

Final Report of the 2022 Southeastern Regional Meeting of the American Chemical Society

I. Introduction and General

Submitted by Ingrid Montes, General Chair

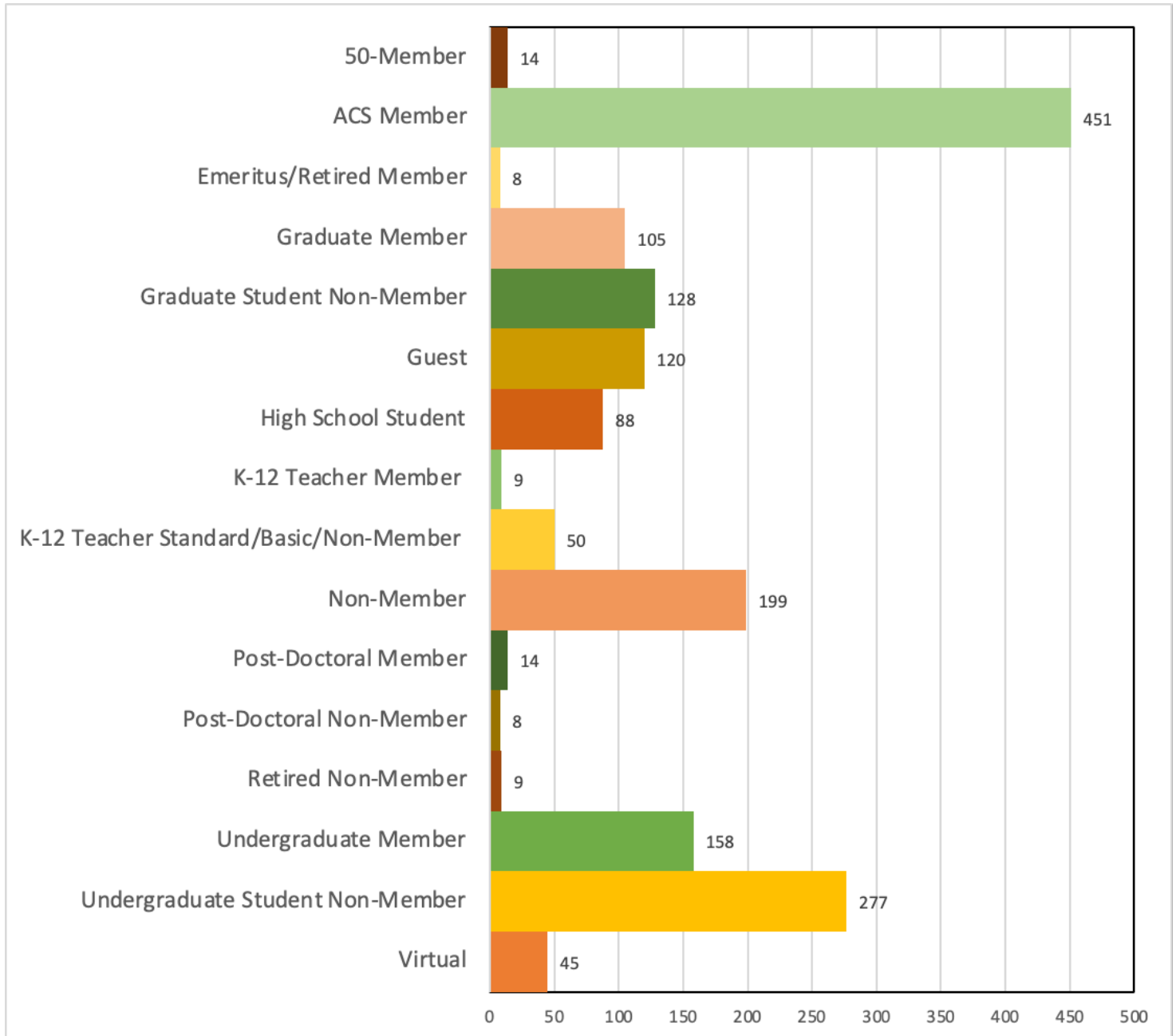
I (a) Executive Summary

During 2022, the ACS-Puerto Rico Local Section celebrated its 75th anniversary. As part of this celebration it served as host for the Southeast Regional meeting of the ACS that was held on October 19-22 at the Puerto Rico Convention Center, San Juan. Some 1,683 participants attended the diversity of offerings, including oral and poster technical sessions that focused on topics from across the discipline and aligned with the general theme: ***“Chemistry transcending boundaries for a sustainable future”***. This theme was chosen to emphasize and align a cutting edge scientific program and other activities with the Sustainable Development Goals. A variety of special events were held, including more than 30 invited symposia featuring some of the World's top chemists, five plenaries including a Nobel Laureate: Dr. David MacMillan and a number of keynote speakers including, Angela Wilson, ACS President, Victor McCrary, Vice-Chair of the National Science Board, Isiah Warner, Vice President for Strategic Initiatives at Louisiana State University, Erick Carreira, Editor in Chief of the Journal of the American Chemical Society and Laura Castillo, Chief Diversity and Inclusion Officer-National Academies of Sciences, Engineering, and Medicine. We were also honored to receive visitors representing 18 different countries. The event was also enriched by over 1,000 technical presentations, an exposition, the graduate school fair, ACS-on-Campus, exhibition of Hispanic women, luncheons, dinners and receptions, student-focused events, special shows to highlight our culture, and the National Chemistry Week celebration. This activity alone attracted more than 1,200 additional participants, including high school students. Jointly with SERMACS 2022, on Saturday, October 22, the AAAS-Caribbean Division hold its 37th Annual Conference (AAAS-CD 22) titled "Puerto Rico Confronts Climate Change". We are very happy to have for the first time in SERMACS, a hybrid technical program (in-person/remote). Although limited to two daily symposia, it also included all the plenary lectures and a virtual poster session for international students (i-RIPS).

Something unique in this meeting was to address Goal 5 of the ACS Strategic Plan: Embrace and Advance Inclusion in Chemistry. All the five plenaries were started with an "inclusion moment" led by an ACS Board member; all morning and afternoon sessions were also started with a short reflection about inclusiveness. Moreover, all the plenary sessions were also delivered using sign language interpreters and were virtually transmitted for the benefit of those members that could not attend, including international members that were also benefited by the i-RIPS project that supported their virtual poster presentations. Also, a special room was designed for those students that suffer from anxiety. A virtual pre-meeting on the topic of Climate Science was also hosted, with Dr. Bassam Shakashiri and Dr. Jerry Bell as speakers. Representatives from eight different countries participated in the workshop. In addition, some of the symposia allowed speakers, especially Hispanic students, to present their talks in Spanish, however slides were in English.

Feedback from attendees through a post-conference survey indicates a high level of satisfaction with the event. The meeting earned revenues in excess of expenses. A graph with the different categories of participants is shown below.

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I (b) Site Selection

With the assistance of our meeting coordinator (Carlos Castañeda), we sent out a bid solicitation to the Puerto Rico Convention Center as the venue for our meeting.

Puerto Rico Convention Center

The Puerto Rico Convention Center is located in the Isla Grande area, in San Juan, Puerto Rico. With a sleek, modern design and 600,000 square feet of total space, PRCC is the largest and most

technologically advanced meeting facility in the region. It's also one of the greenest, with a 20,000-panel solar array and numerous other initiatives focused on sustainability. PRCC is the anchor of the fast-growing Convention Center District, with hotels, restaurants, and the T-Mobile District entertainment complex located just across the street from the convention center.

We reserved a total of 16 meeting rooms on the first, second and third level of the convention center. They were divided into Ballroom A on the third floor as a plenary room with a maximum capacity of 2,340 people in a theater style set up room and 15 meeting rooms on the second and first floor with different capacities and set ups, from theater, school, and round table set ups.

We also reserved 4 meeting rooms on the second floor to be used as an office, storage, complementary food and beverage for volunteers and undergrad students and a speaker ready / Board meeting room.

We reserved Ballroom B on the third floor to be used for 50 boards (8'x4') for poster presentations and 50 tabletops for the Graduate School Fair exhibition.

The foyer in front of the ballrooms on the third floor was used for the 34 exhibitors 8'X10' booths. The second floor foyer was used for registration, that included 4 pre-registration counters and 2 on-site registration counters, plus a women in chemistry exposition and the ACS member's lounge.

Hotels

Two major hotels in the city of San Juan (Sheraton Puerto Rico Hotel & Casino, Hyatt Place, and Courtyard by Marriott San Juan Miramar) were initially considered for the meeting's official hotels. The Miramar Courtyard was found to be of marginal size and the location was also not ideal. This hotel was designated as a backup candidate.

The Sheraton Puerto Rico Hotel & Casino and the Hyatt Place were studied as finalists. A copy of the final contracts with the Sheraton Puerto Rico Hotel & Casino and the Miramar Courtyard hotels may be found in Appendix 1. A \$1,000 deposit for the Hyatt Place was made on April 26, 2019, but upon suggestion by the initial ACS meeting planner Starleetah Gaddis, the hotel was dropped in early 2022. The deposit was not returned even after attempting to get it back. The Sheraton Hotel completely sold out in early September 2022, and we went back to the Hyatt Place hotel to try to contract them again, but the room rate was too expensive (higher than the Sheraton) so we contracted the Courtyard by Marriott San Juan Miramar hotel.

The main host hotel for SERMACS was the Sheraton Convention Center across from the Puerto Rico Convention Center. We had contracted a total of 950 room nights with a room rate of \$189++ for a single run of the house room type and \$219 and \$249 for double or triple rooms.

The total actual pick up for the Sheraton hotel was 1,018 room nights.

Our second hotel that was reserved was the Courtyard by Marriott Miramar, in San Juan, located two miles away from the PR Convention Center. We did not offer transportation services, however it was fairly easy to obtain an Uber and/or taxis. We had a contracted 40 room nights with a room rate of \$139++ for a single / double run of the type.

The total actual pick up for the Courtyard by Marriott Miramar hotel was of 159 room nights.

I (c)

Meeting Organizing Committee Selection

Complete contact information for the final composition of the Organizing Committee can be found in the Appendix 2.

General Chair: Ingrid Montes, Professor of Chemistry, University of Puerto Rico-Río Piedras. Montes was chosen to lead the Organizing Committee by the ACS Puerto Rico local section. She was the General Chair for SERMACS 2009. Montes has been active in the Puerto Rico Section since 1991, including being the Chair for four times, (1995, 2003, 2011, 2022), Councilor (1998 to 2013), Outreach coordinator and SEED Program Coordinator (2011-to present). has served as Director-at-Large of the ACS Board of Directors (2013-2021) and has served as a member in different ACS National Committees, including being member of SOCED (2009-2012), ConC, Committee on Community Activities (Chair 2007-2009), (2009-2012), and for the Policy Board of ChemMatters Magazine (2007-2009) Councilor for the Puerto Rico Section since (1998-2013).

Program Chair: Néstor Carballeira, Professor of Chemistry, University of Puerto Rico-Río Piedras. Carballeira was asked to serve as Program Chair by the General Chair. Dr. Montes and Carballeira have had a long-standing collaboration, so they knew they could work together well. Carballeira was the Program Chair of SERMACS 2009. Carballeira has been active at the local section and the national levels (CMA, CPT). Carballeira's position at UPR-Río Piedras ensured active participation by the only R2 PhD-granting institution in the section.

Finance Chair: Jorge Colón, Professor of Chemistry, University of Puerto Rico-Río Piedras. Colón was chosen as Treasurer. He has served as the Treasurer of the Local Section since 2004 and has always shown to be committed and enthusiastic about his responsibilities. Colón was the Finance Chair of SERMACS 2009. Colón has been active at the local section and the national levels (IAC).

Webmaster: José A. Prieto, retired Professor of Chemistry, University of Puerto Rico-Río Piedras. Prieto was chosen as the SERMACS 2022 Webmaster. He had served as Webmaster for SERMACS 2009. In 2003 he was the Webmaster for the local section and in 2011 he also shared the webmaster duties for the IUPAC World Chemical Congress, held in Puerto Rico. The SERMACS 2022 website included all meeting information and links, including registration, abstracts submission, scientific program, plenary lectures, housing, sponsorships, workshops, exhibition, graduate school fair, undergraduate program, high school teacher's program, special events, social activities, area and

convention center maps, etc. Actually, the art work, meeting information, exhibition, general program, etc. that were included in the program book were taken directly from the website. The initial design and development of the SERMACS 2022 website was contracted with Design Burd, Inc., a professional web design company from Chicago, IL after evaluating four proposals.

Fundraising Chair: Lisa Houston, Director, District IV, ACS Board of Directors, was chosen as the Fundraising Chair. She has extensive connections and networks with vendors.

