



# ACS NEWS

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

## MESSAGE FROM THE CHAIR



NEIL VASDEV

Greetings from Toronto, Canada! I joined the Division of Fluorine Chemistry as a graduate student member over 20 years ago at my first ACS conference

in 1998 and am humbled by the opportunity to serve as the 2019 Chair for such a wonderful community of outstanding chemists.

We jumped into the New Year with our Division's flagship meeting, the **24th Winter Fluorine Conference**, held in Clearwater Beach, Florida from January 13–18, 2019. The meeting was chaired by Dr. Markus Etzkorn and co-chaired by Mike Bulinski. Hats off to Markus and Mike for putting together such a fantastic technical and social program. Technical highlights included 14 Fluorine Chemistry sessions over the course of the week. A mix of 68 plenary, invited and contributed lectures as well as 30 poster presentations covered all facets of fluorine chemistry from basic science through to applied research. Traditions remained strong with excellent scientific presentations, award presentations, numerous student awards, and with such close proximity to the beach, hospitality suite events every evening and a wonderful banquet reception it was guaranteed to be a great meeting. At this banquet

dinner, several awards were given to students and faculty. The **2019 Distinguished Service Award** was presented to **Professor Gerald B. Hammond** from the University of Louisville. Congratulations G.B. and thank you for your continued service to the fluorine chemistry community, and for your support to the Executive Committee through 2018. It was also our honor to present **Professor Norio Shibata** from the Nagoya Institute of Technology, Japan, with the **2019 ACS Award for Creative Work in Fluorine Chemistry**. Norio's award lecture highlighted his outstanding research on synthetic organofluorine chemistry and methodology development. On behalf of the Division, I would like to congratulate Norio for this well-deserved award, which represents the highest academic distinction by our Division. An award symposium was being held for him at the **257th Spring ACS National Meeting in Orlando, FL** (March 31 – April 4, 2019). Many thanks to Drs. Olga Boltalina, David O'Hagan and Teruo Umemoto for co-organizing the symposium. In other great news, two of our members, **Dr. David Vicic** and **Dr. Steven Strauss** have been named as **2019 ACS Fellows!** The new fellows were feted at the ACS National Meeting in San Diego in August.

Congratulations to **Dr. Robert (Bob) G. Syvret** who is the recipient of the **2020 ACS Award for Creative**

*Continued on p. 2*

## VICE-CHAIR

### MEMBERSHIP REPORT

AS OF AUGUST 2019, THE DIVISION OF FLUORINE CHEMISTRY OF THE ACS HAD 493 MEMBERS. THE BREAK-DOWN IS AS FOLLOWS:

GROUP	COUNT	%
Regular Member	370	75.05
Regular Student Member	30	6.09
Student Member – UnderGrad	8	1.62
Emeritus Member	51	10.34
Retired Member	20	4.06
Division Affiliates	8	1.62
Society Affiliate	6	1.22
<b>TOTAL</b>	<b>493</b>	<b>100</b>

Please join me in welcoming the newest members to our Division: Stefano Altomonte, Mohammed Amin, Julie Baker, Frank Brownen, Jessica DeMott, Thanthirimudalige Dunstan, Matt Ezuka, Clifford Gilbert, Daniel Harrison, Xuan Huang, Anwar Hussain, Atim Johnson, Stephanie Langga, Maria Morales Colon, Jesus Morales Muriel, Tamarra Parker Stephens, Giancarlo Pascali, Emily Peck,

*Continued on p. 4*

**Work in Fluorine Chemistry**, sponsored by our Division! Bob will be honored at the awards ceremony on Tuesday, March 24, 2020, in conjunction with the ACS Spring 2020 National Meeting in Philadelphia, and there will be an award symposium in his honor.

On the behalf of the Division, I would like to thank all Symposia Organizers, as well as the Presenters and Chairs for their dedication and hard work in putting together excellent programs, and I welcome our new Vice-Chair for Programs, Dr. Olga Boltalina from the University of Colorado who has already initiated several exciting symposia to be held over the next three years. We hope to see you all at the 2020 Spring ACS National Meeting, which will also include an Industrial Fluorine Chemistry Symposium, and at FLUO sponsored symposia at Pacifichem 2020, and please be sure to mark your calendars and plan to attend our flagship meeting, the Winter Fluorine Conference in January 2021.

At the WFC, we held a productive annual Executive Committee Meeting. One important task was to discuss nominations for any openings as officers of the FLUO Division. Superb candidates have been nominated, and you will see all of their biographies in this newsletter. Many thanks to the candidates for their willingness to serve the Division. I would like to take this opportunity to thank former members of our Executive Committee who completed their terms of service at the end of 2018. Dr. David Vicic completed his one-year stay as Chair of the Division in 2018 and is now serving as Past-Chair. Many great things happened to the Division under David's leadership, and we are all indebted to his hard work and commitment to the Division of Fluorine Chemistry. Dr. Ralf Haiges completed his term as Past-Chair, and we thank him for providing generous mentorship to the Division.

