## The 42nd Fluorine Conference of Japan Oral Presentations

## **Technical Program**

Date	Time	No.	Subject	Authors	
Nov. 21	9:20	1002	C-F Bond Cleavage of Trifluoromethylarenes by Ni(0)/NHC	Hiroto Imiya, Masato Ohashi, Sensuke Ogoshi	
	0.40	1002	Complexes	Kadai Fulusdaraa Kata Aada Casasha Oasahi Masata Ohashi	
	9:40	1003	Synthesis and complexation of bidentate N-heterocyclic carbenes with fluorine-containing electron withdrawing groups at 4,5 position	Kodai Fukudome, Kota Ando, Sensuke Ogoshi, Masato Ohashi	
	10:00	1004	Development of Trifluoromethylation Reactions using FreonTM 23	hirano kazuki, okusu satoshi, gondo satoshi, shibata norio	
	10:20	1005	Development of fluorine-containing luminescent tolane fluorine	Morita Masato, Yamada Shigeyuki, Konno Tsutomu	
	10:40	1006	atom induced emission enhancement effect  De Novo Synthesis of Fluorinated Monosaccharides via Mukaiyama  Aldol Reaction as a Key Reaction	Toshiki Nokami, Kana Kuroda, Shiho Hayashi, Ayana Tsukahara, Keisuke Takayanagi, Toshiyuki Itoh	
	11:00	1007	Visible-light perfluoroalkylation using simple amine and development to radical polymerization	Miyu Tanaka, Tadashi Kanbara, Tomoko Yajima	
	11:20	1008	Synthesis of PAHs from methylarenes via domino cyclization of difluoroalkenes	Takao Go, Takahashi Hiroki, Ijima Shiori, Fuchibe Kohei, Ichikawa Junji	
	11:40	1009	Development of fluoroalkylation reactions of alkenes using fluorinated acid anhydrides	Shintaro Kawamura, Elena Valverde, Daisuke Sekine, Mikiko Sodeoka	
	12:00		Lunch Break		
	13:00	1513	Characterization and Functionalization of Organic Ferroelectric Vinylidene Fluoride Molecules	Kenji Ishida, Yasuko Koshiba, Tatsuya Fukushima	
	13:40	1015	Preparation and Properties of Fluoroalkyl End-capped 2- Acrylamido-2-methylpropanesulfonic Acid Oligomer/Poly(vinyl alcohol) Composites	Shinsuke Katayama, Masato Yasuta, Hideo Sawada	
	14:00	1016	Nitrogen Doping of Single-Walled Carbon Nanotubes Using Defluorination	Yokoyama Koji, Yoshinori Sato, Tetsuo Nishida, Yoshinori Sato	
	14:20	1017	Investigations of Si etching process using fluorine gas	Masanari Namie, Fumihiro Nishimura, Jae-Ho Kim, Susumu Yonezawa	
	14:40	1018	Suppression of metal surface corrosion by layered double hydroxide containing acrylic gel sheet	Kota Kamon, Masaki Matsui, Hideshi Maki, Minoru Mizuhata	
	15:00		High temperature structure and dynamics of molten fluoride salts	Catherine Bessada, Kelly Machado, Aydar Rakhmatullin, Didier Zanghi	
	15:40	1021	Application of high temperature MAS NMR for the study inorganic fluorides	Aydar Rakhmatullin, Frantisek Simko, Mathieu Allix, Emmanuel Veron, Catherine Bessada	
Nov. 22	9:00	2001	Synthesis of heteroacenes using intramolecular cyclization reaction	Katsutoshi Sekino, Ryosuke Shiki, Natsuki Takigawa, Naoki Shida,	
	9:20	2002	catalyzed by fluoride ions  Rhodium-Catalyzed [4 + 2] Cycloaddition of Biphenylene with	Hiroki Nishiyama, Ikuyoshi Tomita, Shinsuke Inagi Kosuke Sano, Yota Watabe, Masafumi Takeishi, Takeshi Fujita, Junji	
