

# **Supathorn Phongikaroon, Ph.D.**

**Engineering Foundation Professor and Director of Nuclear Engineering Programs at VCU  
College of Engineering**

Richmond, VA, US

Professor Phongikaroon's research focuses on pedagogy and experimental studies in used nuclear fuel reprocessing.

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## **Biography**

Dr. Phongikaroon earned his PhD and BS degrees in chemical engineering and nuclear engineering from University of Maryland, College Park in 2001 and 1997, respectively. Prior joining the Virginia Commonwealth University (VCU) in January 2014, he held academic and research positions at University of Idaho in Idaho Falls, ID; Idaho National Laboratory in Idaho Falls, ID; and Naval Research Laboratory, Washington, D.C. During his research career, Dr. Phongikaroon has established chemical and electrochemical separation of used nuclear fuel through pyroprocessing technology and extended his expertise toward molten salt reactor physics and material detection and accountability for safeguarding applications. These developments include kinetics in ion exchange process, advanced chemical separation routines via cold fingers and zone freezing, electrochemical methods, laser induced breakdown spectroscopy, and computational modeling for electrorefiner. This effort has led to a strong establishment of Radiochemistry and Laser Spectroscopy Laboratories at VCU.

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## **Industry Expertise**

Education/Learning, Research

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## **Areas of Expertise**

Nuclear and chemical separation technology in fuel cycle research and development,  
Electrochemical processes, Special material detection and analysis via laser and mass spectroscopy techniques

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## **Education**

**University of Maryland**

Ph.D. Chemical Engineering

**University of Maryland**

B.S. Nuclear Engineering, Chemical Engineering

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## **Accomplishments**

## **Outstanding Contributor Award**

Awarded by the Center for Advanced Energy Studies.

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