Dr. Olga Boltalina has transitioned from the Executive Committee as our new Vice-Chair for Programs. I would like to thank all of the members of the Executive Committee for volunteering their time on behalf of the Division.

The Division is continuing its sponsorship of undergraduate research with the award of two Moissan Summer Undergraduate Research Fellowships of \$5000 each. Several outstanding applications were received, and a standing committee had the difficult task of choosing two winning proposals. Congratulations to Olivia C. Hennis from the lab of Prof. GB Hammond at the University of Louisville, KY who will work on *Diversity-oriented fluorine synthesis via HF trapping in cationic cascade reactions* and Renee Fang from Prof. David Vicic's labs at Lehigh University, PA who will work on *New Ligand Design for Volatilization of Late Transition Metals*.

The deadline for next year's Moissan Fellowship will be January 31, 2020.

Drs. David Dixon and Joseph Thrasher are currently serving as the Division's councilor and alternate councilor, respectively, ensuring that our voice is heard within the American Chemical Society. In Dave's report, you may read about recent developments in ACS. Thanks to Bob Syvret, the Division's Treasurer, for all his help with the logistics of funding and organizing the Moissan Fellowships and stimulating conferences. You can find upcoming meetings and symposia of interest in the Program Chair's report by Olga Boltalina. Please read the Membership Report of Michael Gerken to hear about our Division's reach. I'd also like to thank Dr. Andrej Matsnev for all of his support to our Division as Vice-Chair, Secretary.

Please do not hesitate to contact me directly ([neil.vasdev@utoronto.ca](mailto:neil.vasdev@utoronto.ca)) if you have any comments, concerns, or questions. New ideas, improvements, and/or criticism for the Division are always welcome. It is my honor to serve as the Chair of the ACS Division of Fluorine Chemistry!



**Neil Vasdev**, Chair 2019

## 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](https://twitter.com/FLUORINECHEM).



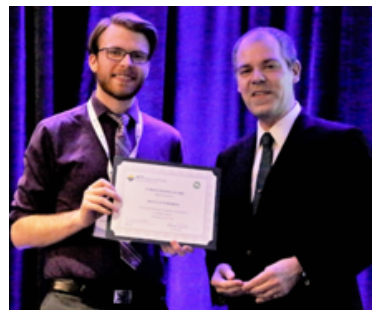


OLGA BOLTALINA

Our Division held the 24th Winter Fluorine Conference in Clearwater, FL (January 13–18, 2019). The conference Chair Dr. Markus Etzkorn and the Co-Chair Dr. Mike Bulinski attracted an outstanding cohort of fluorine chemists from the U.S. and other countries. Following the long-standing tradition, two poster sessions were held during the conference, and the best poster awards were given to three students.

### BEST POSTER AWARDS

24th Winter Fluorine Conference, 2019



#### FIRST PLACE:

Douglas Turnbull  
University of Lethbridge, AL, Canada  
advisor: M. Gerken

Title: Synthesis, characterization, and computational study of fluoridotungsten(VI) cations



#### SECOND PLACE:

Melissa Cloutier  
Université Laval, QC, Canada  
advisor: J.-F. Paquin

Title: Regioselective gold-catalyzed hydration of CF<sub>3</sub>- and SF<sub>5</sub>-alkynes



#### THIRD PLACE:

Emily B. Cruil  
University of Southern Mississippi, MS, USA  
advisor: M. J. Donahue

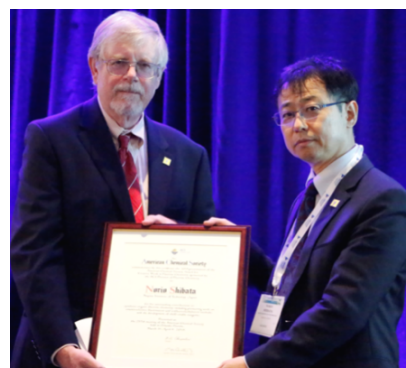
Title: Investigation of a pentafluorobenzyl isothiocyanate as a chiral derivatizing agent



#### 2019 DISTINGUISHED SERVICE AWARD

recipient Prof. GB Hammond, the Endowed Chair in Organic Chemistry from the University of Louisville, USA (right) and Division chair Neil Vasdev (left) at the Awards ceremony at 24<sup>th</sup> Winter Fluorine Conference, Clearwater, FLA.

