ACS NEWS

The biannual newsletter for the American Chemical Society Division of Fluorine Chemistry

MESSAGE FROM THE CHAIR

OLGA BOLTALINA

Warm greetings from Fort Collins on the foothills of Rocky Mountains, Colorado, USA! The summer has come and gone quickly, and we resumed nearly normal travels, for pleasure and professionally. Many of the Division members traveled to Berlin in August to attend the European Symposium on Fluorine Chemistry organized by our friends from the two powerhouses - Humboldt University and Free University. As a community, we continue to be deeply concerned about our brave colleagues in Ukraine whose suffering and hardships caused by the Russian aggression are beyond imaginable. Sadly, this fall our Fluorine Chemistry community has lost one of its active members, Prof. Helge Willner, who will be remembered by many as a very kind friend, colleague and an excellent teacher.

This year, we received a record number of nominations of outstanding candidates for the ACS's Division of Fluorine Chemistry Doctoral Thesis Award. It has been very difficult to make a selection from this cohort of excellent young researchers in fluorine chemistry. We are proud of the achievements of all nominees and wish them all brilliant careers in their professional lives. The **2022 Recipient of the ACS Division of Fluorine Chemistry Doctoral Thesis Award is Scott Schrieber**, who obtained his Ph.D. from Lehigh University, USA, under the supervision of Prof. David Vicic.

I want to congratulate **Dr. Slava Petrov from Chemours Co. for receiving the 2023 ACS Award for Creative Work in Fluorine Chemistry**, sponsored by the Division of Fluorine Chemistry. Slava has made outstanding contributions to industrial organofluorine chemistry and has been extremely productive during his stellar career in industry. Congratulations for this well-deserved ACS award!

Elections to the Executive Committee of the ACS Division of Fluorine Chemistry are coming up and we have many candidates who agreed to stand for election. Several candidates were 'nominations from the floor' after our call via e-mail. It is wonderful to see so many people willing to become more engaged in our Division. Please find the bios of all the candidates in this Newsletter.

Please remember our upcoming Winter Fluorine Conference in January 2023. **David Vicic** (Conference Chair) and **Thomas Mathew** (Co-Chair) are working on the organization of our Division's flagship meeting, the **26th Winter Fluorine Conference** held in Clearwater Beach, Florida from January 8-13, 2023. Registration is open now with discounted early registration ending on Oct 31, 2022.

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VICE-CHAIR MEMBERSHIP REPORT

AS OF AUGUST 2022, THE DIVISION OF FLUORINE CHEMISTRY OF THE ACS HAD 428 MEMBERS. THE BREAKDOWN IS AS FOLLOWS:

GROUP	COUNT	%
Regular Member	297	69.39
Regular Student Member	27	6.31
Student Member – UnderGrad	10	2.34
Emeritus Member	51	11.92
Retired Member	15	3.50
Division Affiliates	10	2.34
Society Affiliate	16	3.74
Community Associates	2	0.47
TOTAL	**428**	**100**

Please join me in welcoming the newest members to our Division: Dominique Adams, Sanberk A. Atalay, Nicholas D. Ball, Adrian Beach, Alli M. Berry, Nikki Biber, Anthony Birri, David Brennan, Matthew Coe, Paige Coleman, Onofre T. De Jesus, Mario Djugovski, Rebecca J. Dooley, Louis Eagleton, Richard Esteves, Kyle Felling, Erica Fisher, James Folkert, Tatsuo Fukushi, Wei Gong, Anuradha Gupta, Khanh Ha, Andrew Howe, Cassie Hopkins, Yiqin Hu, Raana Kashfi Sadabad, Djene Keita, Tim Kemp, David Kempisty, Erin M. Kennedy, James Knoop, Ja-Young Koo,

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MESSAGE FROM THE **CHAIR** *Continued from p. 1*

Please visit the conference website for more information: winterfluorineconference.com. We will celebrate advances in fluorine research and will honor our award winners at this conference.

The Division will continue its sponsorship of undergraduate research by awarding two **Moissan Summer Undergraduate Research Fellowships** (SURF) of $5000 each. The deadline for next year's Moissan SURFs will be January 31, 2023. Please send your proposals to Thomas Mathew (tmathew@usc.edu) the Division Chair for 2023. Instructions for the submission of applications can be found at the end of this Newsletter.

The newly established ACS Division of Fluorine Chemistry Undergraduate Research Award will be awarded for the first time this year, the deadline for nominations is October 31, 2022.

Finally, I would like to invite all of you to attend the Division's second virtual Tutorial week "Pioneers of Modern Fluorine Chemistry", the first part of which will be held on November 14-18th 2022. We appreciate all distinguished speakers who accepted our invitation and Andrej Matsnev and Daniel Hercules for organizing this exciting event, detail is given below.

My service for the ACS Division of Fluorine Chemistry as its Chair in 2022 has been filled with a lot of memorable events and interactions with Division members, which I will cherish in the years to come. The unwavering support by the members of the Executive committee has been simply incredible. All EC members have greatly contributed to moving our Division forward with new initiatives, and doing everything to maintain the traditions of the collegial and friendly spirit of the community of international fluorine chemists. We are committed to continue nurturing our young generations of fluorine chemists, and attracting new members of the Division. I will appreciate you reaching out to me directly with your ideas, comments, questions or concerns (olga.boltalina@colostate.edu). ■

—Olga Boltalina
2022 ACS Division of Fluorine Chemistry Chair

VICE-CHAIR
MEMBERSHIP REPORT *Continued from p. 1*

MARKUS ETZKORN

Manish Kumar, Kristi Lucht, Marc Mason, Nathan Mirr, Ashwini Mohapata, Carla Ng, Sammy Njane, Kale, Oglesby, Mary C. Okorie, Martin Rahm, Elliot Richman, Nathalie Rowlinson, Farbod Salahi, Melanie Schubert, Christopher Scott, Hyoseop Shin, Dean Stamos, Siqi Sun, Ryan Svendsen, Masako Takatsu, Hao Wang, Flornce Williams, Lydia Yorks, Heling Zhou.

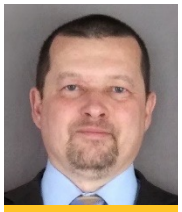
I encourage our new student members to take advantage of the Division's many opportunities to grow professionally and to network, as you hopefully will remain part of our community throughout their future careers.

