

March Business Meeting Minutes

Minutes:

- GCCM Committee Members present: Seagle, Branch, Duwal
- Seagle/Branch presented the 2024 election report, group financials, membership trends. Award nomination deadlines were advertised as well as SCCM2025 and SCCM2027.
- The topic of 2025 SCCM Student Symposium financial student support was discussed regarding some confusion on POCs, registration, and financial support notifications – the correct contact information for these topics is on slide 12 of the presentation.



Topical Group on
Compression of
Condensed Matter
GCCM

GCCM Business Meeting

2025 Annual Meeting at March Meeting

March 18th, 2025



Topical Group on
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The APS Topical Group on Compression of Condensed Matter (GCCM) was founded in 1984.

- Promotes fundamental and applied research in static and dynamic compression of condensed matter.
- Explores how extreme conditions drive behavior in superconductivity, plasticity, transitions, planetary science, chemical reactivity, and shock waves.
- Offers engagement opportunities for students and researchers for networking, career enhancement, and recognition.

Agenda

1. Welcome (Cooper/Seagle)
2. Election Report (Cooper/Seagle)
3. Membership Report (Seagle)
4. Financial Report (Polsin)
5. Award Nominations (Cooper)
6. Meeting Summaries (Seagle)
 - 2025 March Meeting Overview
 - SCCM-2025 and SCCM-2027 planning
7. Open Discussion

2024 Election Report

147 ballots cast of 568 eligible (25.8% of membership voted)

Election open Nov 15th through Dec 11th, 2024

Vice-Chair, (1 position)

Brittany Branch

Frank Cherne

Raymond Smith

Marius Millot

Secretary/Treasurer, (1 position)

Danae Polsin

Tom Lockard

Executive Committee, Member-at-large (2 positions)

Sakun Duwal

Rachel Huber

Trevor Willey

Stefano Racioppi

Terry-Ann Suer

Early Career/Student Member-at-Large (1 position)

Matthew Brennan

Kerry-Ann Stirrup

Xuchen Gong



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Current GCCM Executive Committee

Chair: [Marcia Cooper](#) (01/25 - 12/25)
Texas A&M University

Chair Elect: [Chris Seagle](#) (01/25 - 12/25)
Sandia National Laboratories

Vice Chair: [Brittany Branch](#) (01/25 - 12/25)
Sandia National Laboratories

Sec./Treasurer: [Danae Polsin](#) (01/25 - 12/27)
Laboratory for Laser Energetics (LLE)

Past Chair: [Minta Akin](#)(01/25 - 12/25)
Lawrence Livermore National Laboratory

Assigned Council Rep: [Dragana Popović](#)
Div. Condensed Matter Physics

Members-at-Large:

[Matt Beason](#) (01/24 - 12/25)
Kansas City National Security Campus

[Patricia Kalita](#) (01/24 - 12/25)
Sandia National Laboratories

[Sakun Duwal](#) (01/25 - 12/26)
Sandia National Laboratories

[Rachel Huber](#) (01/25 - 12/26)
Los Alamos National laboratory

Early Career/Student Member-at-Large:

[Matthew Brennan](#) (01/25 - 12/26)
Los Alamos National laboratory

Thank you to our outgoing officers:

Peter Celliers	J. Matt Lane	Jessica Shang
Chair sequence	Secretary/Treasurer	Member-at-Large
01/2021 - 12/2024	01/2019 - 12/2024	01/2023 - 12/2024

Nenad Velisavljevic
Member-at-Large
01/2023 - 12/2024

Sakun Duwal
Early-Career Member-at-Large
01/2023 - 12/2024



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2024 Year-end Financial Report

2024 income:

Member dues: \$ 3,684

Investment: \$ 11,534

2024 expenses:

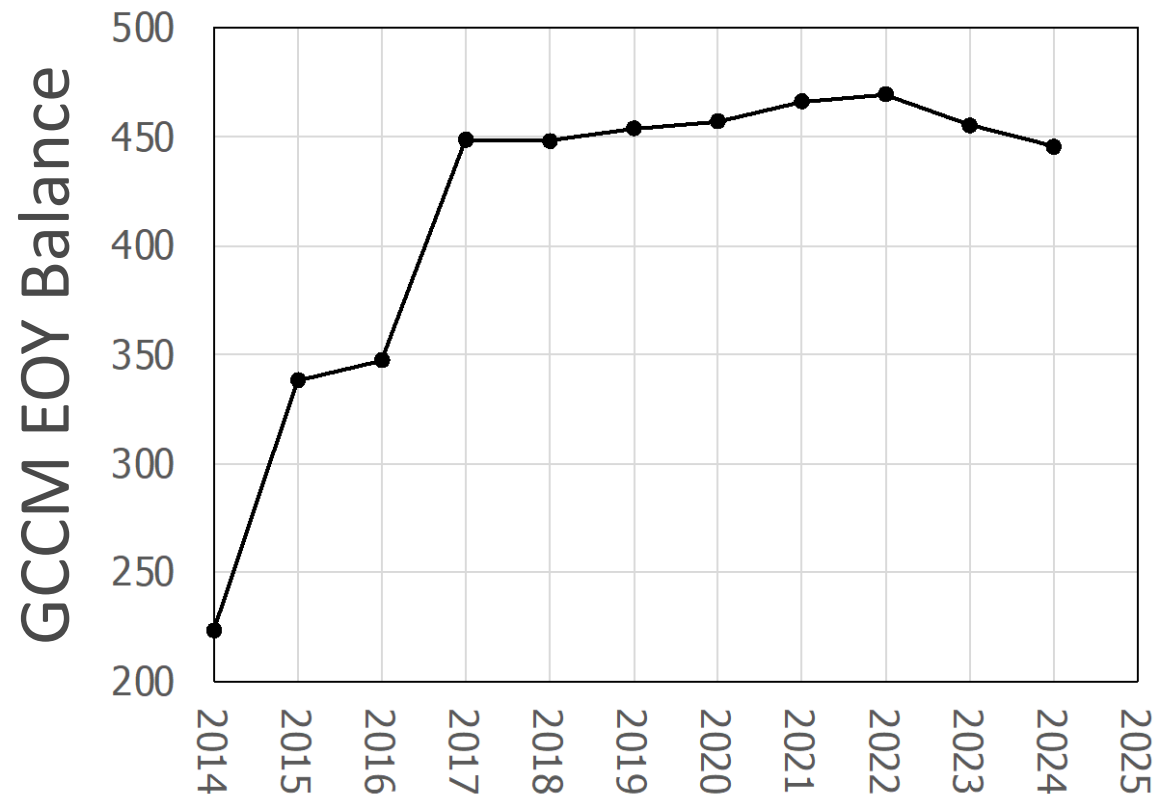
Miscellaneous \$ 1,644

Travel \$ 0

2024 Net: \$ 13,574

Duvall Endowment: \$102,463

Ashcroft Endowment: \$0



2024 End-of-Year Balance \$445,595

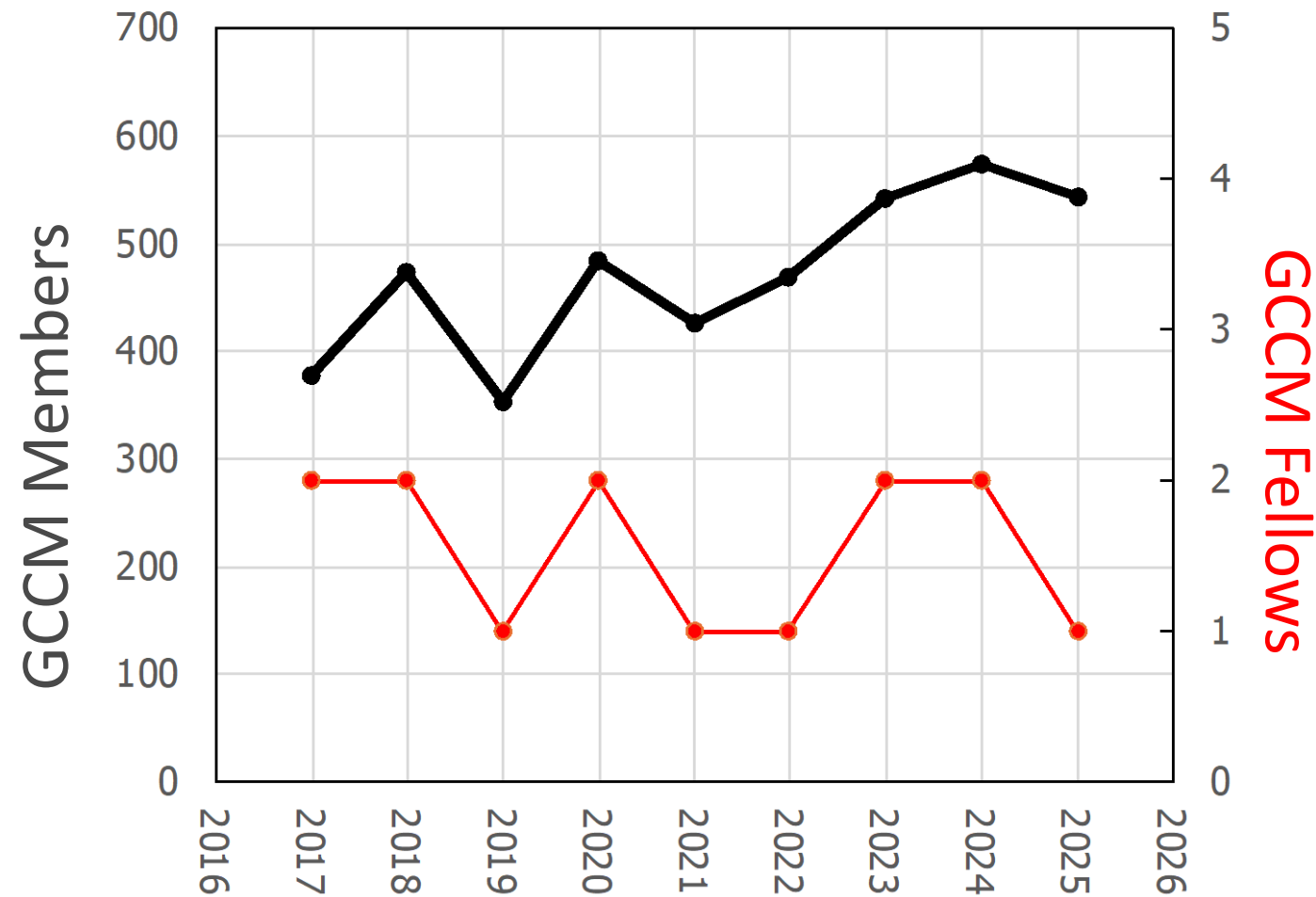


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Membership trends

February 2025

Undergrad Student	27
Graduate Student	154
Early Career	41
Regular	258
Lifetime	20
Senior/Retired	40
Senior Lifetime	4
Total	544



Award Nominations Due June 2, 2025

- **APS Fellowship**

Contact: Brittany Branch (babranc@sandia.gov), Fellowship Committee Chair.

- **Neil Ashcroft Early Career Award for Studies of Matter at Extreme High Pressure Conditions (APS Honors)**

The award recognizes outstanding theoretical or experimental contributions by an early-career scientist to studies of matter at extreme high pressure conditions. The award is conferred annually and consists of a \$5000 stipend, a certificate, and a travel allowance.

- **GCCM Student and Dissertation Research Award (Unit Award)**

The award recognizes outstanding work by a researcher within two years of PhD completion. The award is conferred annually and consists of a \$2000 stipend and an invitation to deliver an invited talk at the SCCM conference.



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2025 March Mtg Summary

Matter at Extreme Conditions Focus Sessions co-sponsored (GCCM, DCOMP, DMP).
co-sponsor this year. GCCM will lead in 2026.