January 17, 2019



#### 2019 ACS AWARD FOR CREATIVE WORK IN FLUORINE CHEMISTRY

recipient Prof. Norio Shibata, Nagoya Institute of Technology, Japan (right) and Division Councilor Prof. David Dixon, University of Alabama, USA (left) at the Awards ceremony at 24<sup>th</sup> Winter Fluorine Conference, Clearwater, FLA.

January 17, 2019

#### OTHER FLUORINE-THEMED SYMPOSIA:

**SYMPOSIA SUPPORTED/CO-ORGANIZED BY DIVISION OF FLUORINE CHEMISTRY IN 2019:** At the 257<sup>th</sup> ACS National Meeting & Exposition, that was held from March 31–April 4 in Orlando, FL, the Fluorine Division held an Award Symposium dedicated to Professor Norio Shibata from the Nagoya Institute of Technology, Japan, the winner of the 2019 ACS Award for Creative Work in Fluorine Chemistry. The Symposium was co-organized by Dr. David O'Hagan, Dr. Teruo Umemoto, and Dr. Olga Boltalina. The two-full day symposium included 27 invited lectures and 2 poster presentations.

#### OTHER FLUORINE-THEMED SYMPOSIA IN 2019 (IN CHRONOLOGICAL ORDER):

■ The **International Conference on Fluorine Chemistry** was held in Himeji, Hyogo, Japan on the 22–24 May, 2019. The program included 24 invited lectures on inorganic, organic and polymer chemistry. This conference became an exciting international forum for the discussion of interesting topics on fluorine chemistry. Please visit [fluo.sakura.ne.jp/ICFC2019](http://fluo.sakura.ne.jp/ICFC2019) for detailed information.

■ The **International Symposium on Fluorous Technologies – 2019 (ISoFT19)** was held in Shanghai, China, from August 8–11, 2019. The eighth edition of ISoFT followed the successful conferences, which were held in Boston 2017 (Co-Chaired by Profs. Krishna KUMAR and Wei Zhang) and Como in 2015 (Chaired by Prof. R. Ruzziconi).

Continued

The purpose of this symposium was to provide a forum of active discussions in fluorine chemistry and associated technologies. To this end, the meeting was organized in several sections, each one including plenary and keynote lectures by top researchers in specific fields related to fluorine chemistry, together with selected poster presentations. A list of speakers who participated is posted on the symposium website: <http://isoft19.sit.edu.cn/>

■ The Polish Fluorine community hosted the **19th European Symposium on Fluorine Chemistry**, in Warsaw, Poland on August 25–30, 2019. Special issue of the Journal of Fluorine Chemistry is planned to be published in 2020. More details about the Symposium are available on the following website [f2019.uw.edu.pl](http://f2019.uw.edu.pl). The Chairman was Wojciech Grochala.

#### UPCOMING SYMPOSIA SUPPORTED/CO-ORGANIZED BY DIVISION OF FLUORINE CHEMISTRY IN 2020:

■ The **259th ACS National Meeting & Exposition** will be held March 22–26 in Philadelphia, PA. Two FLUO symposia will be held:

**1. Award Symposium** dedicated to the winner of the 2020 ACS Award for Creative Work in Fluorine Chemistry, Bob Syvret.

**2. Symposium on Industrial Fluorine Chemistry**, co-organizers: Viacheslav Petrov and Bob Syvret.

■ The **260th ACS National Meeting & Exposition** will be held August 23–27, 2020 in San Francisco, CA. There are no FLUO symposia to be held but a symposium of interest to FLUO members will be the **TOXI/MEDI** session in the Chemical Toxicology Division where there is planned a

session devoted to the metabolism and toxicity associated with fluorinated compounds.

■ The **2020 International Chemical Congress of Pacific Basin Societies (Pacifichem)** will take place in Honolulu, Hawaii, USA, December 15–20, 2020. Three symposia will be co-sponsored by the Fluorine Division (FLUO):

#### **Diversity in Inorganic Fluorine Chemistry, from Fundamental Aspects to Applications for Global Challenges**

Organizers: Michael Gerken, Rika Hagiwara, Kazuhiko Matsumoto, Helene Mercier, Gary Schrobilgen and Bob Syvret

**Innovative Fluorination/Fluoroalkylation/Fluorofunctionalization** Organizers: Norio Shibata, Hideki Amii, Jinbo Hu and Vicic, David

#### **The Chemistry of 18F, 11C and Radiometal-based Probes for Molecular Imaging & Precision Medicine**

Organizers: Neil Vasdev, Henry VanBrocklin, Leonard Luyt, Gilles Tamagnan, Yearn Seong Choe, Thomas Reiner and Thomas Davis

#### OTHER FLUORINE-THEMED SYMPOSIA IN 2020 AND 2021 (IN CHRONOLOGICAL ORDER):

■ **7th Fluorine Days**, 5–9 July 2020 in Poznan, Poland. Chairman: Professor Henryk Koroniak [koroniak@amu.edu.pl](mailto:koroniak@amu.edu.pl)