	0.40	2003	Difluoroalkenes: Synthesis of Fluorinated Phenanthrenes Changes of the Fluorescence Properties Induced by Fluorine Atoms	Ichikawa Kengo Yamada, Yasuhiro Kubota, Toshiyasu Inuzuka, Tomohiro Agou,	
	3.40	2003	on the Naphthalene Ring	Toshio Kubota, Yohei Miwa, Shoichi Kutsumizu, Hiroaki Wasada, Kazumasa Funabiki	
	10:00	2004	Development of new nucleophilic fluorinating reagents using nucleophilic aromatic substitution	Yukiko Karuo, Minori Sakamoto, Taiga Oka, Atsushi Tarui, Kazuyuki Sato, Kentaro Kawai, Masaaki Omote	
	10:20	2005	Solubility-Control of Fluorescent Dyes by Strongly Acidic Groups	Shoki Hoshikawa, Yukiko Moriiwa, Akio Yanagida, Takashi Matsumoto,	
	10:40	2006	Containing Fluorine Atoms Synthesis of dormant species initiator by photo induced	Hikaru Yanai  Manami Uedo, Tadashi Kanbara, Tomoko Yajima	
			iodoperfluoroalkylation and application to controlled radical polymerization	3,000	
	11:00	2007	Preparation of Hydrophobic Surface of Polymers with High Dense Perfluoroalkyl Side Chains	Takuya Matsumoto, Eichi Kannan, Takashi Nishino	
	11:20	2S08	History of Fluorine Chemistry in the Early Days of Japan	Shun-ichi Kodama	
	12:00		Lunch B	reak	
	13:40	2015	Unique Interaction between Perfluoroalkane and Interface	Aki Fukumi, Takafumi Shimoaka, Nobutaka Shioya, Takeshi Hasegawa	
	14:00	2016	Organofluorine Compounds-Specific Molecular Structure and Interaction Discussed on Phase Transition Temperatures	Takafumi Shimoaka, Takeshi Hasegawa	
	14:20	2017	Corrosion analysis for JLF-1 steel, a structural material for a nuclear fusion device, in molten LiF-NaF-KF by electrochemical methods	Gaku Yamazaki, Yuta Suzuki, Takuya Goto, Takuya Nagasaka, Takashi Watanabe	
	14:40	2018	Effect of pore blocking on nitrogen adsorption behavior of fluorinated activated carbon fibers	Sugiyama Hironori, Hattori Yoshiyuki	
	15:00		Brea	k	
	15:20	2020	Investigation of electrochemical reaction of fluorine-graphite	Yoshiaki Matsuo, Junichi Inamoto, Atsushi Mineshige, Miwa	
			intercalation compound containing copper fluoride for the cathode of all-solid-state fluoride-ion shuttle battery.	Murakami, Kazuhiko Matsumoto, RIka Hagiwara	
	15:40	2021	Interaction of Fluoride Ion and Hydroxyl Proton in Alkali Metal Fluoride-Diol complex Salt	Yuto Tonouchi, Kazuhiko Matsumoto, Rika Hagiwara	
	16:00	2022	Synthesis of fluorine-containing helicenes	Masaki Kohara, Yuuki Tamura, Tomohiro Agou, Hiroki Fukumoto, Toshio Kubota	
	16:20	2023	Introduction of fluorine-containing functional groups into aza-	Ryouta Kawanishi, Lacksany Phongphane, Kosuke Nakada, Kazutaka	
			heterocyclic compounds by decarboxylative functionalization of carboxylic acid	Shibatomi	
	16:40	2024	Generation and Reaction of Fluorine-Substituted Methyllithium	Yusuke Takahashi, Marco Colella, Arianna Tota, Ryosuke Higuma,	
			Using Flow Microreactor	Renzo Luisi, Aiichiro Nagaki	

## Poster Presentations (Nov. 21)

	Tille	No.	Subject	Authors