Exhibition Chair: Carlos Castañeda was chosen as Exhibition Chair and Lisa Houston as Co-Chair. Castañeda has vast experience and knowledge as Exhibition Chair for several scientific meetings in Puerto Rico and abroad. Houston was also the Fundraising Chair and has extensive connections and networks with vendors.

Graduate School Fair Coordinator: Milagros Delgado, Professor of Chemistry, Florida International University, was chosen as the Graduate School Fair Coordinator. She has been active in her ACS local section and at the national level.

Floor Coordinator: Edmy Ferrer, Professor of Chemistry, Interamerican University-Ponce Campus, was chosen as the Floor Coordinator. She has been active in the local section.

Meeting Planner: Brianne Blevins was the ACS Meeting Planner. The National ACS office largely handled the registration. However, several volunteers of the ACS-Puerto Rico Section helped the ACS Staff members during the on-site registration process.

SERMACS 2022 ORGANIZING COMMITTEE

Executive Committee

General Meeting Chair

Ingrid Montes

Program Chair

Néstor M. Carballeira

Co-Chairs

Jorge L. Colón

José Antonio Prieto

Arthur Tinoco

Treasurer

Jorge L. Colón

Meeting Coordinator

Carlos Castañeda. LCC Management

ACS Meeting Planner

Brianne Blevins

Webmaster

José Antonio Prieto

SERMACS 2022 Organizing Committee

ACS Meeting Planner

Brianne Blevins

Fundraising/Exhibit Committee

Lisa Houston, District IV Director - ACS Board of Directors

Chris Bannochie, Savannah River National Labs,

Carlos Tollinche – INDUNIV

María de Lourdes Rivera, CQPR

Jorge L. Colón

Carlos Castañeda. LCC Management

Tim Hanks

Arthur Tinoco

Graduate School Fair Chair

Milagros Delgado – FIU

Education Program Chair

María Oliver-Hoyo – NCSU

Undergraduate Program Chair

Brenda J. Ramos – UPR-Aguadilla

i-RIPS Program Chair

Santiago Urena – Costa Rica, Isaac Céspedes Camacho – Costa Rica, and Carolina Guzmán - Guatemala

Teachers Day Chair

Liz Díaz –UPR-Río Piedras

SEED Program Chair

Ajay Mallia

NCW-Festival Chair

Ingrid Montes

Co-organizers

Sara Delgado –UPR–Río Piedras and all Faculty Advisors (Student Chapters/ ChemClubs)

Awards Committee Chair

Mitk’El Santiago – UPR-Humacao and Local ACS-PR

Floor Coordinator

Edmy Ferrer – Interamerican University

Public Relations Committee

Marío Alegre, / Ingrid Montes, / Néstor Carballeira, / Jorge Colón / José Prieto

SERMACS 2022 Scientific Committee

Ajay Mallia
Alec H. Christian
Angel. A. Martí-Arbona
Arthur D. Tinoco
Asier Unciti-Broceta
Ben A. García
Bob Kane
Brenda J. Ramos-Santana
Bridgette Shannon
Caleb Martin
Carlos R. Cabrera
Christopher D. Chouinard
Cliff W. Padgett
Dalice M. Piñero Cruz
Daniel Cruz-Ramírez de Arellano
Daniel Rabinovich
David J. Sanabria-Rios
Douglas Masterson
Elsie I. Pares-Matos
H.N. Cheng
Jenny Lawler
Idalia Ramos
James D. Kubicki
Jenny Y. Yang
Jesús Velázquez
Jillian L. Dempsey
Jorge L. Colón
Joseph Sabol
José Almirall
Juan C. Colberg
Kelley C. Caflin
Lisandro Cunci
Lorena Tribe

2022 SERMACS Final Report

Luyi Sun
Mahesh Narayan
Maria Oliver-Hoyo
Mario V. Ramos-Garcés
Mark Pederson
Verónica Bermúdez Benito
Will E. Lynch
Xu Simon
Yousong Ding
Marvin J. Bayro
Mary Virginia Orna
Md Nurunnabi
Mitkel B. Santiago-Berrios
Monica Pica
Paul S. Weiss
Ramonita Diaz Ayala
Randy M. Wadkins
Renã A. S. Robinson
Reni Joseph
Rosallynn Quiñones
Santiago Sandi-Ureña
Santiago-Berrios
Scott R. Goode
Stephen Westcott
Tad Whiteside
Ubaldo M. Córdova-Figueroa
Verónica Bermúdez Benito
Will E. Lynch

Undergraduate Program Chair: Brenda Ramos, Professor of Chemistry, University of Puerto Rico-Aguadilla. Dr. Ramos is the advisor to the UPR-Aguadilla Student Chapter. She led the organization of the undergraduate program. In addition, all the other Puerto Rico Student Chapters' advisors actively collaborate in the coordination of the different events.

Educational Program Chair: María T. Oliver-Hoyo, Professor of Chemistry, North Carolina State University. Dr. Oliver-Hoyo was chosen to head the Educational Program.

Fundraising Chair: Lisa Houston, District IV Director, ACS Board of Directors occupied this position.

I (d)

Meeting Organizing Committee Operations

Regular monthly Committee meetings were begun in August 2020, but since 2021 were on a weekly basis. These were supplemented by email and phone conversations between Committee members as

required. This structure was satisfactory. The meetings were sufficient to keep everyone informed as to our progress and to generate new ideas in brainstorming sessions, yet infrequent enough not to be a major barrier to participation.

The Committee worked well as a team on most projects. Establishment of sub-committees to handle specific functions was very important. All the Faculty Advisors of the ACS Student Chapters worked very efficiently to coordinate National Chemistry Week outreach events as well as other specific tasks related to the program. Some individuals were assigned to specific tasks; they were generally handled very well, though this resulted in some individuals carrying very heavy loads at various points.

More detailed training for the Chair might have been helpful. This is an extraordinarily complex job and involves a myriad of details that are difficult to anticipate in advance.

I (e)

Budget Development

The budget was developed based on the results of previous meetings. We looked at the registration numbers and distributions, the various income sources and the expenses incurred. For us it was not easy to follow previous meetings because the pandemic affected the previous meetings. Many aspects were uncertain due to the pandemic and also location (people from the US needed to travel by plane) but at the same time we promoted SERMACS 2022 as an international meeting. We looked very closely at previous meeting plans and preliminary results. We looked to minimize expenses where possible and tried to dedicate as much funding as possible to the program. We were careful when considering organizing large off-site events as these had proven to be poorly attended (and costly) at other meetings.

Section I(e) Budget Development

Budget development was based initially on financial reports of previous SERMACS (2009, 2017, 2018, and 2019). In August 2019 we received from Prof. Jordan C. Poler of the SE Regional Board the 2 years before meeting preliminary budget for SERMACS 2017. We then prepared the SERMACS 2022 3 years before meeting preliminary budget based on the SERMACS 2017 budget, the SERMACS 2019 registration fees (obtained from its webpage), and the SERMACS 2009 number of registrants (since SERMACS 2009 was held in San Juan, Puerto Rico). That 3 years before meeting preliminary budget was presented to the SE Regional Board meeting on October 20, 2019, during SERMACS 2019.

In that SE Regional Board meeting at SERMACS 2019, the Board suggested to project the registration fee as an average of the previous 4 years, to increase the number of participants from 1,300 to 1,500, to increase the number of Graduate School Fair Booths from 30 to between 40-45 and increase their price from \$400 to \$500, and to increase room nights to 1,000.

The SERMACS 2022 2 years before meeting preliminary budget was presented on October 17, 2020, to the SE Regional Board meeting during SERMACS 2020. We had increased the budget for webpage design from \$2,500 to \$8,000.

The year after, on November 13, 2021, during SERMACS 2021, we presented to the SE Regional Board of SERMACS, Inc. the SERMACS 2022 1 year before meeting preliminary budget (the final budget). The draft of this budget was sent for comments to Tim Hanks, Brent Feske, and Christopher

Bannochie for comments. We were asked to make a major increase in the amount budgeted for A/V. In addition, upon their request due to coming off of a pandemic, we revised down the estimate of registrants from 1,500 to 1,300. We also reduced the fees for the Puerto Rican Night event (from \$40 to \$30) and the two luncheons (from \$50 to \$40). Finally, compared to the 2 years before meeting preliminary budget we increased the direct financial support per symposia to \$1,500 (as seed money per symposia, regardless of symposium length) as we agreed with what Tim Hanks had told our fundraising committee that we needed to invest enough funds in programming or we would have problems.

Immediately after SERMACS 2021, Brent Feske sent us a “Program Chair Timeline and Tips” document as well as some other planning documents that helped us organize the symposia organizers, obtain sponsors, and plan sessions.

Registration fees were set using the 2019 fees as template and taking into consideration the extra costs of traveling to Puerto Rico. Some research was done on typical exhibition booth costs for scientific meetings in Puerto Rico. In July 2020 the SERMACS 2022 Treasurer contacted Prof. Jordan C. Poler to ask for the list of exhibitors to SERMACS 2019 and 2020. He responded by sending us the vendor and grad school list for SERMACS 2017 since he had been its General Chair and Expo Chair. He also gave us the contact information of the SERMACS 2019 Expo Chair (Catherine MacGowan) and the SERMACS 2020 Expo Chair (Al Bopp). I communicated to them our request in September 2020. Al Bopp responded that due to the COVID crisis, the city's guideline prohibited trade shows and exhibitions, so they were not going to be able to have them in SERMACS 2020.

Graduate School Fair booth prices were kept in line with those of previous SE regional meetings.

As planning progressed and as bids for AV equipment, the exhibit hall set-up, menus, and coffee breaks, etc. were received, the budget was revised more tightly. Organizers were encouraged to find their own funding for symposia. They were offered direct financial support up to \$1,500 as seed money to use to offer complimentary registration and/or travel/housing support to invited speakers.

I (f)

Other/Lessons Learned

The selection of the Convention Center was critical to the success of the meeting. The area was perfect for the size of the meeting and the Chemistry Festival as well, also the easy access to restaurants, coffee shops, bars and the like. The hotel contiguous to the Convention Center provides access to all the amenities.

Regular meetings of the Executive Committee helped to keep the program development on track. Many tasks proved difficult to break into smaller components, resulting in several individuals carrying very heavy loads. Unfortunately, we didn't get early financial commitments from local industry/academia and that did not allow us to plan for an aggressive program.

II

General Meeting Program

Submitted by Dr. Néstor Carballeira, Program Chair, and the Program Committee

Undergraduate Program

Chair, Brenda J. Ramos-Santana, Professor, Department of Natural Sciences, University of Puerto Rico at Aguadilla

II (a)

Data

Symposia (number of presentations in parentheses)

Symposium on Sustainable Green Chemistry I-V (6+8+5+4+8)

Organizer: Juan C Colberg and H. Cheng

Project SEED Symposium I-II (8+7)

Organizer: D. Masterson.

