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Dr. DeVol is the Toshiba Professor of Nuclear Engineering and the director of the Nuclear Environmental Engineering Sciences and Radioactive Waste Management Center at Clemson University. Dr. DeVol's primary teaching responsibilities are in the areas of radiation detection and measurement, environmental risk assessment and introduction to nuclear engineering and radiological sciences. Dr. DeVol oversees the ABET-ANSAC accredited Environmental Health Physics educational program in the department. Dr. DeVol's research interests are in the areas of radiological environmental measurements, environmental health physics, statistical methods, and homeland security. Dr. DeVol has over 100 referred publications and over 250 presentations in the field of detection of radioactive materials. He holds four U.S. patents on the development of methods and materials for the detection of radioactivity in the environment.

EDUCATION

1988-1993 University of Michigan, Ph.D. Nuclear Engineering
1987-1988 University of Michigan, M.S. Nuclear Engineering
1982-1987 Ohio State University, B.S. Engineering Physics

PROFESSIONAL POSITIONS

2012-Present: Toshiba Professor of Nuclear Engineering, Department of Environmental Engineering and Earth Sciences, Clemson University
2006-2011: Professor, Environmental Engineering and Earth Sciences, Clemson University
2001-2006: Associate Professor, Environmental Engineering and Science, Clemson University
1995-2001: Assistant Professor, Environmental Engineering and Science, Clemson University
1993-1995: Assistant Professor/Research Associate, Department of Environmental Systems Engineering, Clemson University

SELECTED PUBLICATIONS

Guin, T., McDonald, K., Folkert, J., Verst, C., Gaillard, J., DeVol, T.A., Bliznyuk, V.N., Larsen, G., "Organic vacuum pump fluids for the vacuum pumping of fusion power plants," *Fusion Science and Technology,* 80 (6), 781-791; DOI: 10.1080/15361055.2023.2232981 (2024).

Fjeld, R.A., DeVol, T.A., Martinez, N.E., Quantitative Environmental Risk Analysis for Human Health - 2nd Edition, John Wiley & Sons, ISBN 9781119675327 (2024).

Williams, R.F. , Kaplan, D.I., Erdmann, B.J., DeVol, T.A., Powell, B.A., "Cobalt-60, Barium-133, Cesium-137, and Europium-152 migration from cementitious sources through sediment under field conditions," *Journal of Environmental Radioactivity,* 280, 107527; DOI10.1016/j.jenvrad.2024.107527 (2024).

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Fullmer, W.K., Bliznyuk, V.N., Seliman, A.F., Powell, B.A., Husson, S.M., DeVol, T.A., "Hybrid extractive scintillator resin for simultaneous concentration and

detection of plutonium from aqueous solutions," *Journal of Environmental Radioactivity*, 255, 107048 (2022).

Darge, A.W., Gera, Y., DeVol, T.A., Husson, S.M., "Polyamidoxime-based membranes for the rapid screening of uranium isotopes in water," *Analytica Chimica Acta* 1220, 339997 (2022).

Mamykin, S.V., Gnilitskyi, I.M., Dusheyko, M.G., DeVol T.A., Bliznyuk, V.N., "Femtosecond Laser Nano-Structuring for Surface Plasmon Resonance-Based Detection of Uranium," *Applied Surface Science* 576, 151831 (2022).

Foster, J.C., DeVol, T.A., Husson, S.M., "Membranes for the Capture and Screening of Waterborne Plutonium Based on a Novel Pu-Extractive Copolymer Additive," *Membranes*, 12, 1 (2022).

Bliznyuk, V.N., Seliman, A.F., Derevyanko, N.A., Dugan, A., Ishchenko, A.A., DeVol, T.A., "Plastic Scintillators and Radiation Detectors Based on Triphenyl Pyrazoline Derivatives," *Israel Journal of Chemistry*, https://doi.org/10.1002/ijch.202100059 (2021).

DeVol, T.A., Pujari, A.B., Locklair, J., Husson, S.M., Bliznyuk, V.N., Seliman, A.F. (2021) "Hybrid extractive scintillator resin for simultaneous concentration and detection of radiocesium from aqueous solutions," *J Environ Radioactiv* 237: 106720.

Kutsevol, N., Kuziv, Y., Cabrera, T., Husson, S.M., DeVol, T.A., Bliznyuk, V., "Biodegradable star-like polymer flocculants for rapid, efficient purification of water contaminated with industrial radionuclides," *Separation and Purification Technology*, 273. 118630, (2021).

Darge, A. W., Gera, Y., DeVol, T. A., Husson, S. M., "Uranium concentration using reactive polymer thin films for spectroscopic analyses," *Reactive & Functional Polymers*, 104761, 157 (2020).

Foster, J. C., Starstrom, S. A., DeVol, T. A., Powell, B. A., Husson, S. M., "Functionalized polymer thin films for plutonium capture and isotopic screening from aqueous sources," *Anal. Chem.*, 92, 5214-5221 (2020).

Hitchcock, D., Krentz, T., Gaillard, J., Serkiz, S., Kranjc, M., Peters, B., Velten, J., DeVol, T., "Tritium Effects on Aromatic Carbon-Loaded Polymers," *Fusion Science and Technology*, 76(7), 861-868 (2020).

SELECTED PROFESSIONAL SERVICE, AFFILIATIONS, AND HONORS

Coordinator of the Accreditation Board for Engineering and Technology (ABET) Applied and Natural Science Accreditation Commission (ANSAC) accredited Environmental Health Physics program at Clemson University.
Fellow, Health Physics Society, 2019
Elda E. Anderson award, presented by the Health Physics Society, 2004.
Memberships: American Nuclear Society, 1987–present; Health Physics Society, 1993–present; Institute of Electrical and Electronics Engineering Society, 1990–present.
Engineer-in-Training, South Carolina Board of Registration, 1999.
Certified Health Physics, American Board of Health Physics, 1997.