



GESELLSCHAFT DEUTSCHER CHEMIKER
ORTSVERBAND SIEGEN

Ankündigung

Am Montag, 18. November 2024, spricht um 16:30 Uhr
im Hörsaal AR-F 002 des Departments Chemie und Biologie

Prof. Dr. Sebastian Riedel

Freie Universität Berlin

über das Thema

From Laboratory Curiosities to Industrial Applications: The World of Halogens

15.45 h Kurzeinführung nur für Studierende (AR- H 100)

Kaffeerunde ab 16 Uhr in Raum AR- H 100,
organisiert durch das
JungChemikerForum Siegen

Alle interessierten Kolleginnen und Kollegen, Mitarbeiterinnen und
Mitarbeiter und Studierende sind zu diesem Vortrag herzlich eingeladen.
Gäste sind herzlich willkommen.

Der Ortsverbandsvorsitzende
Prof. Dr. Jörn Schmedt auf der Günne



From Laboratory Curiosities to Industrial Applications: The World of Halogens

Novel super acids offer the possibility of synthesizing hitherto unknown compounds.[1] Based on such Lewis and Brønsted acids, we have succeeded in synthesizing and characterizing so far unknown halonium ions, which are ideal alkylation reagents due to their high reactivity.[2,3] Furthermore it was shown, that e.g. chloronium ions can be stabilized by polychloride monoanions such as $[\text{Cl}_3]^-$. [4]

Especially such polychloride anions offer new possibilities which are not only of academic interest.[5-8] The value of trichlorides for chlorine storage and chlorination reactions is only one aspect in this context. Particularly, the inexpensive ionic liquid $[\text{NEt}_3\text{Me}][\text{Cl}_3]$ shows a similar and sometimes even advantageous reactivity compared to chlorine gas, while offering a superior safety profile. Furthermore, this chemistry shows also new applications in the direction of hydrochlorinations and beyond.