■ **23rd International Symposium on Fluorine Chemistry (23rd ISFC)**, which will be held in conjunction with the **9th International Symposium on Fluorous Technologies (ISoFT'21)** from Sunday, July 18, through Friday, July 23, 2021 at the Québec City Convention Centre, Québec, Canada. (<http://www.isfc2021.org>)

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



MICHAEL GERKEN

George Poszmik, Sili Qiu, Jack Sharland, Raj Kamal Singh, Steven Spardel, Douglas Stephan, Thomas Strassner, Lushi Tan, Noman Tor, Aaron Unger, James Votaw, Olica Xu, Andrew Zweig, Nylen Allphin Jr.; Michael Bentel, Lucy Clarkson, Miguel Angel Cortes Gonzalez, David Fenwick, Denis Giguere, Robert Groff, Cassandra Hager, Stephen Hotchkiss, Yuichi Iikubo, Haruki Kobayashi, Gary Kwong, Jim McLaren, Martial Pabon, Vincent Pistrutto, Ilja Popovs, Kevin Rink, Ahmad Shaaban, Alexander Shtarov, Rachid Skouta, John Studley, Hans Conrad zur Loye, and Hashim Al Khunaizi.

Welcome to our Division. I am particularly thrilled to see a significant number of new student members, who will hopefully remain part of our community throughout their future careers.

Our membership numbers have somehow stabilized around 500, but the dip below 500 members is concerning. 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. We still need to be very mindful of attracting new members, and I want to encourage our current members to talk to colleagues who work in fluorine chemistry, particularly those at your institution, to join our Division and become part of our collegial, close-knit fluorine chemistry 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.

## DIVISION COUNCILOR REPORT

ACS DIVISION OF FLUORINE CHEMISTRY COUNCILOR REPORT FOR THE ACS COUNCIL MEETING ON APRIL 3, 2019 AT THE 2019 SPRING ACS NATIONAL MEETING IN ORLANDO, FLORIDA.

The Council selected **H.N. Cheng** and **Carol A. Duane** as candidates for 2020 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall National Election.

The candidates for Directors from District II and District IV on the Board of Directors for the term 2020-2022 are **Christina C. Bodurow** and **Dawn Mason** as District II candidates; and **Rigoberto Hernandez** and **Lisa Houston** as District IV candidates. Ballots will be distributed on or before October 1 to all ACS members in District II and District IV for election of a Director from each District.

The candidates for Directors-at-Large for 2020-2022 terms are **Harmon B. Abrahamson**, **G. Bryan Balazs**, **D. Richard Cobb**, and **Dorothy J. Phillips**. The election of two Directors-at-Large from among these four candidates and any selected via petition will be conducted in the fall. Ballots will be distributed to the Council on or before October 1, 2019.

The Council approved the Petition to Streamline the ACS Governing Documents [Constitution Articles I-XIX, Bylaws I-XIV, and Standing Rules I-IX], which will reorganize the fundamental governing documents of the Society: the Constitution and Bylaws, and create a third document: Standing Rules. These three documents will function as a hierarchy. The Constitution should define; the Bylaws should authorize; and the Standing Rules should operationalize. Additionally, an Amendment was voted upon, and passed by recorded vote: 'That language proposed as Standing Rule II, Sections 2a, 2b, and 2g be moved to the Bylaws as new Sections 2a, 2b, and 2c of proposed Bylaw III with appropriate renumbering of the other sections of Bylaw III and Standing Rule II.' The Petition will become effective if and when the proposed changes to the Constitution are approved by the Membership of the Society, and if and when the Board of Directors approves the Petition. Because the changes to the ACS Governing Documents are substantial, the Council authorized the ACS Secretary and General Counsel and the Committee on Constitution & Bylaws to correct minor technical mistakes in the Petition.

ACS President **Bonnie Charpentier** led a discussion on ACS Relevance to Current and Future Members: Challenges and Opportunities. Councilors provided many recommendations and suggestions including increased support for local sections and industry members, helping student members transition into

their professional careers, and implementing a monthly payment tool for ACS dues.

The Council voted on the recommendation of the Committee on Budget and Finance (B&F) to set the member dues for 2020 at the 2019 rate of \$175.

On the recommendation of the Committee on International Activities, the Council approved the establishment of ACS Pakistan International Chemical Sciences Chapter, subject to confirmation by the Board of Directors.

In 2018, ACS generated a net from operations of \$41.1 million, which was \$13.3 million higher than 2017. Total revenues were \$571.6 million, increasing 6.4% – or \$34.2 million – over 2017. Expenses ended the year at \$530.5 million, which was \$20.8 million or 4.1% higher than the prior year. These results were attributable to strong performance from the Society's Information Service units (CAS and ACS Publications) and a continued emphasis on expense management across the ACS. Council voted to extend the provision of the international dues discount test based on World Bank country income levels for an additional three years (August 2019 – August 2022).