nalytic	cal and	Envir	onmental Chemistry	
	16:10	P01	Efficient Mineralization of Poly(VDF-co-MAF) in Low-temperature Subcritical Water in the Presence of Potassium Permanganate	Ryo Honma, Hisao Hori, Sanjib Banerjee, Fernando Reis da Cunha, Bruno Ameduri
	17:10	P02	Permanganate-Induced Efficient Mineralization of Fluorinated Ionic Liquids in Subcritical Water	Satomi Oishi, Hiroki Kato, Ryuuta Kodama, Hisao Hori
	16:10	P03	Complete Mineralization of ETFE in Subcritical Water in the Presence of Potassium Permanganate	hamaurajin, takahashitoshiaki, horihisao
norgan	ic Che	mistry		
	17:10	P04	Synthesis of lithium transition-metal fluorides under ambient and high-pressure using solid fluorine sources	Moemi Oyanagi, Yoshiyuki Inaguma, Koichiro Ueda
	16:10		Effects of deoxofluorination of graphite oxide with sulfur tetrafluoride on its structure	Hiroki Yamamoto, Kazuhiko Matsumoto, Yoshiaki Matsuo, Yuta Sato, Rika Hagiwara
	17:10	P06	Stabilization of alkali metal fluorocomplex salt using organic ligand	Shunsuke Sawada, Yuki Haruki, Kazuhiko Matsumoto, Rika Hagiwara
	16:10	P07	Current efficiency of fluorine gas generation at room temperature using Cs[(FH)2.45F] room temperature molten salt containing CuF2	Keita Shima, Takuya Sugimoto, Kazuhiko Matsumoto, Rika Hagiwara
	17:10	P08	Thermoelectric Properties of π-Conjugated Nickel Complexes	Ueda Kazuki, Nana Toyama, Mika Oku, Masahiro Muraoka, Michihisa
	16:10	P09	Containing a Fluorocarbon Polymer  Synthesis of Nitrogen-Doped Graphite via Fluorination- Defluorination Process	Murata Minori Kokubo, Yoshinori Sato, Tetsuo Nishida, Yoshinori Sato
	17:10	P10	Effects of surface fluorination on the formation of Ni-BN composite	Yuta Shimpo, Masanari Namie, Yui Nishigaki, Jae-Ho Kim, Susumu
	16:10		plating film  Preparation and evaluation of copper fluoride powder with high	Yonezawa
	16.10	PII	oxidation resistance and high conductivity	Ryosuke Yokochi, Jae-Ho Kim, Susumu Yonezawa
	17:10	P12	Preparation of Ni-PTFE composite film with high water repellency and the effect of heat treatment	Yui Nishigaki, Yuta Shinpo, Jae-Ho Kim, Susumu Yonezawa
	16:10	P13	Preparation and evaluation of Li4Ti5O12 using titanium-containing aqueous solution	Ryota Honda, Hayato Suzuki, Jae-Ho Kim, Susumu Yonezawa
Organic	c Cher	nistry		
J	17:10		In-Situ Generation of Aryl Trifluoromethyl Ketones from Iodoarenes and Tandem Reduction Using the Dual Reactions of Turbo Grignard Reagent	Ryunosuke Kani, Toshiyasu Inuzuka, Yasuhiro Kubota, Kazumasa Funabiki
	16:10	P15	Catalytic Asymmetric Synthesis of Trifluoromethylated Tetraols Using Organocatalytic Asymmetric Aldol Reaction of Trifluoroacetaldehyde Hemiacetal	Toshiya Gotoh, Toshiyasu Inuzuka, Yasuhiro Kubota, Kazumasa Funabiki
	17:10	P16	Syntheses and Property of Hexafluorocyclopentane-Fussed Furans	Takeya Suzuki, Seiya Nemoto, Tomohiro Agou, Hiroki Fukumoto, Toshio Kubota
