



2nd SAFS Program 11. – 15. February 2024 Sun City, South Africa

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Sunday, February 11th – Arrival

<u>From</u>	<u>To</u>	<u>Activities</u>	<u>Venue</u>
15:00	19:00	Registration	Bosveld Shebeen
18:00	20:00	Welcome Reception	Bosveld Shebeen



Monday, February 12th – Sun City Convention Center - Seers Court 1&2

<u>From</u>	<u>To</u>	<u>Activities and Talks</u>
08:00	09:00	Registration
09:00	09:20	Philip Crouse & Ramjugernath Welcome Address
09:40	10:10	Ingo Krossing Keynote Lecture Fluorinated compounds and deelectronation: A synergistic couple
10:10	10:40	Tea Break
10:40	11:00	Mpho Lekgoathi LiPF ₆ -hydrogen fluoride adducts– a study of their system energies and related vibrational spectroscopy.
11:00	11:20	Takahiko Akiyama Enantioselective synthesis of trifluoromethylated nitrogen-containing compounds
11:20	11:40	Thomas Braun Defluorination of fluorinated alkanes at Lewis-acidic compounds: From homogeneous to heterogeneous reactions and back
11:40	12:00	R. Porhiel Iron fluoride as active material for next generation lithium batteries
12:00	12:20	Malose Mphahlele Fluorinated building blocks strategy in the synthesis of biologically relevant small drug-like molecules



12:20	12:40	David Lokhat Experiences with homogeneous and catalytic oxidation of hexafluoropropene
12:40	13:30	Lunch
13:30	14:00	Chris Potgieter Keynote Lecture Establishing a fluorochemical industry in South Africa: A life-time in industrial fluorine-based projects
14:00	14:20	Michael Gerken Chemistry of MoF ₅ and MoF ₄
14:20	14:40	Gašper Tavčar Pentacoordinated organofluorosilicates and organofluoro-germanates
14:40	15:00	Motlalepula Nete Quantification of fluoride in various solid matrices
15:00	15:30	Tea Break
15:30	15:50	Berthold Hoge The first main group element <i>Lewis</i> acid thionyl chloride adduct and its chemistry
15:50	16:10	Litha Yapi Enhancement of fluorination processes using cobalt trifluoride supported on alumina
16:10	16:30	Cody Ross Pitts Strain-release pentafluorosulfanylation
16:30	16:50	Gabriele Pupo FluoRok: Reinventing fluorination
17:00	18:00	Reception by Kapama Lodge
18:00	20:00	Poster Session, Seers Court 1



Tuesday, February 13th Sun City Convention Center - Seers Court 1&2

<u>From</u>	<u>To</u>	<u>Activities and Talks</u>	
08:00	09:00	Registration	
09:00	09:30	Timm John Fluoride-rock interaction	Keynote Lecture
09:30	10:00	Jean-Francois Paquin Hydrofluorination of alkenes and alkynes	Keynote Lecture
10:00	10:30	Tea Break	
10:30	10:50	Kobus Wagener Fluorination of lithium ion battery cathode materials	
10:50	11:10	Gabriella Cavallo Tuning properties of functional materials by combining halogen bonding and the fluorous effect	
11:10	11:30	Melita Tramšek XeF ₂ - the most useful noble gas compound	
11:30	11:50	Christian Heinekamp An amorphous Lewis-acidic zirconium chlorofluoride as HF shuttle: C-F Bond activation and formation ¹	
11:50	12:10	Feng-Ling Qing Efficient and direct access to ArOCF ₂ Br and ArOCF ₂ Cl	
12:10	12:30	Maksim Tcikin Processing of fluosilicic acid and phosphogypsum as a way to improve the environmental and resource efficiency of mineral fertilizer production	
12:30	13:30	Lunch	



13:30	14:00	Dave Dixon	Keynote Lecture Computational fluorine chemistry across the Periodic Table
14:00	14:20	Bernard Vilakazi	Thermal decomposition kinetics of synthesized LiHF_2 material
14:20	14:40	Maik Finze	Electrochemical fluorination: Synthesis of fluorine-containing building blocks
14:40	15:00	Udo Radius	C–F bond activation @ $\text{Ni}(\text{NHC})_2$
15:00	15:30	Tea Break	
15:30	15:50	Andreas Kornath	Highly reactive molecular ions in interstellar molecular clouds and laboratory
15:50	16:10	Gerard Puts	The use of fluorinated compounds in isotope separation.
16:10	16:30	Sebastian Steiner	Synthesis and stabilization of highly reactive acyl cations
16:30	16:50	Franz Strauss, Eugene Lottering	One-step continuous synthesis of flucytosine
		Session Close and Announcements	
18:00	21:00	Gala Dinner, Royal Court at Palace Hotel	