The ACS ended 2018 with 151,012 members, a net membership growth of one-tenth-of-one-percent. This is the first membership growth ACS has recorded in the better part of a decade. Of the 25,000 new members who joined in 2018, about 20% were incentivized by market testing initiatives. Without these new members, ACS would have seen continued declines.

The Orlando meeting attendance was 15,605.

ACS Division of Fluorine Chemistry Councilor Report for the ACS Council meeting on August 28, 2019 at the 2019 Fall ACS National Meeting in San Diego, California

Ballots for the 2019 fall national election will be distributed starting on September 30th, with a voting deadline four weeks later on October 25. ACS members eligible to vote and with an email address on file will receive an electronic ballot with the option to request a paper ballot. Those members with no email address on file will be sent a paper ballot with the option to vote electronically. The ACS election vendor, Survey & Ballot Systems, will send three email reminders during the voting period to those who have not voted as of the reminder dates. Election information may be viewed at [acs.org/elections](https://acs.org/elections).

The Society's 2019 financial performance through July 31st yielded a Net from Operations of \$30.1 million. This is \$10 million favorable to the Approved Budget, and \$1.7 million less than the same period in 2018. Total revenues are right on budget at

*Continued*

\$338 million. Total expenses are \$308 million, which is \$10 million favorable to budget. The Society is expected to end the year in compliance with each of the five Board-established financial guidelines. Additional information can be found at [www.acs.org](http://www.acs.org), at the bottom of the page, click 'About ACS', then 'Financial'.

The theme of the 258th ACS National Meeting in San Diego was "Chemistry and Water." As of Tuesday August 27, attendance was 12,409. The next National meeting will be March 22–26, 2020 in Philadelphia with a theme of Macromolecular Chemistry: The Second Century.

The ACS Board of Directors voted to set the advance member registration fee for national meetings held in 2020 at \$505, which is the amount equal to the 2019 fee adjusted for inflation.

The ACS Board of Directors has a Task Force on the Future of Meetings, which has been charged with performing a "deep dive" on the current portfolio of ACS meetings and conferences, identifying current offerings, evaluating governance and staff support structures, revenue streams, financial targets, and business models, and recommending actions that will ensure the sustainability and future relevance of that portfolio.



Secrétariat du Grand Prix de la Fondation de la Maison de la Chimie  
28, rue Saint-Dominique • 75007 Paris • France  
Tel : +33 (0)1 40 62 27 18  
[presidence@maisondelachimie.com](mailto:presidence@maisondelachimie.com)

This AWARD is meant to honor an original work in chemistry of benefit to humankind, society or nature

The 2020 Prize will carry a monetary award of 35 000 euros

Created in 1986 on the initiative of the Board of the Fondation de la Maison de la Chimie, this Prize has been awarded in recent years to:

- Professors Gérard Ferey and Jean Fréchet in 2010
- Professor Ludwik Leibler in 2012
- Professor Jean-Pierre Sauvage in 2014
- Professor Vincenzo Balzani in 2016
- Professors Thomas Ebbesen and Susumu Kitagawa in 2018

In 2020, the Prize will be awarded to one or several nominees, irrespective of nationality

\*

**Nominations must be presented by a learned Society or a national or international scientific Organization.**

**Entry forms**, accompanied by a report in French or English detailing the arguments for the nomination, must be returned – by electronic mail – **before 30th April 2020** to the address shown below. Nominations will be evaluated by a jury composed of renowned members of the international scientific community. Unsuccessful entries may be renewed for subsequent awards of the Prize.

More information and entry forms are available on our web site:  
[Fondation de la Maison de la Chimie](http://www.fondation-maison-de-la-chimie.fr)

**President :**  
B. BIGOT  
Director General, ITER  
Organization  
President, Fondation de  
la Maison de la Chimie

**Scientific Secretary :**  
Professor N.J. MOREAU

**Jury Members :**  
J. COSSY – Member of the Académie des Sciences, Professor, ESPCI, Paris, France  
P. GOYA – Professor, Instituto de Química Médica, CSIC, Madrid, Spain  
M. W. HOSSEINI – Professor of exceptional classes, Institut Le Bel, Strasbourg, France  
J. LUCAS – Member of the Académie des Sciences, Emeritus Professor, Institut des Sciences Chimiques, Rennes, France  
L. MAREK – Professor, Technion-Israel Institute of Technology, Haifa, Israel  
R. REAU – R&D Scientific Director, Air Liquide, Jouy-en-Josas, France  
M. ROHMER – Member of the Académie des Sciences, Professor, Institut Le Bel, Strasbourg, France  
C. SANCHEZ – Member of the Académie des Sciences, Professor, Collège de France, Paris, France  
P. SAUTET – Member of the Académie des Sciences, Professor, University of California, Los Angeles, USA  
J.P SAUVAGE – 2016 Nobel Prize, Emeritus Professor, Université de Strasbourg, France



Fondation de la Maison de la Chimie



## 2020 GRAND PRIX

### PURPOSE AND VALUE

The prize is intended to reward original work in chemistry of benefit to mankind, society or nature.

