1991 – May 2006	Senior Scientist, Engineering Physics Department, University of Wisconsin-Madison
July 1987 - October 1991	Associate Scientist, Nuclear Engineering and Engineering Physics Department, University of Wisconsin-Madison
July 1984 - July 1987	Assistant Scientist, Nuclear Engineering Department, University of Wisconsin-Madison
July 1983 - July 1984	Project Associate, Nuclear Engineering Department, University of Wisconsin-Madison
April 1981 - July 1983	Research Associate, Nuclear Engineering Department, University of Wisconsin-Madison
June 1979 - April 1981	Assistant Professor, Mathematics and Physics Department, University of Alexandria-Egypt

RECENT PUBLICATIONS:

- L. El-Guebaly, L. Mynsberge, A. Davis, C. D'Angelo, A. Rowcliffe, B. Pint, "Design and Evaluation of Nuclear System for ARIES-ACT2 Power Plant with DCLL Blanket," Fusion Science and Technology, 72, Issue 1 (2017) 17-40.
- L. El-Guebaly, M. Elias, B. Madani, C. Martin, E. Marriott, "Design Approach for FESS-FNSF In-Vessel Components and Constraints Imposed on Radial/Vertical Build Definition," Fusion Science and Technology, 72,3,347-353 (July 2017).
- M. Harb, L. El-Guebaly, A. Davis, P. Wilson, E. Marriott, J. Benzaquen, "3-D Neutronics Assessment of Tritium Breeding Capacity and Shielding of Tokamak-Based Fusion Nuclear Science Facility," Fusion Science and Technology, 72, 3, 510-515 (July 2017).
- L. El-Guebaly and M. Zucchetti, "Progress and Challenges of Handling Fusion Radioactive Materials," presented at 21st TOFE, Anaheim, CA, November 9-14, 2014; Fusion Science and Technology, Vol. 68, No. 3 (October 2015) 484-491.
- L. El-Guebaly, S. Malang, A. Rowcliffe, and L. Waganer, "Blanket/Materials Testing Strategy for FNSF and its Breeding Potential," Fusion Science and Technology, Vol. 68, No. 2 (September 2015) 251-258.

- L. El-Guebaly and L. Mynsberge, "Neutronics Characteristics and Shielding System for ARIES-ACT-1 Power Plant," Fusion Science and Technology, 67, No. 1, 107-124 (Jan 2015).
- L. El-Guebaly, L. Mynsberge, C. Martin, D. Henderson, "Activation and Environmental Aspects of ARIES-ACT-1 Power Plant," Fusion Science and Technology, 67, No. 1, 179-192 (Jan 2015).
- L. El-Guebaly and M. Zucchetti, "Progress and Challenges of Handling Fusion Radioactive Materials," Fusion Science and Technology, Vol. 68, No. 3 (October 2015) 484-491.
- Laila A. El-Guebaly, Lorenzo V. Boccaccini, Richard J. Kurtz, and Lester M. Waganer, "Technology-related challenges facing Fusion power plants," Chapter in book: Fusion Energy and Power: Applications, Technologies and Challenges. NOVA Science Publishers, Inc.: Hauppauge, New York, USA. ISBN: 978-1-63482-579-5 (2015). https://www.novapublishers.com/catalog/product_info.php?products_id=54439&osCsid=3313b6069d6af6e75338c344520d139b
- Laila El-Guebaly, "Overview of ARIES Nuclear Assessments: Neutronics, Shielding, and Activation," *Progress in Nuclear Science and Technology* 4, 118-121 (2014).
- L. El-Guebaly, L. Mynsberge, J. Menard, T. Brown, S. Malang, and L. Waganer, "Nuclear Aspects and Blanket Testing/Development Strategy for ST-FNSF," IEEE Transactions on Plasma Science, 42, No. 5, 1457-1463 (May 2014).
- L.A. El-Guebaly and L. Cadwallader, "Perspectives of Managing Fusion Radioactive Materials: Technical Challenges, Environmental Impact, and US Policy." Chapter in book: Radioactive Waste: Sources, Management and Health Risks. Susanna Fenton Editor. NOVA Science Publishers, Inc.: Hauppauge, New York, USA. ISBN: 978-1-63321-731-7 (2014). https://www.novapublishers.com/catalog/product_info.php?products_id=51057.

SYNERGISTIC ACTIVITIES:

- Before retirement in 2016, led the Nuclear Group at UW Fusion Technology Institute, performing multidimensional nuclear analyses for magnetic and inertial fusion plants.
- Participated in over 25 multi-institutional fusion design studies.
- Led the nuclear task for the ARIES and FESS-FNSF project since early 1990s, performing neutronic, radiation shielding, activation, and radwaste management analyses.
- Involved in other projects by PPPL focusing on neutronics of Pilot Plants and ST-FNSF designs.
- US contact person for IEA Task on Fusion Radioactive Waste Studies.
- Actively participated in 2017/2018 National Academy of Sciences (NAS) activity addressing "Strategic Plan for U.S. Burning Plasma Research.

UW GRADUATE STUDENTS FULLY OR PARTIALLY SUPPORTED BY ARIES and FESS-FNSF PROJECTS SINCE 2010:

- Rachel Slaybaugh, PhD., 2011, UC-Berkeley
- Amir Jaber, M.S., 2012, Sargent and Lundy, Chicago, IL
- Ahmad Ibrahim, PhD., 2012, Oak Ridge National Laboratory, Oak Ridge, TN
- Lucas Mynsberge, M.S., 2014, EPIC, Verona, WI.
- Moataz Harb, PhD. Graduate student.