Our Division is composed of members that make outstanding contributions in many areas of fluorine chemistry, and we remain the principal international organization of fluorine chemists around the world. The Division of Fluorine Chemistry continues to keep a membership profile with 74% of its members within the USA and 26% from abroad.

Our membership development, particularly with respect to regular members has dropped again; with currently 428 members, the membership of the Division of Fluorine Chemistry has decreased by almost 40 members since the last newsletter report. It is critical for our division to act immediately and decisively, as we need to revert the ongoing decline in membership. I want to encourage all current members to talk to colleagues who work in fluorine chemistry, particularly those at your institution, to join the Division of Fluorine Chemistry and become part of our welcoming, collegial, and close-knit community. In addition, I hope you can convince students or postdoctoral fellows in your groups to join the Division, as the new generation of fluorine chemists. The form and instructions to join our Division can be found at: https://www.acs.org/content/acs/en/membership-and-networks/join.html.

Please note, as a regular member of the Division one has to be a member of the ACS. Non-members of the ACS can become affiliate members of the Division. If you have any questions or suggestions of activities that will expand our membership, please feel free to contact me. ■

VICE-CHAIR **PROGRAM REPORT**



ANDREJ V. MATSNEV

Past Symposia and Conferences (Winter 2022–Fall 2022)

The Fluorine Division held the 25th Winter Fluorine Conference in Clearwater, FL on January 16–21 2022. The conference Chair Viacheslav (Slava) Petrov and the Co-Chair David Vicic attracted an outstanding cohort of fluorine chemists from the U.S. and other countries. This was the first in-person meeting of the Fluorine Division in several years due to COVID pandemics. The Organizers of the Conference successively overcame all obstacles and difficulties and ran a very successful Conference with excellent scientific program. Technical programming areas included: Organic and Bioorganic Fluorine Chemistry, Inorganic Fluorine Chemistry, General Fluorine Chemistry, Industrial Fluorine Chemistry and Physical Fluorine Chemistry.

The *20th European Symposium on Fluorine Chemistry* (20th ESFC) took place on August 14–19, 2022 in Berlin, Germany. https://esfc2022.de/

The Fluorine Division held a Symposium "*Synthetic methods in Fluorine Chemistry*" at the *Fall 2022 ACS National Meeting*. This Symposium was 100% virtual and was held on August 22-24, 2022. Seventeen speakers participated in this event with excellent presentations related to different aspects of synthetic fluoroorganic and material chemistry. Many thanks to Thomas Lectka, Norio Shibata and Jinbo Hu for great work on organizing, scheduling, and conducting this virtual meeting.

Planned Fluorine Symposia in 2022/23:

The *26th Winter Fluorine Conference (WFC)* will take place on January 8–13, 2023 in Clearwater, Florida at the Hyatt Regency Clearwater Beach Resort and Spa. https://winterfluorineconference.com/ Please visit the WFC website for important updates often. The WFC is a great venue for establishing new connections, learning about recent advancements in the field, asking questions and engage in discussions with experts in the fluorine chemistry from both industry and academia.

The *23rd International Symposium on Fluorine Chemistry (23rd ISFC)* will be held in conjunction with the 9th International Symposium on Fluorous Technologies (ISoFT'23) conference will take place on July 23–28, 2023 in Québec City, Canada. www.isfc2023.org

Second Tutorial Week

More than 200 people attended the First Virtual Tutorial Week. Our Division is planning to live-stream a second series of tutorial lectures for the Division members titled "Pioneers of Modern Fluorine Chemistry", on November 14th-18th 2022. Detailed schedule will be communicated via email. ■

DIVISION COUNCILOR REPORT

AMERICAN CHEMICAL SOCIETY FALL 2022 HYBRID COUNCIL MEETING IN CHICAGO, ILLINOIS, AUG. 24, 2022

DAVID A. DIXON

> The Council elected Raychelle Burks, Anne M. Gaffney, Will E. Lynch, and Frankie K. Wood-Black for a three-year term (2023-2025) on the Council Policy Committee (CPC). Lydia E.M. Hines was elected to serve through 2023.

> The Council elected William F. Carroll, Jr., Ella L. Davis, Carmen Gauthier, Thomas H. Lane, and Jason E. Ritchie for a three-year term (2023-2025) on the Committee on Committees (ConC).

> The Council elected Michelle V. Buchanan, Alan B. Cooper, Kelly M. Elkins, Ellene Tratras Contis, and Kathryn E. Uhrich for a three-year term (2023-2025) on the Committee on Nominations and Elections (N&E).

> The Vice Chair of the Council Policy Committee (CPC) reported that both Council meetings in 2023 will be held in a hybrid manner, very similar to what Councilors experienced in Chicago.

> On the recommendation of the Committee on Nominations and Elections (N&E), and with the concurrence of the Council Policy Committee, Council approved the Petition to Amend the Elections Function. This action helps to clarify, consolidate and re-order existing requirements related to nominations and elections.

> On the recommendation of the Committee on Divisional Activities (DAC), and with the concurrence of the Council Policy Committee, Council approved the Petition to Amend the Duties of the Committee on Divisional Activities, providing greater authority to step in and assist Divisions who have inactive Executive Committees.

> On the recommendation of the Committee on Local Section Activities (LSAC), and with the concurrence of the Council Policy Committee, Council approved the Petition for a change in Section Name from the Northeast Tennessee Section to the Tennessee-Virginia Highlands Local Section.

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> On the recommendation of the Committee on Membership Affairs (MAC), and with the concurrence of the Council Policy Committee, Council approved the Petition to Amend the Application and Dues Process for Corporation Associates, allowing Corporation Associates to set fees based on a sales revenue model.

> CEO Thomas Connelly announced his retirement in May and the Board discussed the search for the next CEO. Executive search firm Korn Ferry International is assisting with the search. They are reaching out to an extensive network of organizations and individuals to solicit recommendations and applications from diverse, highly qualified individuals. The search is now underway with the goal of identifying candidates, interviewing them and selecting our next CEO with a targeted start date of January 1, 2023.