GCCM Invited Session (1)

“Compression of Condensed Matter”

GCCM Contributed Sessions (3)

Number of contributed talks: 34

DCOMP was lead



#apsgccm

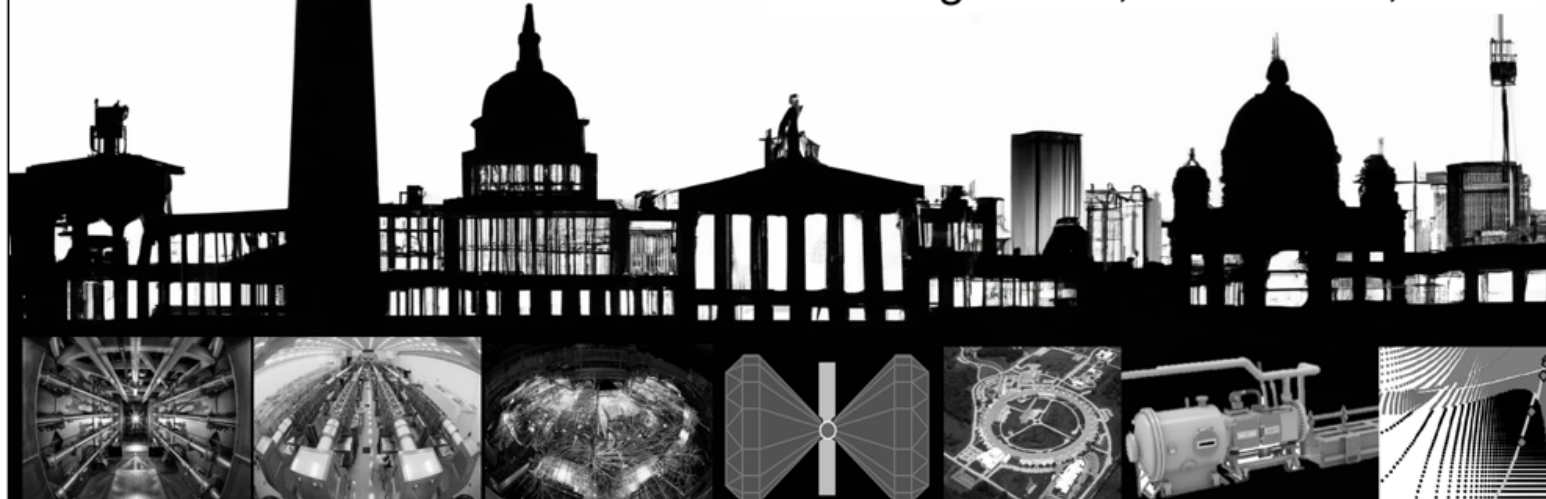
Sc 45 %



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SCCM 2025

24th International Conference on
Science of Compression in
Condensed Matter
Washington Hilton Hotel,
Washington DC, June 22-27, 2025



- new conference **name** & new **focus**
- all timescales of compression
- static, dynamic, shock
- Washington Hilton, **June 22-27, 2025**

SCCM2025@aps.org

Chaired by:

Scott Crockett, LANL

Pat Kalita, SNL

Bill Proud, Imperial College

Damian Swift, LLNL

Advisory Committee:

Minta Akin, LLNL

Dana Dattelbaum, LANL

Dayne Fratanduono, LLNL

Rus Hemley, CDAC & UIC

Jennifer Jordan, LANL

Su Peiris, Battelle

Vitali Prakapenka, U. Chicago/GSECARS

Chris Seagle, SNL

Sarah Stewart, UC Davis

Nenad Velisavljevic, LLNL/HPCAT

Yogesh Vohra, UAB

2025 SCCM Important Dates

Housing:

Deadline May, 20, 2025

Gov't Per Diem Rate of \$276.00

Washington Hilton (1919 Connecticut Ave.)