Wednesday, February 14th – Excursion Day

Game Drive

<u>From</u>	<u>To</u>	
09:30	10:00	Meet at your hotel
10:00	15:00	Game Drive and Lunch

Platinum Mine

<u>From</u>	<u>To</u>	
7:30	17:00	to be confirmed



Thursday, February 15th Sun City Convention Center - Seers Court 1&2

<u>From</u>	<u>To</u>	<u>Activities and Talks</u>
08:00	09:00	Registration
09:00	09:30	Marc Dubois Keynote Lecture Slow neutron reflection using ultrapure fluorinated nano-diamonds and graphite fluoride
09:30	10:00	Bruno Ameduri Keynote Lecture On the overall situation of poly- or perfluoroalkyl substances (PFASs) and recycling of fluoropolymers
10:00	10:30	Tea Break
10:30	10:50	Pavel K. Mykhailiuk Zoom Lecture Fluorinated building blocks for medicinal chemistry
10:50	11:10	Jan Sprenger Ionic liquids with fluoro- and perfluoroalkyl-phosphate and borate anions
11:10	11:30	Zoran Mazej Chemistry of XeF ₆ ; the complex salts of [XeF ₅] ⁺
11:30	11:50	Tobias Chemnitz Use of plasma and laser for syntheses of noble metal hexafluorides
11:50	12:10	Sebastian Riedel Superacidic systems based on teflate derivatives and their reaction products
12:10	12:30	David Vicic Simplifying fluoroalkylation chemistry with nickel



12:30	13:30	Lunch	
13:30	14:00	Junji Ichikawa	Keynote Lecture
		Construction of fluorinated ring systems via [4 + 1]-annulation with difluorocarbenes	
14:00	14:20	Paul Mann	
		Introduction to ASP Isotopes	
14:20	14:40	Lukas D. Ernst	
		Application of a fluorine treatment for the improvement of Cu/ZnO/MgO catalysts for CO ₂ hydrogenation to MeOH	
14:40	15:00	Karl Otto Christe	
		Synthesis and characterization of trifluorocarboxonium salts	
15:00	15:30	Tea Break	
15:30	15:50	Tim Gatzemeier	
		Straightforward pentafluorosulfanylation for molecular design and PFAS alternatives	
15:50	16:10	John T. Welch	
		Tetrafluorosulfanyl-containing compounds: tetrafluorosulfanyl building blocks for materials and life science research	
16:10	16:30	Florian Kraus	
		The peculiar crystal chemistry of [ClF ₂] ⁺ , [ClO ₂] ⁺ , and [ClOF ₂] ⁺ salts	
16:30	16:45	Closing Ceremony	
17:15		Shuttles to airport (Arrive ~19:30)	

Poster Session

- Berthold, Chantsalmaa: Activation of a fluorine based weakly coordinating anion through cooperation of light s block metals
- Bockmair, Valentin: Aminomethanesulfonic acid and its protonated species in superacidic media
- Bui, Minh: An amorphous teflate doped aluminium chloro-fluoride
- Fuzon, Patrick: Synthesis of $\text{NaBrO}_4 \cdot \text{H}_2\text{O}$ with fluorine gas in aqueous solution
- Heinekamp, Christian: A fluorolytic sol-gel route to access an amorphous Zr fluoride catalyst¹
- Hofstädter; Julian: Electrochemical fluorination of propionic acid derivatives
- Hoosen, Kiraan: The impact of replacing HFC-134a with HFO-1234yf in mobile air-conditioning systems in South Africa
- Koch, Björn-Niclas: RuF_6 a stronger oxidation agent than PtF_6 : The oxidation of halogen pentafluorides with RuF_6
- Möbs, Martin: $[(\mu_4\text{-F})(\text{BrF}_5)_4]$: A unique molecular interhalogen ion containing a μ_4 -bridging fluorine atom
- Regnat, Martin: Reactivity of biuret in superacidic media



Friday, February 16th – Departure Day / Fluorspar Mine

Departures to Airport

<u>From</u>	<u>To</u>	<u>Activities</u>
08:00	08:30	Shuttles depart (Arrive ~11:00)
12:00	12:30	Shuttles depart (Arrive ~15:00)
16:00	16:30	Shuttles depart (Arrive ~19:00)

Fluorspar Mine

<u>From</u>	<u>To</u>	<u>Activities</u>
8:30	15:00	to be confirmed
15:00		Shuttle from mine to airport (Arrive ~17:00)