Trends in Chemistry Education (7)

Organizer: Daniel Cruz-Ramirez de Arellano

Evaluation and Assessment in Chemistry Education (7)

Organizer: Maria Oliver-Hoyo

Leveraging Diversity and Inclusion for Educational Excellence (6)

Organizers: B.A. Garcia and R. Joseph

History of Chemistry - Puerto Rico's Impact on Chemistry (6)

Organizer: C. W. Padgett

Novel strategies for Localized Drug Delivery I-II (8+5)

Organizers: R.R. Kane and A. Unciti-Broceta

The Chemistry of Solar Fuels I-V (8+6+8+9+6)

Organizer: Jillian L. Dempsey, Jenny Y. Yang, Jesús Velázquez and Jorge L. Colón

Photoinduced Processes in Macroscopic, Supramolecular and Nanoscale Inorganic Materials I-III (7+7+5)

Organizers: Angel A. Marti-Arbona

Mass Spectrometry: Transcending Boundaries with Innovations in Methods & Technology I-II (8+5)

Organizer: Christopher D. Chouinard

La Historia de Pioneros y Descubridores en Química I-II (5+5)

Organizer: M. Orna and Daniel Rabinovich

Symposium on Forensic Chemistry I-II (6 +7)

Organizer: Jose Almirall

Puerto Rico NSF-PREM's Symposium I-III (6+6+1)

Organizer: Jorge L. Colón, Ubaldo M. Cordova, and Idalia Ramos

XRD in the Southeast - Advances in X-Ray Crystallography in Research I-III (6+6+9)

Organizers: W. E. Lynch, Dalice M. Pinero, and Clifford. W. Padgett

Ligand and Biomolecular Contributions to Metal Bioactivity and Therapeutic Potential (8)

Organizer: Arthur D. Tinoco

Frontiers in Nucleic Acids (6)

Organizer: Randy M. Wadkins

WCC Symposium: Crossing boundaries: The Resilience of Women Chemists Acá y Allá I-II (5+7)

Organizers: K.C Caflin and L. Tribe

Unusual Structure and Reactivity of Inorganic Molecules I-II (6+8)

Organizer: Stephen A. Westcott

Advances in Nanomaterials for Biomedical and Biomedicinal Applications (8)

Organizers: Md Nurunnabi

Inorganic Porous and Layered Materials Symposium I-IV (8+7+7+4)

Organizer: Monica Pica, Mario Ramos-Garcés, Luyi Sun, and Jorge L. Colón

Nanotechnology Approaches to Biology and Medicine (7)

Organizers: Paul S. Weiss

Surface Chemistry: Polymer Science, Self-Assembly, and Bio interfaces (8)

Organizer: Rosalynn Quiñones

3rd Users' Meeting of the UPR MSRC X-Ray Diffraction Facility (8)

Organizer: Dalice M. Piñero

ACS Chemistry Festivals, Non-formal Chemistry Education around the World (7)

Organizer: Santiago Sandi-Ureña

Discovery and Production of Bioactive Marine Natural Products (7)

Organizer: Yousong Ding

Enabling Technologies in Drug Discovery and Development (6)

Organizer: Alec Hiroshi Christian

Sustainable Nanotechnology (7)

Organizers: C. L. Haynes, R. Hernandez, S. E. Mason

Chemical Business Best Practices (8)

Organizer: Xu Simon and Ramonita Diaz Ayala

DEIR Symposium: Building Inclusive DEIR Communities through Societal Organizations (6)

Organizer: B. Shannon

Innovative Ways to Communicate the Value of Chemistry to the Public (6)

Organizer: Scott R. Goode

Interdisciplinary Science for Arid Lands Energy and Water Sustainability I-II (7+8)

Organizer: V. Bermudez Benito, James. D. Kubicki

Total = 370 presentations

Thirty-one symposia were offered during the meeting. The largest symposium was the Chemistry of Solar Fuels symposium with 37 oral presentations spanned into five sessions followed by the Sustainable Green Chemistry symposium (five sessions) with 31 oral presentations. A total of 370 oral presentations were offered during the meeting in these symposia. This accounted for 37% of all of the presentations in this meeting.

General Sessions

Biochemistry I Structure Dynamics (6)

Biochemistry II Biosensors / Signaling (4)

Biochemistry III Drug Discovery (8)

Biochemistry IV Enzyme Activity / Kinetics (8)

Organizer: Elsie I. Pares-Matos

Physical Chemistry I-II (7+6)

Organizer: Marvin J. Bayro

Analytical Chemistry I – Remediation (8)

Analytical Chemistry II - Sensors (8)

Analytical Chemistry III - Optical (7)

Analytical Chemistry IV - Mass Spectrometry (5)

Analytical Chemistry V - Spectroscopy (8)

Organizers: Lisandro Cunci

Inorganic Chemistry I - Inorganic materials (7)

Inorganic Chemistry II -Synthesis (9)

Inorganic Chemistry III -CO₂ catalysis (5)

Inorganic Chemistry IV -Catalysis (8)

Organizer: Mitk'El B. Santiago

Undergraduate Oral Session I-III (8+5+8)

Organizer: Brenda Ramos Santana

Organic Chemistry I Organic Reagents (8)
Organic Chemistry II Synthesis (8)
Organic Chemistry III Physical Organic Chemistry (7)
Organic Chemistry IV Chemical Biology (5)
Organic Chemistry V Catalysis (7)
Organizer: David J. Sanabria-Rios

Total = 160 presentations

Twenty general oral sessions were offered during SERMACS 2022. It is significant to mention that three of these sessions were undergraduate sessions. A total of 160 general oral presentations were offered. The organic and analytical general sessions were the most popular, with 35 and 36 presentations, respectively.

Poster Sessions

1) Sci-Mix Poster Session I (87)
Chemical Education (31)
Surface Chemistry (17)
Biochemistry (6)
Inorganic Chemistry (9)
Undergraduates (24)

Organizers: Néstor M. Carballeira, Marvin J. Bayro, D. Cruz-Ramirez de Arellano, R. Quinones, Brenda J. Ramos-Santana, Mitk'El B. Santiago-Berrios

2) Sci-Mix Poster Session II (93)
Forensic Chemistry (10)
Biochemistry (15)
Physical Chemistry (13)
Inorganic Chemistry (25)
Analytical Chemistry (30)

Organizers: Néstor M. Carballeira, Jose Almirall, Marvin J. Bayro, Lisandro Cunci, Mitk'El B. Santiago-Berrios

3) Undergraduate Poster Session I (95)
Physical Chemistry (12)
Biochemistry (16)
Organic Chemistry (18)
Inorganic Chemistry (14)
Analytical Chemistry (35)

Organizers: Néstor M. Carballeira and Brenda J. Ramos-Santana

4) Sci-Mix Poster Session III (106)
PR-NSF-PREM (33)

Organic Chemistry (13)
Undergraduate (60)

Organizer: Néstor M. Carballeira, Jorge L. Colón, and Brenda Ramos-Santana

5) Sci-Mix Poster Session III (116)

i-RIPS (27)
Project SEED (14)
Organic Chemistry (16)
Physical Chemistry (8)
Undergraduate (51)

Total = 497 presentations

Five separate poster sessions were offered during SERMACS 2022. All poster presentations were Sci-Mix sessions. All the Sci-Mix poster sessions were very popular, which proved to be a very nice blend of presentations. The Sci-Mix poster sessions proved to be ideal to place multidisciplinary presentations such as those in areas of forensic and surface chemistry. Most of the poster presenters were undergraduates and accounted for 46% of all of the on-site poster presentations. The poster format was very popular during the meeting, which received 48% of all contributions. For the first time in this type of meeting, a virtual poster session with Latin American contributors, named i-RIPS, was held on Saturday morning. Other special poster presentations were from project SEED, the PR-NSF PREM symposium and a forensic chemistry session.

Grand Total of 1,027 presentations.

See Appendix 3 for a spreadsheet containing information on the technical sessions and special events.

II (b)

Plenary/Keynote Speakers

David MacMillan - 2021 Nobel Prize in Chemistry McDonnell Distinguished University Professor of Chemistry at Princeton University, Merck Center for Catalysis, Princeton University
The Development of Asymmetric Organocatalysis and Metallaphotoredox

Angela Wilson - John A. Hannah Distinguished Professor of Chemistry at Michigan State University and 2022 American Chemical Society President
Future of the Chemical Sciences: The Transformative Age of Chemistry

Isiah M. Warner - Boyd and Phillip W. West Professor of Surface and Analytical Chemistry and the Vice President for Strategic Initiatives at Louisiana State University
Model Programs for Broadening Diversity and Participation in STEM

Victor R. McCrary, Jr. - Vice President for Research, Professor of Chemistry, Office of University Research, The University of the District of Columbia and Vice-Chair National Science Board
NSB Vision 2030: A Call to Action

Erick M. Carreira - Head of Department of Chemistry and Applied Biosciences at ETH Zürich
Chemistry and Biology of Natural Products

Five plenary lectures were delivered at SERMACS 2022, one of these by a Nobel laureate. These lectures were placed in the program such that no other presentations took place during this time.
Total = 5 presentations

II (c)

Workshops (Appendix 4)

Climate Science (Virtual Pre-Meeting Workshop)

Saturday, October 15, 11:00 AM (Separate free registration was required)

Dr. Bassam Z. Shakhashiri, Department of Chemistry, University of Wisconsin-Madison and Dr. Jerry Bell

This workshop theme was: “What we do in our chemistry classrooms and research laboratories can have profound effects on the minds of students, staff, and the campus community. What we do outside the classroom in reaching the public-at-large can also influence attitudes and behavior. Let us all strive to: reduce our dependence on fossil fuels for daily life needs; adopt a diet with less stress on natural resources; address the economic impacts of climate change; engage in civil and respectful conversations about all matters affecting the quality of life locally and globally; and demand government action locally and nationally to preserve and improve the quality of water, land, and air. Let us become better at connecting chemistry to society.”

Green Chemistry Workshop

Wednesday, October 19, 8:30 AM – 12:00 PM, Room 209 A/B

Dr. Juan Colberg, Pharmaceutical Sciences Small Molecules, WRDM, Pfizer Inc.

This workshop focused on education on, green innovation, the use of safer chemistry, greener processes, and cost savings. In this workshop we will have presentations on various topics involving the application of green chemistry in the development of drugs. The workshop included breakout sessions to give participants the opportunity to apply their knowledge of green chemistry in case studies. The format of the workshop in addition to discussion on the basic application of the 12 Principles of Green Chemistry, also included applications of novel, greener technologies of interest to the Pharma and Chemical Industry. Among the technologies discussed were: Biocatalysis, Flow chemistry and Catalysis Using Non-precious Metals

Practical Green Chemistry Tools and Techniques for Research & Development Scientists

Dr. Isamir Martínez, ACS Green Chemistry Institute, and ACS Green Chem Institute Pharmaceutical Roundtable members

Wednesday, October 19, 1:30 – 5:00 PM, Room 209 A/B

The aim of this workshop was to equip industry-based R&D chemists and engineers as well as graduate students with practical GC tools, methods, and metrics. The content of this workshop covered green chemistry basics through to the most recent innovative tools and metrics widely used in the

pharmaceutical industry. The workshop was tailored toward scientists and engineers working in batch chemical operations in common use within the pharma industry, but the tools could be applied to other allied chemical industries.

Finding Yourself: Identifying a Career that Matches your Strengths and Values

Wednesday, October 19, 8:30 AM – 11:30 PM, Room 208-B

Mary Engelman, ACS Career Consultant, John Engelman, ACS Career Consultant

Finding Yourself: Identifying a Career that Matches Your Strengths and Values allows you to self-assess your career values and strengths. Participants also learned how the four sectors of chemistry employment compare and contrast. This course also aimed to help the participant determine which sector best aligns to their values and strengths and to plan the next steps in obtaining an ideal position

Networking: How to Get Started

Wednesday, October 19, 3:45 – 4:45 PM, Room 208-C

Mary Engelman, ACS Career Consultant, John Engelman, ACS Career Consultant

Networking: How to Get Started was aimed to help participants utilize networking to enhance their job search. Participants also learned which types of questions to create a natural flow in a networking conversation. The course also aimed to help the participant in creating a networking plan to locate and obtain an ideal job in the federal government.

II (d)

Award Presentations

A luncheon was held to honor the following individuals for their activities in the Region. The program included Dr. Paul Jagodzinski, Chair ACS Board of Directors as the keynote speaker. The Award luncheon flyer may be found in Appendix 5.

- **Robert W. Ayton**, *ACS Division of Chemical Education SE Region Award for Excellence in High School Teaching.*
- **Pamela Leggett-Robinson & Dr. Linette Watkins**, *Ann Nalley Award for Volunteer Service.*
- **Dr. Allan M. Ford**, *Stan Israel Award for Advancing Diversity in the Chemical Sciences.*
- **Dr. Bindu Krishnan**, *ACS Regional Industrial Innovation Awards Program.*

II (e)

A/V Arrangements

After discussing possible A/V suppliers and receiving quotations from three companies (Encore, JR Audio Visuals, Inc., and TVEX LIVE), we decided to use the TVEX LIVE company. This company had experience working at the Puerto Rico Convention Center and knew what worked and what didn't work in the specific rooms we would be using. This proved to be an excellent decision. They had courteous,

knowledgeable staff on hand at all times that sessions were running, and they responded immediately to any issues that arose.