Abstracts:

Submissions are closed; post-deadline submissions may be considered email:

To: divisions-mtg@aps.org

CC: sccm2025@aps.org

Registration:

Early Registration: (February 24-April 1)

Regular Registration (April 1-May15)

Late/Onsite (May 15-June 27)

Registration is available to members and non-members. You must pay by credit card and can immediately print a confirmation receipt. Registration fees do **NOT** include meals, parking fees, or transportation costs. (see conference page for range of fees)

Early Career Student Symposium:

Deadline March 24th, 2025.

If you miss this deadline, please reach out to the Symposium co-chairs and we will try to accommodate you.

Participation Grants:

Submissions are close; post-deadline submissions may be considered email:

To: SCCMgrants@lnl.gov

New for SCCM 2025 – MASTERCLASSES ! (see conference page for more details)



Early Career Student Symposium 2025

Join early career researchers for a full-day scientific program, including technical presentations and networking opportunities.

SUNDAY June 22, 2025
Washington, D.C.

Chair: Sakun Duwal (SNL)
Co-Chair: Matthew Brennan (LANL)

Symposium registration is free, and financial support for travel and lodging is available. Instructions can be found within the registration form at <https://engage.aps.org/gccm/meetings/biennial-2025/ec-symposium>



Oral talks

Posters

Networking
Events

Awards

For more information, please contact Sakun Duwal at sduwal@sandia.gov or Matthew Brennan at mcbrennan@lanl.gov

SCCM 2025 Student Symposium

Symposium Registration

To register for the Symposium, please fill out the registration form (<https://forms.gle/WsCfPvWofXAxb6iQ9>). Every attendee must complete the registration form. There is no registration fee for the Symposium.

The deadline for registration and abstract submission is **March 24th, 2025**. If you miss this deadline, please reach out to the Symposium co-chairs and we will try to accommodate you.

Financial Support

Financial support for travel and lodging is available.

Instructions can be found within the registration form and on the [Participation Grants page](#).



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AIRAPT · SCCM · CHICAGO · 2027