ACS Dues and Membership

DUES CATEGORY	MEMBERSHIP TYPE	PREMIUM	STANDARD	BASIC
Emeritus	MEMBER	$0		
Retired	MEMBER	$80		
Regular	MEMBER	$160	$80	
Graduate	MEMBER	$55		
Undergraduate	STUDENT MEMBER	$25		
Society Affiliate	SOCIETY AFFILIATE	$160		
Community Associate	COMMUNITY ASSOCIATE			$0

Member Termination Process *Revised April 1, 2022*

> 60 days after membership expire date Member/Society Affiliate transitioned to Community Associate/Basic Package status

> Can maintain status upon showing activity/interaction up to 3 years

- If no activity in that time, terminated from rolls
- Can opt out by contacting ACS (no questions asked)

> Better experience for Members

- Restores limited set of benefits
- Upgrading is easy and provides a clean 12-month term (no back dues payment)
- Ensures ACS can remain in contact with previously-recruited, loyal individuals
- Individuals can stay involved in ACS even if their lives change
- Very positive feedback to date

Finances

> First half 2022 financial results are ahead of budget

- Information Services revenues modestly outpace budget
- Continuing COVID impacts have kept expenses below budget

> Unrestricted net assets sit just below $600M

June 30, 2022 Finances

> Net from Operations $44.4M
- $9.5M lower than 2021 Actual

> Total Revenues $352.5M
- $28.1M (8.7%) higher than 2021 Actual

> Total Expenses $308.2M
- $37.6M (13.9%) higher than 2021 Actual ■

FOLLOW US ON TWITTER!

AN EASY WAY TO DISCOVER THE LATEST NEWS RELATED TO THE ACS DIVISION OF FLUORINE CHEMISTRY IS TO FOLLOW OUR TWITTER ACCOUNT LOCATED HERE: TWITTER.COM/FLUORINECHEM.

BOB SYVRET

The Division's total assets have decreased approximately **14.1%** over the course of the 12-month period ending September 16, 2022. This decrease is due largely to the reduction in long term investment account value that has occurred during the past 12 months (but mostly within 2022).

ASSETS *(actual as of September 16, 2022)*

	($) as of September 11, 2021	*($) as of September 16, 2022*
Wells Fargo Bank Account	$19,790	$31,707
Long-term Investment Accounts	$214,885	169,826
TOTAL ASSETS	$234,675	$201,533
Percent Change		-14.1%

2022 FINANCIAL HIGHLIGHTS:

> In 2022 the Division provided 2 Moissan Summer Undergraduate Research Fellowships in the amount of **$5,000** each to Professor Socrates Munoz at Kansas State University, Manhattan, Kansas and Professor Jean-Denys Hamel at the University of Lethbridge, Lethbridge, Alberta.

> The Division provided **$2,500** to the SERMACS Conference that was held in Birmingham, AL. November 10-13, 2021.

> The Division provided $8,000 for two symposia (18F and Inorganic Fluorine) that were held at the Pacific Basin Conference (Pacifichem) in December 2021.

> The Division provided **$3,011** to cover immediate expenses for the 25th WFC held in January, 2022

OUTLOOK FOR 2023:

> The Division will cover the remaining expenses from the **25th WFC** held in January, 2022. Estimated outstanding balance is **$30,000**.

> The Division will provide any necessary funding to support the **26th Winter Fluorine Conference** to be held in January 2023.

> The Division will provide **2 Moissan SURF @ $5,000 each** in 2023.

> The Division will sponsor the **2023 ACS Award for Creative Work in Fluorine Chemistry** at a cost of **$17,000**. ■

THE INVITATION TO VOTE ELECTRONICALLY FOR OFFICES OF THE DIVISION OF FLUORINE CHEMISTRY WILL BE SENT BY EMAIL.

See candidate data, pp 9-11.

(SPONSORED BY THE ACS DIVISION OF FLUORINE CHEMISTRY)

2023 ACS AWARD FOR CREATIVE WORK IN FLUORINE CHEMISTRY

DR. VIACHESLAV (SLAVA) PETROV, The Chemours Co., was selected as the recepient of ACS 2023 National Award for Creative Work in Fluorine Chemistry.

Dr. Viacheslav Petrov started his professional carrier in at 1978 as Research Associate in the Institute of Organo-Element Compounds (INEOS) Academy of Science USSR, Moscow, USSR, in the Laboratory of Organofluorine Compounds, which was headed by academician I. L. Knunyants and later by Professor L. S. German. He received his Ph. D in organic chemistry from INEOS in 1983. In 1989 he joined the group of Professor D. DesMarteau at the Chemistry Department of Clemson University, where he spent over two years, before he joined DuPont Co. as a visiting research scientist 1992. In 1994 he was hired by DuPont Central Research and Development (Wilmington, DE), where he spent over twenty years. After spinoff the Fluoro Business by DuPont Viacheslav moved to the Chemours Co. in 2015, where he currently holds a position of Research Fellow in the TSS Division.

His research interests are focused on synthetic methodologies for the preparation of polyfluorinated materials such as polyfluorinated functionalized olefins, imidoyl fluorides, small heterocycles (oxaziridines, aziridines, epoxides and oxetanes) and polyfluorinated monomers and sulfur containing heterocycles. Dr. Petrov is author and co-author of over 130 papers, 5 review articles, one book and over seventy US patents.

Currently he serves as a member of the Editorial Board of the Journal of Fluorine Chemistry. In 1998 he received the Harry Emeleus Prize for Creativity in Fluorine Chemistry by the Elsevier Science, in 2016 Dr. Petrov was awarded the Distinguish Service Award by the Division of Fluorine Chemistry of ACS, in 2017 he became ACS Fellow.

ACS DIVISION OF FLUORINE CHEMISTRY DOCTORAL THESIS AWARD

DR. SCOTT T. SHREIBER, who conducted his doctoral studies at the Department of Chemistry, Lehigh University, Pennsylvania, USA has been selected for the ACS Division of Fluorine Chemistry Doctoral Thesis Award in 2021.