	16:10	P17	Facile synthesis of polyfluoro- $\alpha$ , $\omega$ -diynes and their [2+2+2] cycloaddition	Shogo Saruwatari, Tomohiro Shirai, Tomohiro Agou, Hiroki Fukumoto Toshio Kubota
	17:10	P18	Development of Copper-Catalyzed Trifluoromethylation of Haloalkenes	Sichen Yue, Kazuki Komoda, Tsuyuka Sugiishi, Hideki Amii
	16:10	P19	Synthesis of fluorine-containing pyrrole using trifluoromethylalkyne	Ebinuma Aki, Sugiishi Tsuyuka, Amii Hideki
	17:10	P20	Catalytic Trifluoromethylation by Use of Benzimidazoline Derivatives	Nanami Kamiyama, Taisuke Ishikawa, Tatsuhiro Uchikura, Takahiko Akiyama
	16:10	P21	Enantioselective Friedel-Crafts alkylation reaction of heterocyclic compounds with $\alpha$ - trifluoromethylated $\beta$ -nitrostyrenes catalyzed by chiral metal phosphate	Sosuke Yokohama, Mio Kaneko, Ignacio Ibanez Sanchez, Tatsuhiro Uchikura, Takahiko Akiyama
	17:10	P22	Synthesis of Polyvinyl Ethers Containing a Fluoroalkyl Group	Masaki Ueda, Yamada Shigeyuki, Kubota Toshio, Hukumoto Hiroki, Agou Tomohiro, Tsutomu Konno
	16:10	P23	Novel Introduction of Perfluoropolyether Unit into Aromatics	Machiko Kawazoe, Masaki Ueda, Shigeyuki Yamada, Tsutomu Konno Shinya Takano, and Takashi Nomura
	17:10	P24	Development of simple synthetic methods for unique organofluorine building block and the biological activity evaluation	Yoshitaka Nomura, Yasuhiro Hirata, Masashi Takahashi, Noriaki Miyake, Mihoko Noro, Yasuhisa Matsukawa, Yoshitomi Morizawa
	16:10	P25	Efficient synthesis of a wide range of fluorine-containing compounds utilizing highly selective reductive addition reaction	Makoto Matsuura, Yoshichika Kuroki, Yosuke Kishikawa, Shuhei Sumino, Misae Uno, Takahide Fukuyama, Ilhyong Ryu
	17:10	P26	Selective Synthesis of Cyclic Compounds with a Tetrafluoroethylene Group Based on Highly Controlled Cyclization Process	Suguru Morishitabara, Shigeyuki Yamada, Tsutomu Konno
	16:10	P27	Synthesis of HF Complexes Using Amines and Strong Organic Bases and Their Application to Anodic Benzylic Fluorination	Kaito Santa, Musashi Asano, Keiichi Muraoka, Toshiki Tajima
	17:10	P28	[3+2]cycloaddition reaction of 2-monofluoromethyl-N-tosyl aziridine with aldehydes	Keiichi Sato Takeshi Hanamoto
	16:10	P29	Cross-coupling reaction of (Z) -2-bromo-2-CF3-vinyl benzyl sulfide and its synthetic application	Genki Ikeda Takeshi Hanamoto
	17:10	P30	Ring-Opening Fluorination of an Epoxide Using Various HF Complexes	Keiichi Muraoka, Toshiki Tajima
	16:10	P31	Investigation of Addition of Cu–N, and Cu–S to Tetrafluoroethylene and Following Coupling Reaction	Denise Eimi Sunagawa, Naoyoshi Ishida, Masato Ohashi
ļ	17:10	P32	Fluorination of Boron Ketoiminates as an Aggregation-Induced Emission Fluorophore: Synthesis and Characterization	Kazuyuki Sato, Akira Kawasaki, Yukiko Karuo, Atsushi Tarui, Kentaro Kawai, Masaaki Omote
			Lillission i luolophore. Synthesis and Characterization	

Field	Time	No.	Subject	Authors	
	17:10	P34	CsF-Catalyzed Pentafluoroethylation of Aromatic Acyl Fluorides Using Tetrafluoroethylene	Naoyoshi Ishida, Denise Eimi Sunagawa, Masato Ohashi, Sensuke Ogoshi	