Audio Visuals

The in house A/V company, Encore, servicing the Puerto Rico Convention Center had quoted \$198,928.94. Our meeting planner, Carlos Castaneda from LCC Management, recommended working with a local A/V company (TVEX LIVE) which he had worked with before. We were able to reduce the quote to \$68,125.00. This quote included:

15 meeting rooms with:

Draper 8 x 13 Wide Front Projection Screen for 4 days

1 EIKI 6,000 Lumens Projector for 4 days

1 Sound System B for 4 days

- 2 JBL PRX 815 Powered Speakers

- 1 Soundcraft 12 Channels Mixer Console

- 2 Pro Lock Speakers Security Stands

- 1 Whirlwind Direct Box

1 Shure Microflex Podium Microphone for 4 days

1 Shure UHF Handheld Microphone for Audience Q & A for 4 days

1 Pro Lock Microphone Stand for 4 days

1 Audio Connection from Console to Podium --

1 Data/Image Connection from Console to Podium

Ballroom A Plenary Hall/Hybrid Room

2 Draper 9 x 16 Rear Projection Screens for 4 days

2 EIKI 9,500 Lumens Projectors for 4 days

2 Dell or HP Lap Top Computers for 4 days

1 Roland V-4 Matrix AV Production Switcher for 4 days

1 Kramer 4/1 Distribution Amplifier Signal Distributor for 4 days

1 Perfect Cue Presentation Changer & Green Laser Pointer for 4 days

1 50" Speakers Reference Monitors Floor to Stage for 4 days

All Data/Video & Image Connections for 4 days

All Power Connections for 4 days

Stage & Lights

1 TVEX LED Podiums (One for the Moderator & One for the Speaker) for 4 days

16 TVEX Decorative Stage Panels as Stage Backdrop for 4 days

60 LF Draper Black Pipe & Drape for 4 days

8 Colorado Wash for Stage for 4 days

2 10" Global Truss Structure for Lights Support for 4 days

All Event Lighting Cables for 4 days

All Power Connections

Audio

1 TVEX Sound System for 4 days

- Soundcraft Expression 16 Channel Mixer Console

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- 8 FBT Array Speakers
- 2 FBT Stage Front Fill Monitors
- 2 FBT 218 Subwoofers
- 8 JBL PRX 815 Sound Delays
- 1 Whirlwind Direct Box
- 1 Shure Microflex Podium Microphone

Ballroom A Hybrid Production

- 2 Sony (Feel world) 4K Robotic Video Cameras for 4 days
- 2 KUPO \$C Video Camera C' Stand Stands for 4 days
- 1 Sony Video Camera Controller for 4 days
- 2 MAC Broadcast Streaming Computers for 4 days
- 1 BM ATEM PRO Streaming Switcher for 4 days
- All Cat 6 Category & HDMI Streaming Connections --
- All Audio Connections

Note: Internet, a hard wire line of 20M, was contracted and provided by the Convention Center.

LABOR

- 2 Audiovisual Technicians for Ballroom B
- 5 Floating Technicians on Duty for Rooms Support
- 1 Streaming Technician

Our meeting planner was able to also negotiate to include the following services:

- 1 Registration Area
- 6 Register Counters
- 6 Counter Graphics Production
- 6 Stools
- 1 40' x 10' Structure as Register Area

- 20 Exhibit Booth Partitions
- 20 5 Amps/120 Electric Power Distribution

- 1 20 x 18 Welcome Unit

- 50 Poster Boards Structures

- 3 60" Smart LED Monitors w/ 3 Global Truss, 6' Truss Bases with Cover

Summary

The final A/V setup from TVEX LIVE provided A/V service for 16 rooms, Ballroom A (with hybrid production capabilities) and Ballroom B (including streaming service) at the Puerto Rico Convention Center. TVEX LIVE finally also provided Zoom service for plenary sessions, four register counters, 4 stools, a 40' x 10" structure as register area and four 10' x 8' banners for the registration area.

All sessions' rooms were equipped with 6,000 lumens projectors, 8' x 13' screens, speakers, podium microphones, handheld microphones, and all cables needed for connection to a laptop computer. For the plenary sessions at Ballroom A we used a dual screen system with two 9' x 16' rear projection screens, two 9,500 lumens projectors, 2 laptop computers, one 50" speakers reference monitor floor to stage, and perfect cue presentation changer and green laser pointer. Each presider at regular session rooms was asked to bring a laptop computer with them for use in their session. Presenters were asked to bring their presentations on a USB memory stick and to arrive at their sessions early so they could load their presentations onto the laptop in the room. Having a single laptop in each room made the transition from speaker to speaker go smoothly without the cumbersome plugging and unplugging of computers between talks. However, occasionally some speakers switched computers for their talks.

We wish to stress the importance of working with an A/V group that is agile enough to respond to changing needs throughout a conference of this scale.

The final A/V setup from TVEX Live had a total cost of \$70,224.50.

II (f)

Electronic Abstract Service

The electronic abstract service provided through the online ACS Meeting Abstracts Programming System (MAPS) was very useful and reliable. Most abstracts were easily and accurately submitted. Problems tended to come from submitted errors in particular undergraduates submitting to wrong sessions. The tools for analyzing the program were powerful and worked well in general. We found the training provided by ACS and MAPS particularly useful and received help provided via e-mail helped to solve most of our doubts or arising problems.

Symposium organizers were able to access the MAPS system and organized their sessions.

II (g)

Undergraduate Program Data

Five distinguished chemists, including one Nobel Laureate presented lectures at SERMACS 2022.

The following symposia and Special Events as part of the ACS on Campus comprised part of the undergraduate program. Additional details may be found in Appendix 6

8:30 - 11:30 am

Finding Yourself: Identifying a Career that Matches your Strengths and Values (*in Room 208 B*)

Mary Engelman, ACS Career Consultant

John Engelman, ACS Career Consultant

1:30 - 3:30 pm

Careers in Industrial Chemistry: Identifying Your Role in the Industrial Value Chain (*in Room 208 B*)

Mary Engelman, ACS Career Consultant

John Engelman, ACS Career Consultant

Thursday

9:30 - 9:45 am

Check In

9:45 - 9:55 am

Opening Remarks

9:55 - 10:45 am

10 Tips for Scholarly Publishing

Ben Garcia, Ph.D. Associate Editor, *Analytical Chemistry*

Jenny Y. Yang, Ph.D., Associate Editor, *Journal of the American Chemical Society*

Carlos Toro, Ph.D., Senior Managing Editor, ACS Publications

10:45-11:00 am

Networking Break

Friday

1:45 - 4:55 pm

Hangout with ACS on Campus at Sci-Mix (*in Ballroom B*)

6:15 - 7:15 pm

Ask Me Anything Live!

David MacMillan, Ph.D., Nobel Laureate and James S. McDonnell Distinguished University, Professor of Chemistry, Princeton University

Erick M. Carreira, Ph.D., Editor-in-Chief, *Journal of the American Chemical Society*

Jenny Y. Yang, Ph.D., Associate Editor, *Journal of the American Chemical Society*

Kathleen Canul, Ph.D., ACS Publications Ombudsperson

Graduate School Fair

The Graduate School Fair (GSF) was held on Thursday, October 20, 2022 from 9:00 am – 5:00 pm and Friday, October 21, 2022 from 2:30 pm -5:00 pm of SERMACS 2022 in Ballroom B. The GSF was held in the same ballroom as the poster sessions to facilitate interactions between students and representatives of universities. Fifty vendors were present during both days of the GSF, 48 universities and 2 industrial vendors. Tables were available to university representatives from Wednesday, October

19th, 2022 as there were student poster sessions from Wednesday afternoon until Saturday morning. The list of participating universities is available in Appendix 7.

In general, over 100 graduate programs were contacted multiple times starting in March 2022. The contract form was generated as fillable PDF that could be saved and sent. Furthermore, secured credit card payment links were generated, together with QR codes available in forms and SERMACS 2022 Graduate Fair Webpage (https://sermacs2022.org/wp-content/uploads/2022/08/grad_fair_contract_new.pdf).

As extra promotion to graduate program, university logos, program description, and program links were made available directly in the SERMACS 2022 Graduate Fair Webpage, <https://sermacs2022.org/events/graduate-school-fair/>

A survey was prepared and shared with participating institutions to get feedback and learn from the experience. Results of the survey could be found in Appendix 7.

Symposia: Undergraduate Oral Presentations I, II and III

Three undergraduate oral presentation sessions were scheduled as part of the scientific program for SERMACS 2022. We had a total of 21 presentations distributed among these undergraduate sessions, which were all well attended.

Symposia: Undergraduate Poster Session

A specific totally dedicated undergraduate research and poster session was scheduled as part of the scientific presentations for SERMACS 2022. Undergraduate chemistry majors from Puerto Rico are among the most enthusiastic in the ACS and undergraduate chemistry research in the island universities is a key activity for most undergraduates. As a consequence, we had 95 poster presentations for this undergraduate session, which was divided into the areas of physical chemistry (12), biochemistry (16), organic chemistry (18), inorganic chemistry (14), and analytical chemistry (35). It was evident from these contributions that inorganic chemistry was the most popular area of interest. All of these poster presentations were well attended.

Inclusive Remote International Poster Session (Appendix 8)

Saturday, October 22, 10:00 AM – 12:00 PM, Ballroom B and Virtual i-RIPS provides young students and emerging faculty access to an international professional development experience and strengthens their sense of community and belonging to greater scientific endeavors. This special poster session provided international ACS student chapters and faculty members an authentic opportunity to participate remotely at SERMACS 2022.

The goal of i-RIPS was to provide international ACS student chapters and faculty members with an authentic opportunity to participate remotely at SERMACS-2022. It enacts our goals to promote inclusion as a core value. The backlog of US-visa applications has caused wait times of more than one year for an interview at the US Consulate in most countries in LATAM. Without a US-Visa, students are excluded from ACS events. i-RIPS explores creative, inclusive practices that can be extended to other ACS events impacted by international travel limitations. It also engages students at the event by enlisting them to facilitate the remote session as Session Moderators. The target audience was augmented by access of the event to all SERMACS attendees. i-RIPS provided young students and emerging faculty from diverse local communities with access to an international professional development experience, and it strengthened their sense of community and belonging to greater scientific endeavors. These objectives were consistent with the mission of the ACS International

Activities Committee whose sponsorship through a Global Initiative Grant made this event possible. Through their participation in i-RIPS, students were better able to achieve their professional goals, and later as professionals they will have developed a stronger bond to the ACS and to the international scientific community.

SERMACS-RIPS was innovative: It provided an alternative for remote participation platforms that are expensive, technologically demanding and in many cases unavailable (i.e. venue does not provide affordable internet access or prohibits live streaming). It strived to enhance the authenticity of the remote participation experience.

Comments from participants

“Participating in the I-RIPS was great because: I had the opportunity to practice English. I learned about other interesting studies. I was asked interesting questions to reflect on the work that I do. It was free, which was great because it is hard to pay for events. The fact that it was virtual was great, because if it had been face-to-face only, I wouldn't have been able to participate. The organization and great communication of the team was excellent, all my questions were answered (some I didn't even need to ask), the feedback about the work in a personalized way, the initial dynamic helped a lot to reassure me and interact without fear and the care that the team had at all times, the efforts to provide a great experience for everyone were evident.”

“Showing my results in a new format was interesting and having the chance to respond to questions about my work. I liked the practice in summarizing information and making everything easily understandable with just a look at the poster.”

“I've realized that I need to improve my English and that is a positive aspect. I had the opportunity to share my work and points of view with other people in other countries.”

“It was very fulfilling that my work was seen by many people and the best part was knowing that it caused curiosity and attracted their attention. Although this was a virtual event, I was able to meet through Zoom.”

“Personally, I enjoyed the experience because of the opportunity to share my work with the world. It is the first time I do something at this level, considering that the ACS is the largest chemistry community in the world, makes this experience much more valuable.”

“Through this event I met ACS Student Chapters members, I learnt more about Green Chemistry, I shared my work on a different platform and I learnt about the research developed by other student chapters I learnt a lot about making a poster and a video to show my research progress. My technical skills and communication skills improved considerably.”

“Through this experience, I gained confidence to present to the scientific community, I improved in many aspects of scientific communication, in addition I acquired knowledge on using applications to create posters.”

“I met a lot of similar minded people, within the scientific community which has increased my knowledge in various fields. I made a lot of connections that have positively impacted my life and motivated me towards going for my goals. This interaction has also encouraged me to continue to learn new languages.”

Comments from co-organizer

“i-RIPS was fulfilling and rewarding. We know that the participants would otherwise have not been a part of SERMACS and creating a space of inclusion where they could feel active part of the event was the main inspiration for our work. Although a regional meeting may seem not memorable for many of us, i-RIPS was very meaningful for the participants. One of them, a high school student, ask the Nobel Laureate, Daniel McMillan, a question via Zoom during the Ask-Me-Anything session. Hearing her question asked and knowing professor McMillan was addressing her when responding was exhilarating for this young scientist.

SERMACS-Puerto Rico offered international ACS members a unique opportunity to be part of an ACS event despite obstacles (US visa backlog and lack of travel funds). The co-organizers and the participants are thankful to SERMACS Organizing Committee and to the ACS International Activities Committee for their leadership and devoted support to make i-RIPS a reality.

Organizing i-RIPS was challenging because we had to communicate with native speakers of three languages, in seven different countries and in different time zones. In addition, the scientific background of students was diverse, all the way from high school to grad school. We could not make assumptions about the access to technology or support by their local mentors. It took a big chunk of our time, but we are very satisfied with the outcomes and hope to be able to repeat the experience.”