Advisor: Prof. Dr. David Vicic

Scott began his academic journey at Lock Haven University where he earned his B.S. *summa cum laude* in Chemistry in 2018. Concurrently, he worked at Avery Dennison Performance Polymers on new pressure sensitive adhesives. During his undergraduate studies in 2017, Scott was selected to participate in an NSF REU at Montana State University, working with Prof. Sharon Neufeldt, where he received his first taste of organometallic chemistry. In the summer of 2018, he started his graduate career at Lehigh University and joined the laboratory of Prof. David Vicic. His graduate work focused on the fundamental chemistry of new fluoroalkyl copper, cobalt, and nickel complexes with the goal of developing new fluoroalkyaltion strategies. Scott defended and earned his Ph.D. in the spring of 2022, and during his four years at Lehigh, published 8 first-author papers. Scott now works as a Postdoctoral Research Associate at the University of Pennsylvania, developing new synthetic methodologies. ■

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PIONEERS OF MODERN FLUORINE CHEMISTRY," (PART 1)

TUTORIAL SERIES II: PIONEERS OF MODERN FLUORINE CHEMISTRY"

The live-streamed series of tutorial lectures **"Pioneers of Modern Fluorine Chemistry"**, (Part 1) will take place **November 14-18, 2022**. Please mark your calendars and inform your students and coworkers, and other members of the FLUO Division.

While in-person scientific meetings have recently resumed for our professional community, the benefits of the virtual events have proven to become valuable means of scientific exchange, communication, and knowledge.

During this Tutorial Week you will have an opportunity to attend lectures and participate in live Q&A sessions with some of the most prominent scientists who pioneered research in many diverse fields of Fluorine Science:

Speakers: Karl Christe, Andrew Feiring, David Lemal, Paul Resnick, Shlomo Rosen, Bruce Smart, and Alain Tressaud.

You will find the exact program and detailed schedule of the tutorial lectures on our division website soon.

CLICK HERE TO LEARN MORE > https://communities.acs.org/t5/Fluorine-Chemistry-Division/2022-Tutorial-Series-II-Pioneers-of-Modern-Fluorine-Chemistry/ta-p/87674

We look forward to your participation in this exciting event!

Andrej Matsnev, Program Chair | Daniel Hercules, EC member, Webmaster | Olga Boltalina, FLUO Division Chair

ACS DIVISION OF FLUORINE CHEMISTRY 26TH WINTER FLUORINE CONFERENCE

Preparations for 26th Winter Fluorine Conference (that will take place at Hyatt Regency Clearwater Beach Resort, Clearwater, FL, January 8-13, 2023) is well underway! Abstract submission is closed, **but registrations are open until the start of the conference and we encourage everyone to attend**. Organizers of the conference would like to remind you to reserve your room at **Hyatt Regency** as early as possible. Additional details on registration and hotel reservation can be found at 26th WFC website: winterfluorineconference.com. Please do not hesitate to contact the conference organizers in case if you have questions or need additional information.

Technical programming areas will include:

- Organic and Bioorganic Fluorine Chemistry • Inorganic Fluorine Chemistry • General Fluorine Chemistry
- Industrial Fluorine Chemistry • Physical Fluorine Chemistry

We are looking forward to seeing all of you in Florida next year.

Conference Organizers:

DAVID VICIC
Co-Chair of 25th Winter Fluorine Conference
H. S. Bunn Distinguished Professor
Department of Chemistry, Lehigh University
6 E. Packer Ave.
Bethlehem, PA 18015
Tel: 610-758-3466
vicic@lehigh.edu

THOMAS MATHEW
Co-Chair of 25th Winter Fluorine Conference
Loker Hydrocarbon Research Institute
University of Southern California
Los Angeles, CA 90089-1661
Tel: 714-469-3806
tmathew@usc.edu

2023 MOISSAN SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP IN FLUORINE CHEMISTRY

THE AMERICAN CHEMICAL SOCIETY, DIVISION OF FLUORINE CHEMISTRY is committed to continuing its sponsorship of undergraduate research and actively encourages the submission of appropriate proposals for research to be conducted during the summer of 2023. This program is intended to encourage an interest in fluorine chemistry among prospective graduate students. The program will provide funds for a student's summer salary and will be awarded directly to faculty members conducting research in any area of fluorine chemistry at colleges or universities on the basis of competitively judged applications. The awards for 2023 are currently $5,000 for a ten-week program. In addition, a limited stipend of up to $500 will be available for the student to present his/her research results at an ACS sponsored meeting. Research expenses in connection with this program will be the responsibility of the faculty member or his/her department or institution. The number of awards to be made will be dependent upon the funds available. Applications for funding under this program may be submitted by a faculty member conducting research in fluorine chemistry. The application should be no longer than five pages and should outline the specific research to be undertaken by the student, should present reasons for anticipating progress by the student during the allotted time, and should suggest how the program might encourage the student to pursue graduate work in fluorine chemistry. All applications must state that the faculty member has adequate facilities and sufficient additional funds to cover research expenses for the proposed research program and must be signed by the applicant. In addition, the faculty member has to be a member or affiliate of the Fluorine Division. To be considered for an award in 2023, the Division Chair must receive an application by January 31, 2023. The electronic submission should be in the form of a PDF document and sent to Dr. Thomas Mathew (tmathew@usc.edu).

The electronic submission should be in the form of a PDF document and sent to Dr. Thomas Mathew (tmathew@usc.edu).

No more than one award will be provided to an individual applicant per year. Applications for funding under this program will be judged by a committee consisting of the Division Chair, one academic member and one industrial member of the Division of Fluorine Chemistry and one member-at-large of the Fluorine Division. The awards for 2023 will be announced in the Spring 2023 Newsletter of the Division and the award recipients will be notified prior to this by e-mail or telephone. It is anticipated that students in this program will have completed the equivalent of three years of a chemistry major's program, although outstanding students with less academic experience can also be considered. Faculty members will be urged to consider students from institutions other than their own and especially from schools that provide limited opportunities for undergraduate research. However, the selection of a student for participation in this program will be at the sole discretion of the faculty member. The selection process should be completed by March 1, 2023. Brief reports (two to three pages) to the Division Chair are expected from the faculty member and student by October 1, 2023. The faculty report should include a summary of technical accomplishments, skills realized by the student, perceived interest by the student in graduate work, and the perceived success or failure of this program in encouraging interest in fluorine chemistry by the student. The student report should include a summary of technical accomplishments and an evaluation of the influence of the award program in his/her decision to consider graduate work in chemistry or fluorine chemistry. ■

EXECUTIVE COMMITTEE

(Three-year term, 2023-2025)