	16:10	P35	Synthesis of fluorinated polyxylylene analogues by reductive coupling polymerization using Ni (0)	Hideki Ito, Anna Shigaki, Takuya Tsuruta, Sensuke Ogoshi	
	17:10	P36	Development of Cascade-type aldol reaction using Krapcho Decarboxylation	Hiroshi Shimomura, Atsuhi Tarui, Yukiko Karuo, Kentaro, Kawai. Masaaki Omote	
	16:10	P37	Asymmetric Dearomatizing Fluorination of Indole Derivatives under Phase-Transfer Catalysis	Hiromichi Egami, Ryo Hotta, Minami Otsubo, Taiki Rouno, Kenji Yamashita, Tomoki Niwa, Yoshitaka Hamashima	
	17:10	P38	Synthesis of novel fluorine-containing amino acids and their application to cell penetrating peptides	Toshiki Mikami, Kohsuke Aikawa, Jumpei Morimoto, Shinsuke Sando, Kyoko Nozaki, Takashi Okazoe	
	16:10	P39	Construction of quaternary carbon centers containing a CF3 group by N-heterocyclic carbene-catalyzed 1,6-addition reactions of aldehydes to p-quinone methides generated in situ	Kyu Terashima, Tomoko Kawasaki-Takasuka, Takashi Yamazaki	
	17:10	P40	Cooperative action of cohesive force between perfluoroalkyl chains and H-bonding between dipeptide parts on the molecular aggregation of ammonium amphiphiles	Kousuke Fujimoto, Takafumi Shimoaka, Takeshi Hasegawa, Norihiro Yamada	
	16:10	P41	Formation of Helical Superstructure Induced by Axial Chirality of a Perfluoroalkyl Chain	Ami Fukushi, Kousuke Fujimoto, Takafumi Shimoaka, Takeshi Hasegawa, Norihiro Yamada	
	17:10	P42	Generation of Monofluoroalkyl Radicals using Strongly Reducing Organic Photoredox Catalyst: New Synthetic Methods of β- Fluoroketones	Ryo Taniguchi, Naoki Noto, Takashi Koike, Munetaka Akita	
	16:10	P43	Synthesis of Trifluoromethyl Group Substituted 1,3-Enynes by the Palladium-Catalyzed Alkynylation of 2,3,3-Trifluoroallylic Carbonates with Terminal Alkynes	Atsushi Mochizuki, Yuji Hoshino, Hiroaki Tsuji, Motoi Kawatsura	
	17:10	P44	Reactivity of persistent perfluoroalkyl radical	Azusa Sato, Maksym V. Ponomarenko, Taizo Ono, Alicja Wzorek, Midori Okada, Gerd-Volker Roeschenthaler, Vadim A. Soloshonok	
	16:10		Reactions of 4-bromo-4,4-difluorocrotonate with glycine imines	Yuko Nakamura, Modori Okada, Hikaru Yanai, Takeo Taguchi	
	17:10		Synthesis and Physical Properties of Fluorine-Substituted Mimics of Natural Chlorophyll-a	Kohei Nakano, Shin Ogasawara, Hitoshi Tamiaki	
	16:10	P47	Introduction Reaction of Fluorined Carboxyl Groups via Silver-Catalyzed Ligand Coupling of Diaryliodonium(III) Salts	Keina Komiyama, Kotaro Kikushima, Mina Saito, Yasuyuki Kita, Toshifumi Dohi	
	17:10	P48	Reactivity of Triflylated Carbanion: Selectivity in C–C Bond Forming Reaction with Vinyl Carbocation	Hikaru Yanai, Yuuki Fujimoto, Takashi Matsumoto, Irene Martn-Mejas, Cristina Aragoncillo, Pedro Almendros	
	16:10	P49	Electrochemical fluorination of π-extended Tellurophenes	Naoki Shida, Hiroki Nishiyama, Feng Zheng, Ikuyoshi Tomita, Shinsuke Inagi	