Festival de Química- NCW Celebration Outreach Event (Appendix 9)

Coordinator: Ingrid Montes

Co-Coordinator: Sara Delgado

Faculty Advisors of Student Chapters and ChemClubs

The Southeastern Regional Meeting (SERMACS 2022) coincides with NCW and celebrated our traditional “Festival de Química” at the Convention Center District in San Juan. The event was coordinated with the Puerto Rico Department of Education and students were officially allowed to attend the event. Moreover, the activity was also coordinated with some home schooling groups. More than two hundred volunteers (ACS Student Chapters from Puerto Rico, Chem Clubs, UPRRP Graduate Student Association, Younger Chemist Committee, Women Chemist Committee, the Ecoexploratorio Science Museum, and members from USA, Costa Rica, Colombia, Guatemala, and Jamaica) worked hard to welcome over twelve hundreds kids, the general public, and SERMACS attendees participated in this Festival designed around this year's theme. Each group worked different hands-on demonstrations related to the theme, in addition a chemistry demonstration show was held, and the event was enriched with music form the Interamerican University-Ponce Campus and several mascots from some universities. The event was highlighted by the presence of ACS 2022 President, Dr. Angela Wilson, Chair of the Board of Directors, Dr. Paul Jagodsinski, as well as other members of the ACS Boards. The event was showcased in a five minutes TV report on the most popular afternoon and night news report: https://www.wapa.tv/noticias/ciencia/realizan-festival-de-quimica-en-el-centro-de-convenciones_20131122540439.html, also was highlighted in one page announcement of SERMACS in the most popular newspaper in Puerto Rico.

The planning and organization of the "Festival de Química" required a great deal of effort from all those that agreed to work. Meetings were held at UPR-Rio Piedras Campus during September and October. Each faculty advisor and student members worked together in the selection of the demonstrations to be

presented. All activities were thoroughly discussed by the student members and their Faculty Advisors and all the hands-on experiments related to the NCW theme were practiced prior to the event.

Safety was a priority while rehearsing and for the actual performance at the activity. The setting for the event was divided into several stations: stations were designated to student member chapters and the others were distributed among the Ecoexploratorio Museum, YCC, WCC, and the graduate students from UPR-Río Piedras. All the volunteers conducted demonstrations and hands-on activities for the students, their parents/teachers and the community to illustrate the importance and relevance of chemistry in everyday life.

In addition, as part of the NCW celebration we coordinated a Haiku contest, receiving 140 entries. Moreover, all ACS Student Chapters and ChemClubs promoted and organized a variety of activities to celebrate the mole day. Some of the activities included visits to schools (chemical demonstrations shows and “hands-on” activities), mole day trivias, library exhibitions, and contests, conferences related to the theme, and public exhibits at the different campuses. Furthermore some ChemClubs not only participated in these activities, but also conducted chemistry shows, exhibitions and chemistry contests in their schools. During the Festival, we asked participants to bring first aid needs to be donated to the affected communities by Hurricane Fiona. A lot of articles were received and donated to “Casa Amor, Fe y Esperanza”, a non-profit organization who help low income communities and students.

Two *Salutes to Excellence* were presented by Dr. Wilson during the Festival: one to Lilly del Caribe for its continuous support to the Chemistry Festivals and one to the District of the Convention Center for providing the venue and their support to ensure SERMACS 2022 success.

We conducted an on-site electronic survey. 700 participants completed the survey that reveals that 90% were first time participants in a “Festival de Química”, 98% learned something new, and 97% want to participate again in this type of event. Finally, each participant received a bag with some stickers, tatoos, “Celebrando la Química”, and safety glasses. Thanks to many sponsors, all participants and volunteers also received some snacks and refreshments. Thanks to the generosity of Lilly del Caribe, all volunteers received a red T-shirt commemorating the event.

Refer to Appendix 9 to see the survey results and sample of certificate for volunteers and participants.

Social

DEIR/WCC Luncheon [GF(1)]

Diversity, Equity, Inclusion, and Respect / Women Chemists Luncheon included Laura Castillo-Page (Chief Diversity and Inclusion Officer- National Academies of Sciences, Engineering, and Medicine) as speaker followed by round tables’ discussion.

Rene Robinson, President of NOBCChE and Amy Balijs, Chair of ACS Women Chemist Committee organized some questions and led a very rich discussion amongst the group.

Social: Puertorrican Night

The Puerto Rican Night showcased the Puerto Rican culture, including a Folkloric Show, Latin music to dance and Puerto Rican appetizers.

Social: A special event for international members-sponsored by the ACS Board of Directors was held in Old San Juan.

Additional Comments/ Lessons Learned from the Undergraduate Program & Social Events

Overall, we consider the Undergraduate Program a successful one with 25 oral and 95 poster presentations.

The NCW Festival de Química was a big success, over 900 students attended the festival. The event counted with the participation of more than 300 volunteers, ACS student member chapters from PR and the mainland, seven Chem Clubs, Ecoexploratorio Museum, YCC, WCC and was highlighted by the participation of the 2022 ACS President, members of the ACS Board of Directors, US Faculty Advisors, and international Faculty Advisors and students.

Regarding other social events, all of them were very successful and brought the opportunity of all attendees to better know Puerto Rican culture.

II (h)

Additional Comments/ Lessons Learned in general

Careful planning and assured funding up-front (\$1500/half day session was offered to all session organizers) allowed for the development of a well-rounded technical program with many outstanding speakers. We also chose to continue several topics for symposia that historically play a role in this meeting, while also bringing in numerous new and state of the art topics to enrich our program.

III

Meeting Finances

Submitted by Jorge Colón- Finance Chair

III (a)

Budget

See Appendix 10 for the 3 years before meeting preliminary budget, the 2 years before meeting preliminary budget, the 1 year before meeting preliminary budget (the final budget) and the income and expense accounting file (all are Excel files with tabs). We also include in Appendix 10 the final Event Order Confirmation from the Convention Center which give details of all F&B events and their cost. Finally, we also include the final invoice from the Convention Center. By the end of SERMACS 2022 we had already paid to the Convention Center in the deposit and partial payments as per contract a total of \$136,735.25. The total cost of all facilities and services in the Convention Center for SERMACS 2022 were \$152,945.88. However, the local government of Puerto Rico had agreed to sponsor SERMACS 2022 through its tourism program *Discover Puerto Rico* in the amount of \$15,120 if the conference was able to accumulate at least 1,260 hotel nights. The conference accumulated 1177 night, but the government gave us the total amount offered and it was subtracted from the pending payment to the Convention Center.

On November 15, 2022 we made the final pending payment of \$1,090.63.

III (b)

Financial Accounts Used by Meeting

We debated on whether to open a separate bank account for SERMACS 2022 finances. However, the long and difficult process for doing it, and even if we wanted to simply open an official subaccount in the current ACS-Puerto Rico bank account, forced us to consider to simply use the main ACS-Puerto

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Rico account and keeping detailed records of what was a SERMACS 2022 related expense or income item or not. We consulted with Tim Hanks and Christopher Bannochie and they agreed with us that this was a simpler route. Therefore, we decided to organize our finances through the ACS-Puerto Rico bank account, maintaining detailed records of financial items related to SERMACS 2022. The \$6,000.00 loan check from the SE Regional Board was deposited on November 12, 2019. See Appendix 10 for a complete list of bank account transactions related to SERMACS 2022. General chair Ingrid Montes and finance chair Jorge Colón had signatory privileges for the ACS-PR account.

A total of 71 checks or PayPal transfers were done for speaker reimbursements. Requests for reimbursements for symposium speakers and other symposium expenses (meals, etc.) were also accepted after the meeting. For this purpose, a reimbursement form in an Excel file was distributed to the symposium organizers who were responsible for sending it back with appropriate receipts to the finance chair. This form included a list of expenses per invited speaker and the address to which the reimbursement should be mailed or the email address to use for PayPal transfer. We were able to finish writing all but one of the checks for reimbursements and other bills by March 21, 2023. However, one of symposium organizers never sent his receipts for reimbursement. We later learned that this person hoped to be able to use one of his grants to cover his airfare expenses. However, we recently learned that his university refused to reimburse his airfare expenses from his grant, because they consider travel to Puerto Rico as "foreign travel". Since 52 U. S. C. §20310(8) states that ""United States", where used in the territorial sense, means the several States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands, and American Samoa.", traveling to Puerto Rico is not "foreign travel". But since the symposium that this person had help to organize had gathered enough funds to cover his airfare, we made the PayPal transfer to his account on October 18, 2023.

Finally, after final payments and reimbursement, the total excess revenue for SERMACS 2023 was \$74,135.75. Of this amount, \$14,827.15 is returned to SERMACS Inc. as the 20% return of revenue required in the Region's bylaws. In addition, a \$6,000 check is mailed to the Regional Board in repayment of the Board's loan to SERMACS 2022 as well. These checks were prepared and given to Dr. Mitk'El Santiago, a Past President of ACS-Puerto Rico Section, who will represent the SERMACS 2022 Organizing Committee at SERMACS 2023. He will give the two checks to the SERMACS, Inc. Board. The remaining amount of \$53,308.60 is net profit for the ACS-Puerto Rico Section.

IV	Fundraising* Submitted by Lisa Houston – Chair		
IV (a)	Sponsorship		
	Source	Amount	Purpose
	Diamond Sponsor Oakwood Chemical	\$25,000	General

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<i>Platinum Sponsors</i> OneACS	\$20,000	General
Lilly del Caribe	\$12,000	General and Chemistry Festival
Pfizer	\$12,000	General and student registrations
ACS PR Section	\$10,000	General
AAAS-Caribbean Div	\$10,000	General
National Organization For Professional Advancement of Black Chemists and Chemical Engineers	\$10,000	Building inclusive DEIR communities through societal” symposium
<i>Gold Sponsors</i> Reach Higher Education	\$6,000	Student registrations
3M	\$5,000	Student registrations
Abbvie LTD	\$5,000	General
Merck	\$5,000	Symposium, Grad fair booth, student breakfast/lunch
ACS International Activities Committee	\$5,000	Global Initiative grant for i-RIPS (sent directly to the symposium organizer, not to SERMACS 2022 Organizing Committee)
<i>Silver Sponsors</i>		
Perkin Elmer	\$4,000	General
Baylor University	\$3,500	Novel Strategies for Localized Drug Delivery symposium and Unusual Structures and Reactivity of Inorganic Molecules Symposium
Savannah River National Lab	\$3,000	General

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ACS Office of Science Outreach	\$3,000	UVEX goggles and general
ACS GCI Pharmaceutical Roundtable	\$3,000	Organic Chemistry Symposium
ACS President Angela Wilson	\$3,000	Chemistry Festival and General
Materials Characterization Center	\$2,500	General Program
Carolina Biological Supply Company	\$2,500	General
<i>Copper Sponsors</i> Rigaku	\$2,000	Double exposition booth
ACS Division of Inorganic Chemistry	\$2,000	Support of 4 Inorganic Chemistry-related symposia
NeXus Regional Programming Grant	\$2,000	Support for Green Chemistry programming
LSAC METT grant	\$2,000	Local Section Meeting Lounge and hybrid programming
UPR-MSC STCE/Puerto Rico INBRE	\$2,000	Booth
Nanalysis Corp.	\$2,000	Booth and support of Unusual Structure and Reactivity of Inorganic Molecules symposium
ACS Division of History	\$1,500	La Historia de Pioneros y Descubridores en Quimica and student registration
Puerto Rico Science, Technology and Research Trust	\$1,500	Support for SCHB program
ACS SCHB	\$1,500	SCHB Programming
Nanalysis Corp.	\$1,950	Booth and support of Unusual Structure and Reactivity of Inorganic Molecules symposium

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TTC Analytical Service Corp.	\$1,400	Booth
Anton Paar	\$1,400	Booth, General
Buchi	\$1,400	Booth
CCSI	\$1,400	Booth
Magritek	\$1,400	Booth
Oxford Instruments	\$1,400	Booth
Bruker	\$1,400	Booth
Keyence Corporation	\$1,400	Booth
Mitel	\$1,400	Booth
Los Alamos Natl Lab	\$1,400	Booth
Shimadzu	\$1,400	Booth
Agilent Technologies	\$1,200	General
JEOL USA	\$1,200	General
Teledyne	\$1,200	General
ACS Division of Analytical Chemistry	\$1,000	Support of 3 Analytical chemistry symposia
ACS Division of Energy and Fuels	\$1,000	Support of 3 energy related symposia
ACS Women Chemists Committee	\$1,000	WCC/MAC luncheon and WCC symposium support Local Section Sustainability Programming grant
ACS Committee on Environmental Improvement	\$1,000	Support for SCHB program
ACS Committee on Minority Affairs	\$1,000	Support for DEIR symposia and events
ACS Committee on Chemists with Disabilities	\$1,000	Support for sign language interpretation for plenaries