COUNCILOR

DAVID A. DIXON was born in Houston Texas on Dec. 3, 1949. He received a B.S. in chemistry from Caltech in 1971 where he did undergraduate research in x-ray crystallography and ion cyclotron resonance spectroscopy. He received a PhD from Harvard in physical chemistry in 1976 where he worked on molecular orbital theory with Prof. William Lipscomb and crossed molecular beam chemistry with Prof. Dudley Herschbach. He has been the Robert Ramsay Chair the Department of Chemistry at The University of Alabama (UA) since April 2004. The overall goal of the work in his research group is to develop computational chemistry approaches on advanced computer systems and then apply them to address a range of important national problems with a focus on energy and the environment. Important research areas include fluorine chemistry across the Periodic Table, main group chemistry, heterogeneous and homogeneous catalysis including acid gas chemistry, geochemistry and mineral surfaces, biochemistry of peptides for anion-based proteomics, and heavy element chemistry for environmental cleanup and advanced nuclear fuel cycles. He has more than 800 peer-reviewed publications with an H-index = 100. Prior to moving to UA, he was Associate Director for Theory, Modeling, & Simulation in the William R. Wiley Environmental Molecular Science Laboratory at the Pacific Northwest National Laboratory from 1995 to 2002 and a Battelle Fellow from 2002-2003. He was the leader of the Molecular Sciences Computing Facility in the EMSL as well as computational chemistry and biology groups. His research at PNNL involved using computational methods to solve environmental problems facing the Department of Energy nuclear weapons production complex. Prior to PNNL, he spent 12 years at DuPont's Central Research focusing on hydrofluorocarbons and other fluorinated compounds as chlorofluorocarbon replacements, fluoropolymers, catalysis, metal oxides, and main group chemistry in support of the Company's different businesses. He has received a number of awards including: Junior Fellowship at Harvard, Sloan Fellowship, Dreyfus Teacher-Scholar, 1989 Leo Hendrik Baekeland Award of the ACS, 2000 Federal Laboratory Consortium Technology Transfer Award, 2003 ACS Award for Creative Work in Fluorine Chemistry, 2010 DOE Hydrogen Program R&D Award, 2011 Burnum Award (UA), 2012 SEC Faculty Achievement Award (UA), 2015 ACS Division of Fluorine Chemistry Distinguished Service Award, 2018 Blackmon Moody Award (UA), and 2019 President's Faculty Research Award, Senior Level, STEM (UA). He is a Fellow of the ACS, the American Association for the Advancement of Science, the American Physical Society, and the European Academy of Sciences. He was just names to the ARCS Alumni Hall of Fame in 2022. He has been the Councilor for the ACS Division of Fluorine Chemistry since 2013 and is currently on the ACS Joint Board-Council Committee on Publications, representing the Division and its members. He is a strong advocate for the Division and its members to the ACS as well as for the importance of fluorine chemistry in the chemical enterprise.

ALTERNATE COUNCILOR

JOSEPH S. THRASHER is currently Professor of Chemistry at Clemson University. After receiving his B.S. degree in Chemistry in 1978, he remained at Virginia Tech for his Ph.D. studies in Inorganic Chemistry under the direction of Alan F. Clifford. Upon completion of his Ph.D. in 1981, he took a postdoctoral position with Konrad Seppelt at the Freie Universität Berlin. During the 1983-84 academic year, he was a Visiting Assistant Professor at Clemson University where he both taught and carried out research with Darryl D. DesMarteau. He then started his independent career at The University of Alabama where he rose through the academic ranks (1984-2011), including serving as Director of Graduate Studies (1995-2002) and Department Chair (2002-2007). In the summer of 2011, Dr. Thrasher returned to Clemson University to both overlap with and then follow Prof. DesMarteau in the area of fluorine chemistry. His current research interests are in the areas of halogen bonding and fluoropolymer chemistry. He has been very active in the American Chemical Society (ACS), especially in the Division of Fluorine Chemistry, where he has served in a number of offices, including Chair in 1994 as well as serving on the Executive Committee numerous times. He has also organized a number of symposia and conferences, including having been co-chair of two ACS Winter Fluorine Conferences (1993 and 1995) and was the lead-organizing chair of the 19th International Symposium on Fluorine Chemistry (ISFC) held in Jackson Hole, WY in 2009. He was the recipient of the Division's Distinguished Service Award in 2013. In 2016, he became Regional Editor for the Americas and India of the *Journal of Fluorine Chemistry* and was selected as an ACS Fellow. He has served as Alternate Councilor of Division since 2013.

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VICE-CHAIR/SECRETARY

THOMAS LECTKA is the Jean and Norman Scowe Professor of Chemistry at Johns Hopkins. A native of Detroit, Michigan, he received his B.A. from Oberlin College in 1985 and Ph.D. from Cornell University in 1990. In 1991 he was an Alexander von Humboldt Fellow at the University of Heidelberg in Germany, and from 1992-1994 he was an NIH Postdoctoral Fellow at Harvard University. Prof. Lectka joined the Hopkins faculty in 1994 as an assistant professor in the Department of Chemistry and was promoted to professor in 2002. During his time at Hopkins, he has received fellowships from the Guggenheim, Sloan and Dreyfus foundations among others, and was Maryland ACS Chemist of the Year in 2017; he won a Dean's Award for teaching in 2018. He has won industrial awards from Eli Lilly, du Pont, and Merck, as well as NSF Career and NIH First awards. He was also the Western Hemisphere editor of *Tetrahedron Reports* from 2007-2011. Among his most notable scientific contributions in fluorine chemistry (60 publications out of 136 total) are the discovery of metal-catalyzed amide/peptide isomerization using fluorine-based probes; catalytic, asymmetric a-fluorination of enolates; metal-catalyzed alkane fluorination; directed, diastereoselective radical-based hydrogen atom transfer/fluorination reactions; and the first example of symmetrical C-F-C fluoronium ions in solution and the solid state. He is deeply invested in investigating the close interactions of C-F bonds with organic functional groups and their relevance to medicinal chemistry as well. Prof. Lectka has served on the executive council of the ACS Fluorine Division for the past two years, participating in the organization of the 2022 Chicago ACS Fluorine Symposium and the establishment of an ACS award for undergraduates in fluorine chemistry. Finally, he is a dedicated advocate of the participation of undergraduates in research, and boasts more than 40 undergraduate co-authors.