The GRAND PRIX will be awarded for the seventeenth time in 2020, to one or several persons, irrespective of nationality. The prize will carry a monetary award of 35,000 Euros.

### ENTRIES

All entries must imperatively be presented through a learned society or a national or international scientific organisation without any direct link with the nominee.

**Entry forms**, together with a report detailing the arguments for the nomination, **must be returned to the *Fondation de la Maison de la Chimie* by 30<sup>th</sup> April 2020**.

These documents should be sent by e-mail to the following address: [presidence@maisondelachimie.com](mailto:presidence@maisondelachimie.com).

General information including entry forms are available on the Foundation's website: <https://maisondelachimie.com/>, section "*LES PRIX DE LA FONDATION*".

### JURY

The international jury is composed of a Chairman, nine members recognized for their work in the different fields of chemistry, and the laureates of the two previous GRAND PRIX. Three jury members must be of a nationality other than French. The jury is assisted by a scientific coordinator.

The Chairman of the Jury is the incumbent President of the *Fondation de la Maison de la Chimie*, the other members being appointed by the Board of the Foundation.

### EXAMINATION OF ENTRIES

All entries will be submitted to the jury members for examination. After due deliberation, the jury members will choose the laureate by a majority vote.

### AWARD CEREMONY

The laureate will be invited to deliver a lecture on her/his work at an award ceremony that will take place at the Maison de la Chimie during the first quarter 2021.



Fondation de la Maison de la Chimie

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**ENTRY FORM for the GRAND PRIX of the  
FONDATION DE LA MAISON DE LA CHIMIE**

to be mailed or e-mailed to :

Secrétariat du Grand Prix,  
Fondation de la Maison de la Chimie, 28 rue Saint-Dominique, 75007 PARIS, France

[presidence@maisondelachimie.com](mailto:presidence@maisondelachimie.com)

**Applications should be received no later than 30<sup>th</sup> April 2020**

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**NOMINATING SOCIETY, NATIONAL OR INTERNATIONAL ORGANISATION without any direct link with the nominee :**

Address :

Represented by (surname, position and signature) :

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**NOMINEE'S SURNAME :**

First name :

Nationality :

Date of birth :

Address :

Telephone :

E-mail address :

UNIVERSITY DEGREES (add lines if necessary):

Year :

Year :

Year :

AWARDS (add lines if necessary):

CURRENT POSITION :

since :

Company or Organisation :

Address :

Telephone :

E-mail address :







BOB SYVRET

The Division's total assets have decreased approximately **5.4%** over the course of the 12-month period **ending September 30, 2019**. This decrease is due in part to the Division's sponsorship of the ACS Award for Creative Work in Fluorine Chemistry and losses from the 24th WFC.

### ASSETS (actual as of 30 September 2019)

	(\$) as of 30 September 2018	(\$) as of 30 September 2019
Wells Fargo Bank Account	\$14,721	\$7,806
Long-term Investment Accounts	\$180,502	\$176,961
<b>TOTAL ASSETS</b>	<b>\$195,224</b>	<b>\$184,767</b>
Percent Change		-5.4%

### 2019 FINANCIAL EXPENDITURE HIGHLIGHTS

> In 2019 the Division provided 2 Moissan Summer Undergraduate Research Fellowships in the amount of **\$5,000** to Professor David Vicic at Lehigh University and **\$5,000** to Professor GB Hammond at the University of Louisville.

> The Division provided **\$6,000** in financial support to the Award Symposium for Norio Shibata at the Spring ACS National Meeting in Orlando, FL, March 2019.

> The Division sponsored the 2019 Award for Creative Work in Fluorine Chemistry at a cost of **\$9,018.55**.

### OUTLOOK FOR 2020:

> The Division has budgeted to provide **2 Moissan SURF @ \$5,000** each in 2020.

> The Division will sponsor the 2020 ACS Award for Creative Work in Fluorine Chemistry at a cost of **\$9,000**.

> The Division will provide up to **\$6,000** each for the ACS Award for Creative Work in Fluorine Chemistry and

Industrial Fluorine Chemistry Symposia to be held at the 2020 ACS Spring National Meeting in Philadelphia.