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ACS-Coastal Georgia LS	\$1,000	Solving Chemical Problems with Crystallography: XRD in the Southeast symposium and History of Chemistry-Puerto Rico's Impact on Chemistry symposium
ACS Division of Organic Chemistry	\$997.44	Support of Sustainable Green Chemistry symposium
<i>Nickel Sponsors</i> EASTMAN	\$750	Support of The Chemistry of Solar Fuels symposium
<i>Joule and Chem</i> journals (RSC)	\$600	Support for The Chemistry of Solar Fuels symposium
Elsevier	\$500	Support for the Symposium on Forensic Chemistry
ACS Division of Catalysis	\$500	Support of The Chemistry of Solar Fuels symposium
ACS Division of Colloid and Surface Chemistry	\$500	Support for Surface Chemistry: Polymer Science, Self-Assembly, and Biointerface symposium
ACS Division of Physical Chemistry	\$500	Support of The Chemistry of Solar Fuels symposium
ACS Senior Chemists Committee	\$500	YCC and SCC Panel
<i>Other Sponsors</i> Gascó Industrial Corp.	\$400	General
<i>Dalton Transactions</i> journal (RSC)	\$300	Support for Inorganic Porous and Layered Materials
<i>EES Catalysis</i> journal (RSC)	\$300	Support of The Chemistry of Solar Fuels symposium
<i>Energy & Environmental Science</i> journal. (RSC)	\$300	Support of The Chemistry of Solar Fuels symposium
<i>Chem Communications</i> journal (RSC)	\$250	Support for the Unusual Structure and Reactivity of Inorganic Molecules symposium

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Registration Grant Funds (Report)

Funds from multiple entities were identified to offer registration grants to students and high school teachers. Identified funds were:

Pfizer \$2,000

3M \$5,000

An online form was developed and promoted through the SERMACS 2022 registration webpage and through official SERMACS 2022 email notifications. 135 applications were received and evaluated. When evaluating applications, priority approval was given to:

- High school teachers that have a great impact on future generation of students
- High school students who have never attended a conference

Graduate and undergraduate students presenting their research for their first time

A total of 104 grants were given with the following distribution:

- 36 graduate students (61 % applicants)
- 48 undergraduate students (86 % applicants)
- 13 K-12 Teachers (100 % applicants)
- 7 high school students (100 % applicants)

The following demographic analysis of granted funded was observed:

	<u>Graduate Students</u>	<u>Undergraduate Students</u>	<u>K-12 Students</u>	<u>High School Teachers</u>
Asian	8%	8%	23%	0%
Black/African American	9%	4%	0%	0%
Hispanic	72%	60%	62%	71%
White	22%	10%	15%	0%
male	58%	33%	62%	43%
Female	86%	56%	38%	43%

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Non-binary/Non Conforming	6%	0%	0%	14%
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Additional Comments/ Lessons Learned

The ACS Technical Divisions and Committees were generous in the sponsorship of our meeting. We coordinated fundraising efforts with the symposia organizers to maximize our resources and impact. We were also successful in applying for and receiving grants from ACS and other entities.

Some exposition vendors were interested in making additional contributions to raise their profile. Organizers should look for unique ways to put the names of sponsors before the meeting attendees.

The finance chair brought the symposium budgets, account information, and the SERMACS account checkbook to the meeting so that he could write expense checks on the spot.

Fundraising is a big challenge and requires time. Fundraising was difficult due to COVID and inability to be face to face for some time. We understood that fundraising was everyone's business. Many team members, including the session organizers, raised funds. These individuals often had specific contacts within technical divisions or with companies that were critical.

V	<u>Exposition</u> Submitted by Carlos Castañeda, Exhibits Chair and Jorge L. Colón, Finance Chair
V (a)	<u>Data</u> Cost of booths - \$1,200/single or \$2,000/double until August 15, and \$1,400/\$2,500 thereafter. There were a total of 28 exhibitors that used 32 booths. A list of exhibitors may be found in Appendix 11.
V (b)	<u>Vendor Feedback</u> We received comments from several of the vendors that they appreciated the layout of the Exposition, i.e., that they were sandwiched between posters and some coffee breaks and refreshments. However, some asked for more spare time for participants to have time to visit the Exposition and for all coffee breaks to have been done at the Exposition hall.

V (c)	<p><u>Approaches Used to Attract Vendors to Meeting</u></p> <p>We began approaching vendors three years out from the SERMACS 2019 meeting, the in-person or hybrid ACS National meetings, particularly the Fall 2021, Spring 2022 and Fall 2022, the PRChem meetings of the Colegio de Químicos de Puerto Rico in San Juan, and the SERMACS 2021 meeting in Birmingham. Between the General Chair, the Finance Chair and the Exposition Chair, we went to all of the vendors, introduced ourselves and gave them a general promotional card about the meeting and the Exposition Prospectus created for the occasion (or gave them the link to download it). Some vendors seemed surprised to be contacted early, while others appreciated the ability to put it on their calendars so far in advance. The best venue where we contacted a great amount of vendors was at SERMACS 2021.</p> <p>We also sent exposition information in late September-early October 2021 to all vendors that we could obtain contact information from SERMACS 2017, 2018, 2019, 2021.</p> <p>In Spring 2022, we sent out emails to all of the vendors for which we had contacts, gently reminding them of the upcoming meeting. All of the information required by vendors was available on the SERMACS 2022 website.</p>
V (d)	<p><u>Exhibits</u></p> <p>The exhibit hall layout is presented in Appendix 11. It also contains the Vendor Contract.</p> <p>The setup time was: Wednesday, 10/21 8 am – 4 pm</p> <p>The expo times were: Wednesday, 10/19 6 pm – 8 pm (Opening Reception) Thursday, 10/20 9 am – 7 pm Friday, 10/21 9 am – 4 pm</p> <p>The takedown time was: Friday, 10/21 4 pm – 9 pm</p> <p>The Graduate School Fair was held Thursday, 10/20, 9 am – 5 pm. The Graduate School Fair booth cost was \$400 until early bird date, \$500 thereafter. The schools involved are listed below and in Appendix 7.</p>

	<p>ACS Bridge Project</p> <p>Auburn University</p> <p>Augusta University</p> <p>Baylor University</p> <p>Claflin University</p> <p>Emory University, Dept of Chemistry</p> <p>Florida International University</p> <p>Florida State University - Department of Chemistry and Biochemistry</p> <p>Georgia Southern University</p> <p>Georgia State University</p> <p>Life University</p> <p>Massachusetts College of Pharmacy& Health Sciences</p> <p>Merck</p> <p>Middle Tennessee State University</p> <p>North Carolina State University Raleigh</p> <p>Rice University</p> <p>RPI</p> <p>Scripps Research</p> <p>Tennessee Technological University</p> <p>The George Washington University - Department of Chemistry</p> <p>Joint School of Nanoscience and Nanoengineering</p> <p>Texas A&M University</p> <p>University of Alabama - Department of Chemical and Biological Engineering</p> <p>University of Alabama at Birmingham - Department of Chemistry</p> <p>University of Alabama at Tuscaloosa</p> <p>University of Buffalo</p> <p>University of California at Davis</p> <p>University of Central Florida - Department of Chemistry</p> <p>University of Connecticut</p> <p>University of Delaware - Department of chemistry and biochemistry</p> <p>University of Massachusetts - Amherst</p> <p>University of Memphis</p> <p>University of Mississippi (Ole Miss)</p> <p>University of North Carolina (Greensboro) - Department of Chemistry and Biochemistry</p> <p>Joint School of Nanoscience and Nanoengineering, University of North Carolina - Greensboro</p> <p>University of North Carolina (Wilmington) - Department of Chemistry and Biochemistry</p> <p>University of Pennsylvania</p> <p>University of Puerto Rico - Rio Piedras</p> <p>University of Rochester</p> <p>University of South Carolina (Columbia)</p> <p>University of South Florida - College of Engineering</p>
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University of Southern Mississippi
 University of Tennessee
 University of Texas - El Paso
 University of Texas at Dallas - Department of Chemistry
 Vanderbilt University - Department of Chemistry
 Virginia Tech
 West Virginia University - Department of Chemistry
 University of Vermont

SERMACS 2022 Graduate Fair Survey

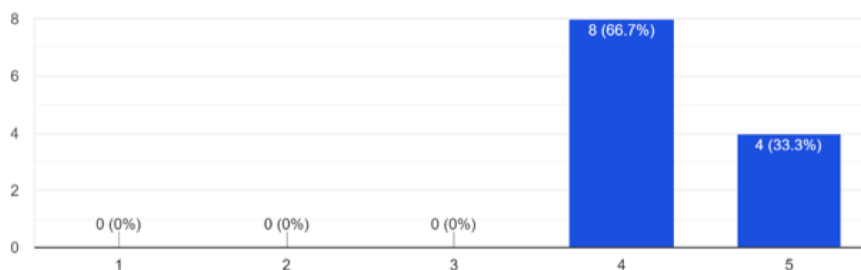
Survey sent to all participating institutions. 25% of participants responded to the survey. Their responses are shown below:

1. Level of Satisfaction with Organization:

5 is very satisfied

What is your level of satisfaction with the organization of the Graduate Fair?

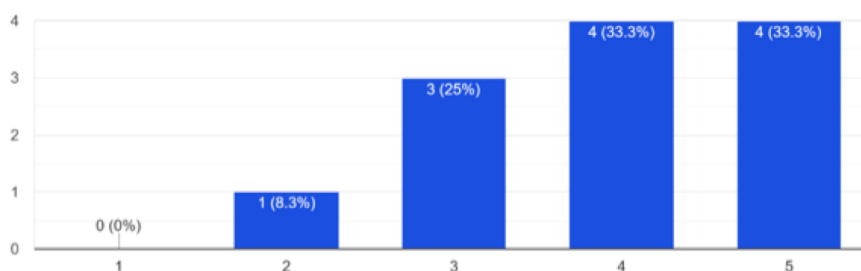
12 responses



2. Level of satisfaction with the webpage of the Graduate Fair:

What is your level of satisfaction with the webpage of the Graduate Fair?

12 responses

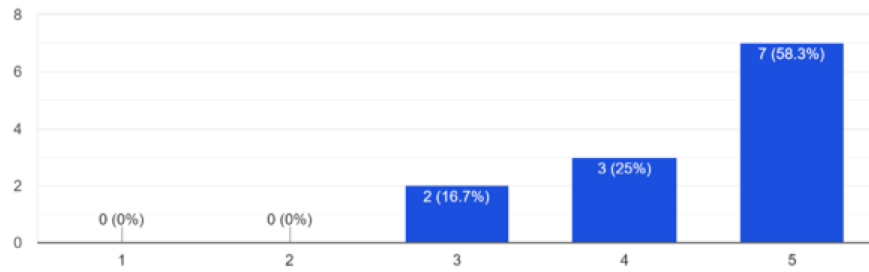


3. Level of satisfaction with venue:

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What is your level of satisfaction with the available space (venue)?

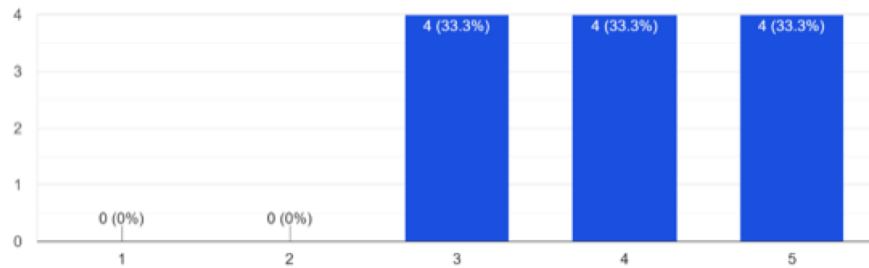
12 responses



4. Level of satisfaction with the number of students you interacted with:

What is your level of satisfaction with the number of students you interacted with?

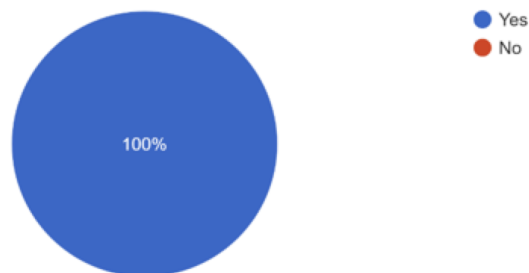
12 responses



5. Location of Poster Sessions and graduate fair:

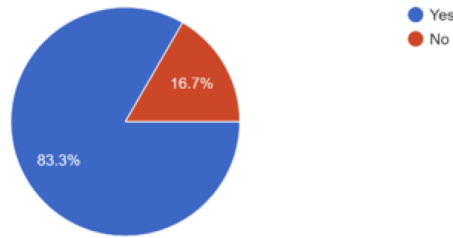
Did you like that all poster sessions were in the same room as the graduate fair?