MEMBER-AT-LARGE: EARLY CAREER CHEMISTS

FANG WANG obtained his B.Sc. in 2006 from Zhejiang University. There, he conducted research in the field of synthetic organic chemistry with Prof. Ping Lu. He was also a visiting undergraduate student in Prof. Jinbo Hu's group at the Shanghai Institute of Organic Chemistry, where he became fascinated by organofluorine chemistry. He pursued graduate studies with Prof. G. K. Surya Prakash and Prof. George A. Olah at the University of Southern California. His doctoral research centered on developing versatile fluoroalkylating reagents and investigating key reaction intermediates in fluoroalkylation processes, including the trifluoromethyl anion. After obtaining his Ph.D. in 2012, he joined Prof. Stephen J. Lippard's laboratory at MIT. He developed fluorine-containing fluorescent sensors for detecting mobile zinc in live biological samples and studied the difluoromethyl group as a hydrogen bond donor. In addition to exploring the use of fluorine in biologically related research, he also designed platinum complexes exhibiting remarkable activity against chemoresistant cancer. Since 2020, he has been an assistant professor of chemistry at the University of Rhode Island. His current research entails the development of new functional fluorinated molecules to study sulfur-containing biomacromolecules. He is the author of 38 peer-reviewed journal articles, five book chapters, and holds two US patents. He has been an active member of the fluorine community and received student awards from fluorine chemistry conferences, including the Best Poster Award of the 22nd International Symposium on Fluorine Chemistry and the 19th Winter Fluorine Chemistry Student Travel Award. As an early-career chemist of the Division of Fluorine Chemistry, he is committed to training young scientists to answer critical questions in biology using chemical approaches, particularly fluorinated molecular tools.

CODY ROSS PITTS had his humble beginning in the Brass City - Waterbury, CT - and spent many years working intermittently as an actor. He later obtained a B.S. in Chemistry with minors in Physics and Musical Theatre from the Monmouth University Honors School in New Jersey, where he was inspired by Prof. Massimiliano Lamberto to pursue a career in organic chemistry. In 2012, he joined the laboratory of Prof. Thomas Lectka at Johns Hopkins University in Baltimore, MD. His graduate research was primarily centered on developing mild "radical fluorination" reactions and studying their mechanisms in excruciating detail. Additionally, he sought opportunities to gain more experience in the realm of physical organic chemistry, e.g., by obtaining direct, spectroscopic evidence of the elusive fluoronium ion. After completing his Ph.D. work in 2017, Cody moved his life to Switzerland to conduct research in the laboratory of Prof. Antonio Togni at ETH Zürich as an ETH Postdoctoral Fellow. There, he developed user-friendly oxidative fluorination reactions, originally with the aim of making the SF5 group more accessible; this work ultimately led to an unanticipated, prolific 2-year stint of exploratory inorganic fluorine chemistry. In 2019, he then transplanted to sunny San Diego, CA, to pursue research in natural product synthesis in the laboratory of Prof. Phil S.

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Baran at the Scripps Research Institute as an NIH Postdoctoral Fellow. And, in the middle of a global pandemic (summer 2021), he was thrilled to have landed a position as an Assistant Professor at the University of California, Davis. During the first year of his career, Cody built his laboratory to be "experiment-ready" after only 30 days (with the help of extremely motivated students), has taken on a total of 12 mentees (graduate, undergraduate, and high school levels), has published 3 manuscripts in *Angewandte Chemie* on topics related to polyfluorinated heteroatoms (including the SF_5 group), has presented at 2 international conferences, and has been able to continue his passion for research in the realm of fluorine chemistry at the nexus of method development, reagent design, and synthesis. Cody feels honored to be considered for the position of Member-At-Large.

JESSICA DEMOTT is currently a Research Scientist for Arkema Inc. in King of Prussia, PA. She received her PhD in organometallic chemistry from Texas A&M University in 2015 then joined the PhD Leadership Development Program at BASF where she contributed to new product development, innovation management and emerging technologies. In 2018, Jessica joined Arkema's Fluorochemicals R&D team with a focus on new product and application development.

MEMBER-AT-LARGE: SENIOR CHEMISTS

MICHAEL GERKEN received his Dipl. Chem. degree from the Gerhard Mercator University in Duisburg, Germany in 1995. He completed his Diploma thesis with Prof. Wiebren Veeman on ^{129}Xe NMR spectroscopy of xenon gas absorbed in microporous solids. During his graduate studies in Duisburg, Michael went to McMaster University for one year on an exchange to do research with Prof. Gary J. Schrobilgen on Zintl-anion chemistry. Michael returned to McMaster in 1995 to pursue Ph.D. studies with Prof. Gary J. Schrobilgen. Michael's thesis work involved the synthesis and characterization of XeO_4 and oxide fluorides of xenon(VIII), osmium(VIII), iodine(VII), and xenon(II). Michael received his Ph.D. in inorganic chemistry in 2000. He then continued as an NSERC postdoctoral fellow at the Loker Hydrocarbon Research Institute of the University of Southern California, where he worked in Prof. Karl O. Christe's research group for two years. In 2002, he joined the Department of Chemistry and Biochemistry of the University of Lethbridge in Alberta, Canada, as an Assistant Professor. Currently, Michael is a Full Professor and the founding Director of the Canadian Centre for Research in Advanced Fluorine Technologies (C-CRAFT). His research is specialized in inorganic fluorine chemistry, focusing on high-oxidation-state and high-coordinate fluorido transition-metal compounds and main-group fluoride chemistry. Michael has co-authored seventy-five publications including four book chapters and served as the chair of the 21st Winter Fluorine Conference in Jan. 2013. He has been a member of the Executive Committee of the Fluorine Division from 2005 to 2008 and since 2013. He has been Vice-Chair Membership of the Division from 2018 to 2020, Division Chair in 2021, and Past Chair in 2022.