> The Division will provide **\$2,500** to each of three FLUO co-sponsored symposia to be held at the Pacific Basin Conference (Pacifichem) at Honolulu in December. ■

## ELECTION BALLOT

THE INVITATION TO VOTE ELECTRONICALLY FOR OFFICES OF THE DIVISION OF FLUORINE CHEMISTRY WILL BE SENT BY EMAIL. SEE THE FOLLOWING PAGES FOR A LIST OF CANDIDATES.



## BIOGRAPHICAL DATA OF THE CANDIDATES FOR OFFICES OF THE DIVISION OF FLUORINE CHEMISTRY

### EXECUTIVE COMMITTEE

(Three-year term, 2020–2022)

**DANIEL A. HERCULES** received his Ph.D. degree in inorganic chemistry in 2016 from Clemson University (USA) under the advice of Prof. Dr. Joseph S. Thrasher. The emphasis of the work was in the design and setting up of a pilot-scale polymerization facility for preparation of monomers and determination of their reactivity and reaction kinetics in synthesis of tetrafluoroethylene (TFE)-based copolymers. This work has been published in the *Journal of Fluorine Chemistry*, as well as in the Handbook of Fluoropolymer Science and Technology. After graduation, he started his career as an industrial chemist and currently he works at Innovative Chemical Technologies, Inc. in Cartersville, GA (USA). His research interests are focused on synthetic methodologies for the preparation variety of intermediates, monomers, additives and other commercial products. Daniel also an Adjunct Professor at Trinity Western University in British Columbia (Canada) where he currently teaches undergraduate Inorganic Chemistry.

**THOMAS BRAUN** studied chemistry at the Julius-Maximilians-Universität Würzburg (Germany) where 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. He published more than 140 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 of small molecules. This involves studies on metal fluoro complexes as well as C-F and C-H activation reactions of fluorinated

precursors and their derivatization. Another current focus is on the chemistry of sulfur fluorides. He also developed some aluminum fluoride catalysts, which can activate and convert fluorinated alkanes and olefins by heterogeneous catalysis.

**NICKEISHA STEPHENSON** completed her Bachelor's degree in chemistry at Ithaca College in NY and obtained her PhD under the supervision of Prof. Shannon Stahl and Prof. Samul Gellman at the University of Wisconsin-Madison. Upon completion of her doctoral degree, she carried out a post-doctoral fellowship in the lab of Prof. Tobias Ritter at Harvard University where she studied organometallic fluorine chemistry. Following her tenure in the Ritter lab, she joined the lab of Prof. Neil Vasdev at Harvard Medical School and Massachusetts General Hospital where she made major contributions to fluorine-18 chemistry by co-leading the development of iodonium ylide chemistry for the synthesis of radiopharmaceuticals applied for human use. Dr Stephenson's work has been published in high impact journals such as the *Journal of the American Chemical Society*, *Nature Communications* (2014 & 2017), *Nature Protocols*, and *The Journal of Nuclear Medicine*. Her radiofluorination technology has been patented and licensed and has been featured in Chemical and Engineering News. She has also been the recipient of a Young Investigator Award from the Alzheimer's Drug and Disease Foundation for translation of her novel chemistry methodology towards the high yield synthesis of [<sup>18</sup>F]FPEB, a radiopharmaceutical applied for early detection of Alzheimer's disease.

Dr. Stephenson is currently a Lecturer at the University of the West Indies – Mona in Kingston Jamaica where her research focuses on developing new methods for fluorinating natural products with fluorine-18. She also co-leads a joint venture with the School of Education at UWI Mona, which aims to increase the motivation of university students in the sciences by involving them in locally relevant and topical research projects. She was a recipient of a 2018 Canada/CARICOM research scholarship, which bridged her <sup>19</sup>F-organofluorine program in Jamaica with fluorine-18 chemistry at the Center of Addiction and Mental Health (CAMH) and the University of Toronto in Canada, where she holds an ongoing visiting faculty appointment.

Dr. Stephenson is committed to the field of fluorine chemistry and has presented lectures at FLUO sponsored sessions at the ACS on fluorine-18 chemistry and at the 2019 Winter Fluorine Chemistry Conference.

**THOMAS LECTKA**, the Jean and Norman Scowe Professor of Chemistry at Johns Hopkins University, received his B.A. from Oberlin College in 1985 and Ph.D. from Cornell University in 1990. In 1991, he was an

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Alexander von Humboldt Postdoctoral Fellow at the University of Heidelberg in Germany, and from 1992–1994 he was an NIH Postdoctoral Fellow at Harvard University. Dr. 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, Lilly, DuPont, and Dreyfus Foundations among several others, and was chosen Maryland Chemist of the Year in 2017. He was also the Western Hemisphere editor of *Tetrahedron Reports* from 2007–2012, and has been recently recognized with university-wide teaching awards at Johns Hopkins. His career includes endeavors in the areas of catalysis, synthetic and mechanistic organic chemistry, and of course, organofluorine chemistry. Among his most notable earlier scientific contributions are the discovery of metal-catalyzed amide isomerization; the development of the first practical method for the catalytic, asymmetric synthesis of  $\beta$ -lactams; and catalytic, asymmetric halogenation. For the last ten years or so, his focus has shifted strongly to fluorine, on which he has published 36 papers and counting. His recent work spans a spectrum of organic fluorine chemistry, including asymmetric fluorination, catalyzed alkane fluorination, site-selective fluorination, and the fundamental interactions of C-F bonds with other functional groups.