12 responses



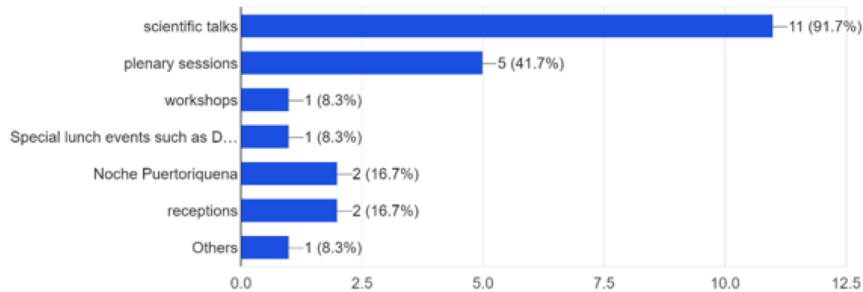
6. Did you attend other SERMACS events during the conference?

Did you have an opportunity to attend other SERMACS events during the conference?
12 responses



7. What other sessions did they attend?

What other sessions did you attend? Select all that apply
12 responses



Some recommendations for improvement:

- The light in the fair space was a bit dim. Also, it would be nice to have electrical outlets.
- I'm not sure all three sessions were necessary. Most students came by during the first session, and very few visited after that. The session during the undergraduate poster session was particularly quite since most students were at their posters. Overall it was very good though. Thank you!
- It is probably not necessary to run the fair for two days. This tends to dilute attendance; a concentrated specially defined time makes it more likely that students will find the time to come to the fair, rather than leaving it to chance.
- Ask Milly Delgado to organize the graduate fair again. Extend the grad fair for 30 min past the poster session so that some undergrad student presenters get a chance to visit some of the tables if they did not do so previously. I talked to a few students during their poster presentation on Friday afternoon who

	<p>had not visited my table. We made a connection during our conversation and I invited them to stop by our table, but it was a challenge because the grad fair and poster sessions ended at the same time.</p> <ul style="list-style-type: none"> · Having the hall open during times where the graduate fair "was not happening" made it feel as though we had to be present at the table even when the graduate fair was not scheduled. I don't think this is avoidable, but it added pressure to be present when it wasn't required. · The grad fair was great on Thursday morning, but attendance dropped off Thursday afternoon and Friday afternoon. Perhaps having just two sessions, say Thursday morning and Friday afternoon, would have reached just as many prospective students and also allowed people attending the tables to see more of the conference talks, etc. · It would have been helpful to have power outlets and a solid internet connection, but overall it was great. · Better wifi · This was the best grad recruiting fair I have ever attended. I talked with over 50 students and all of them were engaged and truly interested in grad school. I enjoyed being able to talk to students in the morning at my table, then visit them at their posters in the afternoon. Overall, fantastic fair. · It would be helpful to have more information ahead of time. In particular, I could not find the fair schedule on the website (meaning students couldn't either?). Information about fair times and where to send materials was sent out very close to the fair date. Otherwise, this was a great event! Thank you for having us. · Internet in the space was quite spotty -- we used a webform to interact with students, however, it was difficult to access during the meeting. <p>Summary: The Graduate fair was a success; major recommendations were electrical outlets in the area, WI-FI in the room, and better lighting in some areas. Maybe it is possible to do two half-days and</p>
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	<p>extend for 30 minutes beyond the time of the poster sessions. The location and number of student interactions were excellent.</p>
V (e)	<p><u>Additional Comments/ Lessons Learned</u></p> <p>Our original Exhibition and Graduate School Fair Floor plan was revised when we received a higher than expected number of vendor contracts. We have originally asked the vendors and graduate schools to specify their top three choices for booth number and we tried to follow their wishes as closely as possible once the floor plan was revised.</p>
VI	<p>Publicity/Web Site The Web Master was Dr. José A. Prieto.</p>
VI (a)	<p><u>Data</u></p> <p>Initial marketing efforts were web based (aka virtual marketing) and involved establishing a web presence, with the web site being the resource that all other efforts pointed to. The ease and speed at which changes can be widely disseminated makes the web site the most up-to-date and accurate source of meeting information</p> <p>The first actual marketing effort involved a booth presence at SERMACS 2021. SERMACS 2022 committee members brought some goodies from Puerto Rico and promoted the venue. This strategy was very successful and we repeated it again in other meetings, for which we also prepared thousands of flyers, highlighting important dates and the web URL. These flyers were given during 2021 & 2022 ACS Spring and Fall meetings as well as Latin-American Chemical Congress (CLAQ) and many local meetings.</p> <p>Traditional vehicles, primarily C&EN, were used for publicity and announcements such as Call for Papers and Meeting Announcements. Also the meeting was promoted in ACS Matters newsletter.</p> <p>A wide reaching effort, by e-mail, to make important dates and deadlines known to chemists, primarily in the southeast, was conducted. Appendix 12.</p> <p>Targeted mailings (email) were made to the entire membership of the region, Department Chairs of regional universities, local industrial contacts and so on. Press releases were prepared and sent out to local popular press, news. Due to the attractive tie-in to National Chemistry Week, the presence of the Nobel Laureate and more than 1400 chemists in attendance, these efforts were very successful and we got coverage from several radio stations, TV and newspapers.</p>

VI (b))	<p><u>Publicity Methods</u></p> <p>Total costs for printed and logo promotional material and promotional cards, banners were under \$1,000. The promotional cards handed out at the SERMACS 2021 meeting and other chemistry meetings (ACS National and Regional Meetings, FLAQ, PRCHEM, local scientific meetings and industries) were prepared by student volunteers, and some other.</p> <p>The web maintenance and e-mail campaign were all done with volunteer efforts with no cost to SERMACS 2022.</p>
VI (c)	<p>Webpage Design</p> <p>The initial design and development of the SERMACS 2022 website was contracted with Design Burd, Inc., a professional web design company from Chicago, IL after evaluating four proposals.</p> <p>The Wordpress website was maintained “in house” by our webmater José A. Prieto and was hosted on a private hosting service (NameCheap). This enabled a high degree of autonomy and control within the many aspects that the Home Page impacted. It is strongly recommended that this be a model to follow for future SERMACS meetings, if possible. The webmaster was also an active and contributing member of the Steering Committee and the Scientific Organizing Committee. This provided him with a broad and clear view of the many aspects that the meeting encompassed. The key is to have a web-savvy, html adept member of the steering committee that can serve as webmaster.</p> <p>The website replaces most printed materials, and phone calls and can be updated in near real time to provide the latest information regarding a SERMACS meeting. There is no other information medium that can match the internet when it comes to publishing dynamic changes, which is the nature of meetings like SERMACS.</p> <p>In the case of SERMACS 2023, the web site included all meeting information and links, including registration, abstracts submission, scientific program, plenary lectures, transportation, housing, sponsorship, workshops, exhibition, graduate school fair, undergraduate program, high school teacher's program, special events, social activities, area and convention center maps, NCW activities, etc. After the meeting, the website included post meeting information, pictures and statistics. The electronic Program Book eliminated the need for (costly) printed program books. The more comprehensive and inclusive you can make a SERMACS website the better. The website will remain active for future reference. The web traffic was closely followed with Google Analytics. This powerful tool allowed us to</p>

	<p>continuously assess and quantitatively gauge the interest, public awareness, usefulness, relevance, deadlines pressure, and the overall use that the potential participants were giving the website. Between June and November 2023 the website received around 23,000 visits (with more than 250,000 pages viewed). The final report is included in this report as Appendix 12.</p> <p>The SERMACS 2022 website was a key element for the overall success of the meeting.</p>
VI (d)	<p><u>Meeting Logo</u></p> <p>The SERMACS 2022 logo was created at no cost by Mr. José Terrón, who is a scientific illustrator at University of Puerto Rico-Río Piedras Campus. Having a unique logo definitely helped with SERMACS 2022 brand recognition. An electronic copy of the logo may be found in Appendix 14.</p>
VI (e)	<p><u>News Media</u> – Appendix 15</p> <p>Our efforts to get coverage by general interest news media for SERMACS 2022 were very successful.</p> <p>Website: https://sermacs2022.org/</p> <p>Facebook: South Eastern Regional Meeting ACS 2022</p> <p>Twitter Account: @sermacs2022pr</p> <p>The general meeting chair, executive committee, and activity organizers of the SERMACS 2022 conference used a combination of online and print outlets and social media to promote the event and encourage the participation of members of the Southeast Region of the ACS and the broader international chemistry community. The ACS Puerto Rico Section took a very active role in the promotion of the conference and documentation of its many accomplishments particularly via its Facebook page: https://www.facebook.com/ACSPuertoRico. Below you will find the promotional flyer and a selection of the title of articles that advertise the conference and its offerings and reflections on the conference by representatives of universities who attended. The complete articles are collated into an appendix.</p>

	<p>Promotional Flyer of the program:</p> <p>Selection of Articles:</p> <p>Promotion-</p> <p>Outlet: Capital Chemist</p> <p>Publication Date: March 26, 2022</p> <p>SERMACS 2022 Symposium – October 19-22, 2022 – Innovative Ways to Communicate the Value of Chemistry to the Public</p> <p>https://capitalchemist.org/2022/03/sermacs-2022-symposium-october-19-22-2022-innovative-ways-to-communicate-the-value-of-chemistry-to-the-public/</p> <p>Outlet: Chemical Education Research</p> <p>Publication Date: May 19, 2022</p> <p>Title- Chemical Education Programming at SERMACS 2022 in San Juan, Puerto Rico</p> <p>https://cer.chemedx.org/mail-list/chemical-education-programming-sermacs-2022-san-juan-puerto-rico</p> <p>Outlet: Chemical Engineering News</p> <p>Publication Date: September 2, 2022</p> <p>Title- Register for the 2022 Southeastern Regional Meeting</p> <p>https://cen.acs.org/articles/100/i32/Register-2022-Southeastern-Regional-Meeting.html</p> <p>Outlet: Chemical Engineering News</p> <p>Publication Date: September 17, 2022</p> <p>Title- Comment: Inspiring, empowering, and engaging ACS international leaders</p> <p>https://cen.acs.org/acs-news/comment/Comment-Inspiring-empowering-engaging-ACS/100/i33</p> <p>Outlet: El Nuevo Día</p> <p>Title- Químicos de renombre visitarán la isla para participar en conferencia internacional</p>
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	<p>(English- <i>Renowned Chemistry visit the island to participate in an international conference</i>)</p> <p>Publication Date: October 15, 2022</p> <p>https://www.elnuevodia.com/ciencia-ambiente/otros/notas/quimicos-de-renombre-visitaran-la-isla-para-participar-en-conferencia-internacional/</p> <p>Outlet: Ciencia Puerto Rico</p> <p>Publication Date: October 19, 2022</p> <p>SOUTHEASTERN REGIONAL MEETING AMERICAN CHEMICAL SOCIETY 2022 (10/19 - 10/23)</p> <p>https://www.cienciapr.org/en/event/southeastern-regional-meeting-american-chemical-society-2022-1019-1023</p> <p>Outlet: Conference Index</p> <p>Publication Date: Unidentified</p> <p>Southeastern Regional Meeting of the American Chemical Society SERMACS on October 19-22, 2022 in San Juan, Puerto Rico</p> <p>https://conferenceindex.org/event/southeastern-regional-meeting-of-the-american-chemical-society-sermacs-2022-october-san-juan-pr</p> <p>We also had a local media personality Dr. Ada Monzón (Chief Meteorologist WAPA TV, WKAQ, Noticel, Founder EcoExploratorio) document the conference. She interviewed Dr. Angela Wilson and showcase the Festival de Química. https://www.wapa.tv/noticias/ciencia/realizan-festival-de-quimica-en-el-centro-de-convenciones_20131122540439.html</p>
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Ada Monzon ✓

October 19 · 🌐

¡Excelente EcoExploratorio: Museo de Ciencias de PR junto a American Chemical Society
#PuertoRico! 🧑🧑🧒🧒

See Translation





Ada Monzon ✓

October 21 · 🌐

¡Excelente actividad de [ACS Puerto Rico Section](#) en el Centro de Convenciones! Saludo todos los estudiantes y maestros, y todos los profesionales científicos de Puerto Rico y mundo por una excelente actividad que resaltó la buena ciencia de nuestra isla.