JINBO HU was born in China in 1973. After he obtained his B.S. degree (from Hangzhou University) and M.S. degree (from Chinese Academy of Sciences), he pursued his Ph.D. degree during 1997-2002 in University of Southern California under the guidance of Professor Surya Prakash. He did his postdoctoral work during 2002-2004 in Loker Hydrocarbon Research Institute with Professors Surya Prakash and Georger Olah. In 2005, he joined Shanghai Institute of Organic Chemistry (SIOC), Chinese Academy of Sciences (CAS) as a faculty member. He served as the Chairperson of the Department of Organofluorine Chemistry of SIOC during 2010-2020. His research mainly focuses on the development of new reagents and reactions for synthetic organofluorine chemistry. He has published more than 200 peer-reviewed scientific publications with H index 60. He was the recipients of RSC Fluorine Prize (2009) and ACS Award in Creative Work in Fluorine Chemistry (2022).

JEAN-FRANÇOIS PAQUIN studied chemistry at Université Laval (Quebec City, Canada) where he graduated with a B.Sc. degree in 1999. In 2004, he received his Ph.D. degree at the University of Toronto (Canada). After a postdoctoral stay at the ETH Zürich (Switzerland), he was appointed assistant professor in 2005 at Université Laval (Quebec City, Canada) as a Tier 2 Canada Research Chair in Organic and Medicinal Chemistry (2005-2010). In 2010, he was promoted to associate professor and his Canada Research Chair in Organic and Medicinal Chemistry renewed (2010-2015). He was promoted to Full Professor in 2014. He has been awarded, in 2015, a Humboldt Research Fellowship for a 6-month stay at the KIT in the group of Professor Anne S. Ulrich (Karlsruhe, Germany). In 2016, he received the Keith Fagnou Award from the Canadian Society of Chemistry. His current research interests include the development of novel methodologies for the synthesis of organofluorine compounds and their applications for the preparation of bioactive fluorinated compounds or fluorinated biological probes. Jean-François has co-authored more than ninety-seven

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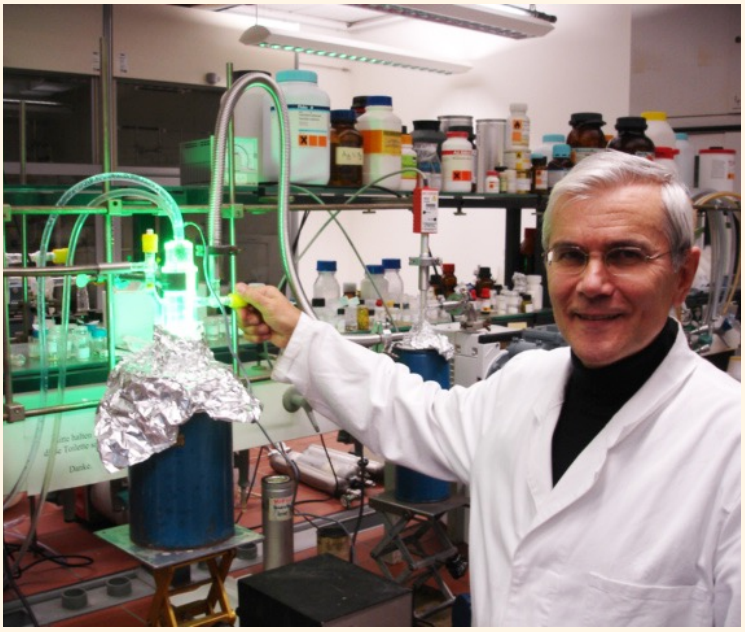
publications in addition to fifteen book chapters and he currently acts as Editor for the update of a Thieme Science of Synthesis volume on fluorine chemistry. He has presented more than one hundred invited lectures. Jean-François is a member of the Canadian Society for Chemistry (CSC) and the American Chemical Society (ACS). He has been a member-at-large on the executive committee of the Fluorine Chemistry Division of the ACS since 2013. He was also a member of the international advisory board for the 2016 Bremen Fluorine Days, the 2018 Nanjing Fluorine Days, the 22nd International Symposium on Fluorine Chemistry and the 20th European Symposium on Fluorine Chemistry. Finally, he will co-host the International Symposium on Fluorine Chemistry in Quebec City in 2023.

HAORAN SUN is a chemistry professor at the University of South Dakota (USD) and currently the director of the Center for Fluorinated Functional Materials (CFFM). He earned his B.S., M.S., and Ph.D. degrees in chemistry from Jilin University. After a short stint at Jilin University as a faculty member, he and his family moved to the United States in 1999, worked at University of Nebraska-Lincoln with Prof. Stephen DiMagno on highly reactive nucleophilic fluorinating reagent, anhydrous tetrabutylammonium fluoride ($TBAF_{anh}$), and related nucleophilic fluorination chemistry. After joining the Chemistry Department at USD, his research is focused on study of fluorinated materials for organic semiconductor and energy storage applications, non-covalent bonding and crystal engineering involving fluorine, safer and selective deoxyfluorination methods using fluoride salts and electron-deficient fluoroaromatics, and lately on developing strategies for defluorination of polyfluorinated organic molecules, aiming safely and effectively decomposing/repurposing hydrofluorocarbon refrigerants with high global warming potential. He has authored and co-authored five book chapters and 87 peer-reviewed journal articles; and obtained four U.S. patents. He was an NSF CAREER grant awardee. With the support from the South Dakota Governor's Office of Economic Development, he and his colleagues at USD established the Center for Fluorinated Functional Materials (CFFM) in 2017. In addition to his own research concentration, as the CFFM director, he promotes fluorine chemistry and fluorinated materials through both graduate and undergraduate research. Together with an NSF REU grant support *(REU Site: Undergraduate Research in Fluorine Chemistry, 2018-2022)*, he and his colleagues at USD guided 12 undergraduate students each summer to explore research projects related to fluorinated materials and fluorine chemistry. His professional service experience includes serving on the ACS Sioux Valley Local Section as the chair in 2011 and as a member of its Executive Committee from 2010 to 2012. Dr. Sun will continue promoting fluorine chemistry by 1) initiating and joining collaborative efforts to solving bigger-picture problems related to fluorine chemistry, and 2) engaging and training students to be the next generation workforce in fluorine chemistry.