**HAORAN SUN** earned his Ph.D. degree in chemistry from Jilin University in 1996. After a short stint at Jilin University as a faculty member, he and his family moved to the United States in 1999, where he initially worked at University of Nebraska-Lincoln with Prof. Stephen DiMugno on fluorinated metalloporphyrins and highly reactive nucleophilic fluorinating reagents. After joining the Chemistry Department of the University of South Dakota (USD), he focuses on study of fluorinated functional materials, particularly fluorinated organic semiconductor materials and fluorinated high energy density battery materials. He has authored and co-authored four book chapters and 75 peer-reviewed journal articles; and obtained four U.S. patents. 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 summer 2017. In addition to his own research focus, as the CFFM director, he also engages in undergraduate research. Together with NSF REU support (*REU Site: Undergraduate Research in Fluorine Chemistry, 2018–2021*), he and his colleagues at USD guide 12 undergraduate students each summer to explore research projects related to fluorinated materials and fluorine chemistry. He also served as the ACS Sioux Valley section chair in 2011 and as a member of its executive committee from 2010 to 2012.

**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 eighty-three 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 ninety invited lectures. Jean-François is a member of the Canadian Society for Chemistry (CSC) and the American Chemical Society (ACS). He was a member-at-large on the executive committee of the Fluorine Chemistry Division of the ACS (2013–2019). He was also a member of the international advisory board for the 2016 Bremen Fluorine Days, the 2018 Nanjing Fluorine Days and the 22nd International Symposium on Fluorine Chemistry. Finally, he will co-host the International Symposium on Fluorine Chemistry in Quebec City in 2021.

### VICE-CHAIR/SECRETARY

(Three-year term, 2020–2022)

**THOMAS MATHEW** is a Senior Scientist at the Loker Hydrocarbon Research Institute, University of Southern California. After receiving Ph.D. from University of Kerala, India in 1989, he did his initial postdoctoral studies at the National Institute for Interdisciplinary Sciences and Technology (NIIST, CSIR), Trivandrum, India. Later as a Humboldt Fellow, he spent two years (1994–1996) with Professor Horst Prinzbach at Albert-Ludwigs University, Freiburg, Germany. In 1996, he joined the Loker Hydrocarbon Research Institute with Professor George A. Olah and Professor G. K. Surya Prakash. He was a Visiting Scholar at the Institute of Advanced Material Study, Kyushu University (2003), Humboldt Visiting Scholar at Albert-Ludwigs University, Freiburg (2003), a Visiting Professor in the Shanghai Institute of Organic

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Chemistry, Chinese Academy of Sciences (2012) and a Visiting Scientist in the Department of Organic Chemistry, University of Valencia (2014). He is a Fellow of the Royal Society of Chemistry; Committee member, ACS Fluorine Chemistry Division, ACS Southern California Section and RSC Photophysics and Photochemistry Group. His main research interests are in superacid chemistry, hydrocarbon chemistry focusing on many aspects of the "Methanol Economy", development of new catalysts and organic synthetic methods, fluorine chemistry and photochemistry. He has over 200 papers and presentations together, 46 invited lectures and edited two books.

### **DIVISION COUNCILOR**

(Three-year term, 2020–2022)

**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 and 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. Prior to moving to Alabama, 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 a 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 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 DIVISION COUNCILOR**

(Three-year term, 2020–2022)

**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 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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### 2020 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 2020. 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 2020 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 2020, the Division Chair must receive an application by January 31, 2020.

The electronic submission should be in the form of a PDF document and sent to Andrej Matsnev: [a.v.matsnev@gmail.com](mailto:a.v.matsnev@gmail.com)

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 2020 will be announced in the Spring 2020 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, 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, 2020. Brief reports (two to three pages) to the Division Chair are expected from the faculty member and student by October 1, 2020. 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 ■



# ACS NEWS

THE BIENNIAL NEWSLETTER FOR THE AMERICAN CHEMICAL SOCIETY DIV. OF FLUORINE CHEMISTRY

## 2019 EXECUTIVE COMMITTEE • ACS DIVISION OF FLUORINE CHEMISTRY

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