Outlet: Science Web

Publication Date: Unidentified

Title- GSSM students presented posters at SERMACS 2022

https://scienceweb.clemson.edu/uacsl/gssm_sermacs_2022/

Outlet- Auburn University College of Sciences and Mathematics

Publication Date: November 1, 2022

Title- Department of Chemistry and Biochemistry meets with students

	<p>at SERMACS 2022 in Puerto Rico</p> <p>https://www.auburn.edu/cosam/news/articles/2022/10/departments_of_chemistry_and_biochemistry_meets_with_students_at_sermacs_2022_in_puerto_rico.htm</p> <p>Outlet- The Collegian: Student Newspaper at the University of Richmond</p> <p>Publication Date- November 1, 2022</p> <p>UR chemistry students share their research in San Juan, Puerto Rico</p> <p>https://www.thecollegianur.com/article/2022/11/puerto-rico-science-conference</p>
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DOMINGO
16 de octubre de 2022

CIENCIA

55
EL NUEVO DÍA
elnuevodia.com

CONFERENCIA INTERNACIONAL

Químicos
de renombre
visitarán la isla

David MacMillan, Premio Nobel 2021, será uno de los invitados en SERMACS, del 19 al 22 de octubre

KEVIN ALICEA TORRES
Especial El Nuevo Día

Luego de 13 años, Puerto Rico será nuevamente la sede de la Reunión de la Región Sureste de la Sociedad Americana de Química (SERMACS, por sus siglas en inglés), en la que miles de distinguidos investigadores de la comunidad científica internacional, incluyendo al doctor **David MacMillan**, Premio Nobel en Química 2021, discutirán sus avances.

La conferencia, cuyo tema es "La Química Transcendiendo Fronteras para un Futuro Sostenible", se realizará del 19 al 22 de octubre en el Centro de Convenciones de Puerto Rico, en Miramar.

Este evento reunirá a la comunidad científica, con representantes de un gran número de estados de Estados Unidos y, al menos, 14 países de América Latina, África y Europa. También, contará con la participación del doctor **Victor R. McCrory**, quien fue nombrado por el presidente de Estados Unidos, **Joe Biden**, como vicepresidente de la National Science Board.

La reunión -auspiciada por la Sociedad Americana de Química (ACS, por sus siglas en inglés)- es organizada por el Capítulo de ACS en Puerto Rico, bajo la tutela de la doctora **Ingrid Montes**.

De acuerdo con Montes, la ACS es la sociedad científica más grande del mundo, con una matrícula de más de 154,000 químicos, ingenieros químicos y otros profesionales de áreas relacionadas.

"Esta reunión de la ACS provee a los químicos y a los estudiantes de esta materia todo un programa enfocado a la di-

seminación de la ciencia y al desarrollo profesional. En este evento, los miembros de la ACS compartirán ideas entre ellos y aprenderán sobre importantes descubrimientos de vanguardia en este campo especializado de acción y muchos afines", compartió Montes, catedrática del Departamento de Química en la Universidad de Puerto Rico Recinto de Río Piedras.

Además de sus conferencias, tanto MacMillan como McCrory se reunirán con estudiantes boricuas y representantes del gobierno y la academia, con el propósito de discutir retos y oportunidades en la química y en las ciencias en general y su relevancia para la sostenibilidad y economía en Puerto Rico.

Actualmente, MacMillan es profesor distinguido de Química en la Universidad de Princeton, en Nueva Jersey. Su grupo de investigación realizó muchos avances en el desarrollo de métodos que permiten construir moléculas y acelerar reacciones químicas, también conocido como organocatálisis asimétrica. En 2021, fue galardonado con el Premio Nobel, junto con el alemán **Benjamin List**, por el método de organocatálisis asimétrica, que tiene una gran influencia en el desarrollo de nuevos medicamentos y procesos ecoamigables.

FESTIVAL DE LA QUÍMICA

La conferencia de SERMACS también servirá de marco para la celebración de la "Semana Nacional de la Química, ¡Fibras fabulosas: la química de las telas!". Será parte del Festival de Química, que se llevará a cabo el viernes 21 de octubre, de 8:30 a.m. a 1:30 p.m., y está abierto a toda la comunidad puertorriqueña.

Este año, la presidenta de la ACS, **Angela Wilson**, participará en el Festival de Química, que se celebra en Puerto Rico como parte de sus "Eventos Presidenciales de la Semana a Nivel Nacional".

Además, participarán diferentes miembros de la Junta de Directores Nacional,



David MacMillan, a la derecha, ganó el Premio Nobel en Química 2021 junto a Benjamin List, a la izquierda, por el método de organocatálisis asimétrica. archivo/ep

profesores distinguidos de Estados Unidos, América Latina, África y Europa.

"La actividad está preparada para que los niños y jóvenes se motiven al estudio de las ciencias y lo vean como algo divertido e interesante. Las dinámicas relacionadas a las diversas áreas de esta ciencia se desarrollarán a través de sencillas demostraciones para llevar el mensaje de la importancia y la presencia de la química en nuestra cotidianidad", destacó Montes.

Todas las actividades se ofrecerán en el Centro de Convenciones de Puerto Rico. Para más información, puede llamar al (787) 502-9264 o visitar la página web www.sermacs2022.org.

El autor tiene un doctorado en Biología Celular y Molecular, y es profesor y director de programas de la Universidad de Puerto Rico en Humacao.

ORGANOCATÁLISIS
ASIMÉTRICA

- Método que permite construir moléculas y acelerar reacciones químicas.
- Tiene una gran influencia en el desarrollo de nuevos medicamentos y procesos ecoamigables.



"Esta reunión de la ACS provee a los químicos y a los estudiantes de esta materia todo un programa enfocado a la diseminación de la ciencia y al desarrollo profesional"

INGRID MONTES
CATEDRÁTICA DEL DEPARTAMENTO DE QUÍMICA DE LA UPR-RIÓ PIEDRAS

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VI (f)	<p><u>Exhibits</u></p> <p>A number of flyers were used to promote the meeting. An example may be found in Appendix 12.</p>
VI (g)	<p><u>Additional Comments/ Lessons Learned</u></p> <p>The organization for the web site design and hosting as exhibited by SERMACS 2022, the speed and flexibility and cost savings realized cannot be overemphasized. SERMACS 2022 should serve as a model for future meetings in this regard.</p> <p>Science in general remains uninteresting to the general public when compared to sports or entertainment for example. Generating interest (in a positive way) in chemistry is the biggest challenge to overcome when it comes to marketing and generating PR for a SERMACS meeting.</p>

VII

Arrangements

Submitted by Carlos Castañeda, Local Arrangements Chair

Committee Members:

Milagros Delgado, Graduate School Fair Chair,

Brenda Ramos, Poster sessions Coordinator

Mitk'El Santiago, Awards Chair

VII (a)

Data

The Local Arrangements Chairs were responsible for coordinating room usage for all special events and technical sessions, coordinating all banquets and receptions, signage, set up and break down of poster sessions, room setups for each session and transitioning from one room use to another, and were the point persons with hotel personnel for anything that needed attention. Each item will be explained below. A listing of room assignments may be found in Appendix 16.

A/V: this has already been addressed in section II(e).

Room usage: Working closely with the Program Chair, an initial spreadsheet was generated that included each special event, the type of room needed, and AV needed. As the technical program came together we again worked together to assign spaces for each of the special events. The spreadsheet with all the final details is provided Appendix 16.

Banquets and receptions: As a group, the steering committee made the decision that any event involving food would be on the special events spreadsheet. If the food and beverages were being paid for by SERMACS the Local Arrangements Chair worked with the sponsoring group to select the menu

and finalize the order when budgets and head counts were available. If the food and beverages were being paid for by an outside group, such as a college drop-in or an event sponsored by ACS National, those groups were referred directly to the catering staff of the Convention Center. Those groups had independent billing and made their own arrangements except for an ACS National sponsored breakfast that we paid and were later reimbursed. Before the Convention Center began working with these groups they required a clearance from the General, Program, or Finance Chair to ensure that only authorized groups were using the rooms during the conference. Two weeks prior to the meeting all menus were finalized for all events, and seven days prior to the conference all final head counts were set. However, the convention center was willing to accommodate changes to head counts up to 72 hours in advance and we took advantage of that since many people registered for events onsite.

Signage: ACS arrived with reusable signs that could have a landscape legal size document quickly inserted behind a piece of clear plastic. Easels were also provided for these signs. These signs were used for technical sessions, a few special events and for last minute information. Signs were up before every session began and changed out at lunch and before leaving in the evening.

Poster sessions: Poster boards were rented from the company providing the booths for the Exposition and the Graduate School Fair. However, on the night before the start of the meeting and the first poster session, we noticed that the company setting up the Exposition Hall was setting poster boards of reduced size of the one specified on the contract. Therefore, we would have not been able to accommodate all scheduled posters for the meeting. Since this company informed us that they could not provide more poster boards, we immediately placed an emergency order to another company, which was able to deliver the additional poster boards the next morning. The amount paid for those additional poster boards was discounted from the standing balance with the original company. We bought signage for each poster board number and they were placed by the members of the Puerto Rico ACS Student Chapters under the supervision of the Local Arrangements Co-Chairs. They also set up and broke down all poster sessions. These groups helped greatly with the poster sessions. Since we scheduled an additional poster session on Saturday and the Exhibition Hall was rented until Friday, the poster boards were moved on Friday night by the company to another Convention Center room on the first floor.

Room setup and transitioning: in the final weeks prior to the meeting the General Chair, Program Chair, Finance Chair and Local Arrangements Co-Chairs went through the entire program and identified any activity that might need a room set up other than the traditional theater style. Organizers were contacted for any sessions where it was not clear what type of seating arrangement was desired. Once we knew what room setups were desired we made the arrangements with our Convention Center conference coordinator.

VII (b)

Special Needs

At two of the luncheons we do not have individuals who require any special needs.

VII (c)

Additional Comments/ Lessons Learned

We were lucky that the Local Arrangements Co-Chairs had previous experience with this responsibility for conferences in Puerto Rico. The Co-Chairs worked excellently together and ease the burden of the General Chair, Program Chair, and Finance Chair who were able to attend to their responsibilities without worrying too much about local arrangements.

The Organizing Committee was given some parking space permits to be able to park at the loading dock area of the Convention Center starting the day prior to the meeting. That way we were able to leave materials in the assigned office room that were later distributed throughout the meeting.

Final Reflection:

For the second time, SERMACS was held outside the U.S. mainland. We found this a unique opportunity for participants to learn more about our chemistry related endeavors and about our culture. In addition to the extensive scientific/technical program, we had a series of social events enriched with artistic performances or shows. These cultural activities were partially sponsored by local higher education institutions, government dependencies or private entities.

On Wednesday, October 19 at the Opening Ceremony, we had the a representative of the governor who presented a Proclaim to the ACS Puerto Rico for its contributions to education and research during 75 years. After the greetings from the General Chair and other special guest, the ceremony ended with a big parade of historic characters and Puerto Rican music.

On Thursday, October 20, we had the DEIR/WCC luncheon. WCC Chair and NOBCChE's President coordinated some guided questions around challenges and progress of women in chemistry and chemical engineering. The interaction and discussion was extremely rich and offered an excellent opportunity to engage everyone in the discussion.

After a full day of scientific presentations, we had the Puertorrican Night (social), also sponsored by Rums of Puerto Rico. Finishing the night, a Folkloric Show by *Guateque*, was presented. After the show, we danced with latin music by a local orchestra, directed by Luis Correa.

On Friday, October 21 we had the Awards Luncheon. The artistic show was presented by the Tuna Interamericana from Interamerican University-Ponce Campus. Participants enjoyed a wonderful meal during the presentation of the awards.

Appendices

In addition to the Appendices cited in the text, copies of the complete program book and the details of post-meeting survey are also attached in Appendix 18.

- 1) Final Hotel Contracts (Hotel Bids and Analysis of two finalist hotels).
- 2) Organizing Committee membership and contact information.
- 3) Programming
- 4) Workshops
- 5) Awards Luncheon flyer and brochure
- 6) ACS on Campus/ Undergraduate Program
- 7) Graduate School Fair & Survey
- 8) i-RIPS Program
- 9) Festival de Química
- 10) Budgets and Finances
- 11) Exhibitors brochure and contract
- 12) Meeting advertising materials
- 13) Webpage Analytics
- 14) Meeting logo
- 15) News Media-Articles C&EN and other venues
- 16) Room Usage and setup
- 17) Final Program Book
- 18) Post-Meeting Survey results