THOMAS BRAUN studied chemistry at the Julius-Maximilians-Universität Würzburg (Germany) were he obtained his diploma. He received his Ph.D. under the supervision of Helmut Werner at the same University in 1997. After a short stay with Pierre Dixneuf (Rennes, France) and post-doctoral work with Robin Perutz (1997–2000) in York (UK), he obtained in 2003 his habilitation with Peter Jutzi as mentor at the University of Bielefeld (Germany). In 2007, he was appointed Professor of Inorganic Chemistry at the Humboldt-Universität zu Berlin, where he is full professor since 2011. Thomas Braun received the Wöhler Award for Young Scientists in 2006, the RSC Fluorine Chemistry Prize in 2007 and the Fluorine Publication Prize of the Fluorine Subject Group of the German Chemical Society in 2015. In 2015 he delivered the Xingda Lecture at Beijing University. From 2010–2012 he served as the chair of the GDCh Fluorine Chemistry Division and was from 2009–2018 vice-chair of the DFG (German Research Foundation) Research Training Group GRK 1582 “Fluorine as the Key Element”. Currently he is deputy spokesperson of the DFG Collaborative Research Center “Fluorospecific Interactions: Fundamentals and Applications”. From 2010–2012 he was head of department of the department of chemistry at the Humboldt-Universität. Thomas also chaired the 20th European Symposium on Fluorine Chemistry in Berlin 2022. He is a member-at-large on the executive committee of the Fluorine Chemistry Division of the ACS (2020–2022). Thomas published more than 170 peer-reviewed publications. The major interests of Thomas Braun are in fluorine chemistry as well as organometallic and coordination chemistry with an emphasis on the catalytic activation and derivatization of small molecules. This involves studies on metal fluorido complexes and their role in fluorination reactions, defluorination processes, as well as C-F and C-H bond activation reactions of fluorinated precursors and their derivatization. Another current focus is on the chemistry of sulfur fluorides such as SF6 or SF4. He also developed aluminum fluoride catalysts, which can activate and convert fluorinated alkanes and olefins by heterogeneous catalysis.

Election Ballot: The election ballot for Offices of the Division of Fluorine Chemistry will be distributed by email. ■



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WITH THE RECENT PASSING OF PROF. HELGE WILLNER, the Fluorine Chemistry community has lost one of its most prolific contributors, a very kind friend, colleague and an excellent teacher. Prof. Willner passed away on September 4 at the age of 75.

Prof. Willner was born on March 7, 1947 in Hamm, Germany, and completed an apprenticeship as a *Chemielaborant* (chemical lab technician) at the Schering AG. After attending an Engineering School in Essen, he continued with studying chemistry at the Westfälische-Wilhelms-Universität in Münster. In 1974, he obtained his doctoral degree under the supervision of Prof. Dr. H. J. Becher. After a research visit in 1977 at the University of Virginia, Charlottesville, USA with Prof. Lester Andrews as his host, he habilitated at the Ruhr-Universität in Bochum, where he worked on low valent sulfur and selenium fluorides.

Prof. Willner received an appointment as a C3 Professor at the Universität Hannover where he stayed until 1998. During this time, he visited the University of British Columbia in Vancouver, Canada starting his long-lasting collaboration with Prof. Felix Aubke. Together with Prof. Aubke, he established the field of carbonyl cations of the late transition metals using superacidic media. The first transition metal carbonyl cation in the series was $[Au(CO)_2]^+$ which they obtained using fluorosulfonic acid. Later, they described a set of further ground-breaking homoleptic transition metal carbonyl cations including the trication $[Ir(CO)_6]_3^{+}$. A guest professorship at the University La Plata in Argentina followed that led to long-lasting fruitful collaborations with researchers in Argentina.

In 1998, he received and accepted a *Ruf* as a C4-Professor at the Gerhard-Mercator Universität Duisburg, followed by another move to the Bergische Universität Wuppertal in 2003 where he stayed until his retirement in 2013.

Prof. Willner's extensive scientific accomplishments are characterized by a remarkable breadth and many productive national and international collaborations. His international collaborations were recognized by the Dr. Luis Federico Leloir 2011 Prize for International Cooperation in Science, Technology and Innovation by the Argentina Ministry of Science, Technology and Productive Innovation. His remarkable contributions to chemistry include matrix isolation, characterization of gas-phase molecules, vibrational spectroscopic analyses, azide chemistry, transition-metal carbonyl cations, chalcogen chemistry, and borate chemistry. The latter led to the development of weakly coordinating anions, such as the tetrakis(trifluoromethyl)borate anion $[B(CF_3)_4]^-$, which he obtained by fluorination of the tetracyanoborate anion $[B(CN)_4]^-$ using ClF_3 or ClF. A further major contribution to the field of boron chemistry was the discovery of the tris(trifluoromethyl)borane carbonyl $(CF_3)_3BCO$. In addition, he made numerous contributions in the field of applied and materials science, e.g. to the field of conducting salts. In general, his chemistry was characterized by ingenious ways of solving experimental problems for characterization of highly moisture-sensitive and reactive compounds. For example, the "Young-NMR tube", which serves the experimental community as an indispensable tool, had been developed by Profs. Gombler and Willner in collaboration with J. Young, Scientific Glassware Ltd. in 1984.

Prof. Willner will be deeply missed by his friends and colleagues from the fluorine chemistry community.

Maik Finze (Julius-Maximilians-Universität Würzburg) and Michael Gerken (University of Lethbridge)

ACS NEWS

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OLGA V. BOLTALINA
Department of Chemistry
Colorado State University
200 Lake St. Fort Collins
CO 80523, USA
+1-970-491-5088
olga.boltalina@colostate.edu

VICE-CHAIR / SECRETARY
THOMAS MATHEW
Loker Hydrocarbon Research Institute,
University of Southern California
837 Bloom Walk, Los Angeles
CA 90089, USA
+1-714-469-3806 (cell)
tmathew@usc.edu

VICE-CHAIR / MEMBERSHIP
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Dept. of Chemistry
The University of North Carolina
at Charlotte
9201 University City Blvd.
Charlotte, NC 28223, USA
+1-704-687-1468
metzkorn@uncc.edu

VICE-CHAIR / PROGRAMS
ANDREJ V. MATSNEV
The Chemours Company
Washington Works Plant
Building 22
8480 DuPont Rd.
Post Office Box 1217
Washington, WV 26181, USA
+1-864-309-5988
andrii.matsnev@chemours.com

TREASURER
ROBERT G. SYVRET
Fluorine Chemistry and
Technology LLC
1156 Clearwood Drive
Allentown, PA 18103
+1-484-788-8476
syvretrg@f2chemtech.com

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