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Aushang

Einladung zum Seminar über „Nukleare Energieerzeugung“

Zeit: **Montag, 28. Juli 2025, 11:00 Uhr**

Ort: Karlsruher Institut für Technologie, Hermann-von-Helmholtz-Platz 1
76344 Eggenstein-Leopoldshafen, INR, Bau 521, Raum 302

Referent: **Herr Dr. Marcus Seidl**, PreussenElektra, Hannover

Titel: The potential role of electrochemistry for the recycling of spent nuclear fuel

Abstract:

Material recycling has become both a regulatory requirement and standard practice across most industries in developed nations, underpinned by circular economy legislation. However, spent nuclear fuel remains largely exempt from this practice, despite the availability of various methods for waste minimization and constituent recycling. While numerous projects for conventional light water reactor construction and advanced reactor designs have been initiated recently, limited attention has been devoted to closing the nuclear fuel cycle and achieving circular nuclear economy objectives.

Electrochemical methods for spent fuel recycling have been extensively investigated over several decades, with foundational research conducted at the Fuel Conditioning Facility at the Experimental Breeder Reactor-II (EBR-II) and subsequently advanced through projects led by institutions such CRIEPI and KAERI. A recent study has examined the application of this methodology to spent fuel from German light water reactors. The approach utilizes a sufficiently compact process suitable for on-site spent fuel partitioning, thereby eliminating additional transportation requirements and minimizing secondary waste stream generation. This work reviews the process flow, material balances, and economic considerations of the proposed system.

Hinweis: Alle auswärtigen Besucher des Seminars werden gebeten, ihren gültigen Personalausweis oder Reisepass mitzubringen