	17:10	P50	Chlorodifluoromethylation reaction using chlorodifluoroacetic anhydride	Yuma Aoki, Shintaro Kawamura, Cassandra J. Henderson, Daisuke Sekine, Shu Kobayashi, Mikiko Sodeoka	
	16:10	P51	Synthesis of Fluorinated Cyclic Ethers by Intramolecular Radical Cyclization Reaction	Ofuji Yu, Kanbara Tadashi, Yajima Tomoko	
	17:10	P52	Application of 14N-decoupled HOESY for 19F-mediated amide hydrogen bonds	Keiko Hasumi, Hiroaki Utsumi, Hiroaki Sasakawa	
Physic	hysical Chemistry, Materials Chemistry, Polymer Chemistry, Pharmacy				
	16:10	P53	Vibration Generator Characterization of Unimorph Cantilever Devices Using Piezoelectric Fluorinated Polymer Films	Yasuko Koshiba, Akiko Kobayashi, Shohei horike, Tatsuya Fukushima, Isaku Kanno, Kenji Ishida	
	17:10	P54	Effect of Fluorination of Pseudo-cyclic Ether Phospholipid on Membrane Properties and Structure and Function of Membrane Protein	Rui Kawahara, Toshiyuki Takagi, Hiroshi Takahashi, Takashi Kikukawa, Hideki Amii, Masashi Sonoyama	
	16:10	P55	Controlled Radical Copolymerization of α-Trifluoromethylstyrenes	Yuriko Ito, Tadashi Kanbara, Tomoko Yajima	
	17:10		Development of Novel Perfluoropolyether-containing Block Copolymers and Their Characteristics	Shota Shibutani, Kenji Adachi, Sadahito Aoshima	
	16:10		Mechanical Property and Skeletal Conformation in Crystalline Regions of Tetrafluoroethylene-Vinyl Alcohol Copolymers	Hitomu Mushiaki, Takuya Matsumoto, Takashi Nishino	
	17:10		Development of fluorinated polymer utilizing reactivity of trifluorovinyl group	Kazuto Yoshinari, Tomohiro Shirai, Tomohiro Agou, Hiroki Fukumoto, Toshio Kubota	
	16:10	P59	Evaluation of photophysical property for enediyne-type luminophores with hexafluorocyclopentene-based bent core	Shigeyuki Yamada, Akito Nishizawa, Tsutomu Konno	
	17:10	P60	, ,	Shigeyuki Yamada, Mitsuda Akira, Tsutomu Konno	
	16:10	P61	Effect of substitution pattern of fluorine-containing tolane on physical properties	Shigeyuki Yamada, Tsuyoshi Tanaka, Tsutomu Konno	
	17:10	P62	Influence of Center Alkylene Chain Length of Fluorine-Containing Dimer and Orientation Direction of Ester Group on Gelation Ability	Ryoichiro Yoshihara, Koutaro Kanetada, Yuki Morita, Hiroaki Okamoto	
	16:10	P63	Electroreductive Synthesis of Perfluoropolyphenylene Films and Their Structural Analysis	Keita Tomioka, Wataru Ito, Toshiki Tajima	
	17:10	P64	Post-functionalization of Octafluorobiphenyl-containing π- Conjugated Polymers Based on Nucleophilic Aromatic Substitution Reaction	Kazuyuki Ninomiya, Takanobu Nishikawa, Naoki Shida, Hiroki Nishiyama, Ikuyoshi Tomita, Shinsuke Inagi	
	16:10	P65	Electrochemical properties of gel electrolyte using fluorinated gelator	Takumi Sugiura, Junya Yamaguchi, Yuki Morita, Hiroaki Okamoto	
	17:10	P66	Influence of Fluoroalkyl Chain Length on Gelation Ability of Low Molecular Weight Organic Compounds Having Fluorine Substituent at Both Terminal Position	Daiki Mizobe, Yuki Murata, Yuki Morita, Hiroaki Okamoto	