Host institution: HPCAT, Advanced Photon Source

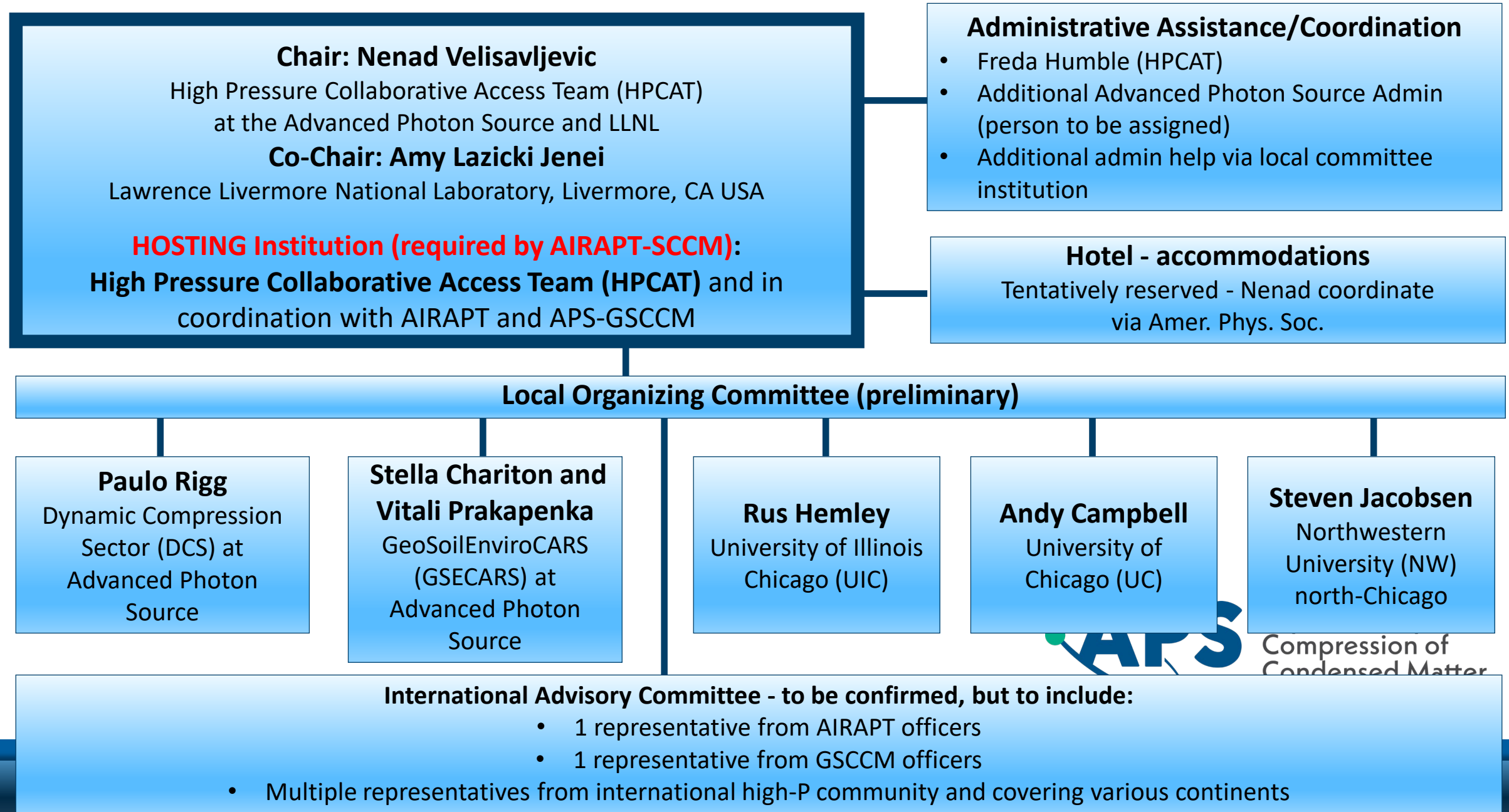
Organizers: Nenad Velisavljevic HPCAT/LLNL (GCCM former ExC member)
Amy Lazicki LLNL (AIRAPT secretary)

UPDATES:

- Dates: June 18-27, 2027, reservation confirmed by Sheraton Grand Hotel (entire 4th floor: up to 10 rooms, with larger rooms partitioned)
- Nenad and Amy meeting on regular basis to discuss general scientific agenda, educational classes, hotel prep, and other logistics, working on drafting a list of names to invite for International Advisory Committee, to be finalized by the 2025 AIRAPT & SCCM meetings
- Major part of planning (especially regarding scientific agenda and classes) is being gleaned from the 2025 SCCM and AIRAPT conferences (held separately in 2025; both Amy & Nenad will attend)
- Questions or suggestions? SCCM2027@aps.org email is active for communication



2027 joint AIRAPT-SCCM conference Organizational Structure

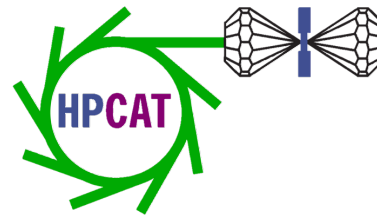


Proximity to high pressure research centers

~35km southwest



- The Advanced photon Source upgrade to APS-U. Opportunity to showcase various static and dynamic pressure facilities and capabilities (DAC, Large volume press, gun, laser, etc.)
- Argonne National Laboratory has agreed to facilitate conference participants' visit for tours and hands-on training



GCCM Virtual Seminar Series – Docere Procul

to inform or teach at a distance

GCCM Hosts a virtual seminar series!

- Recent emphasis on static compression
- Need nominations for speakers
- Need volunteers to help organize

Contact: Tracy Vogler (tjvogle@sandia.gov), or any
GCCM Exec Committee Member

October 17: Vitali Prakapenka, University of Chicago (73 registrants)

Polymorphism of Superionic Ice: Static vs Dynamic Compression

December 19: Shanti Deemyad, The University of Utah

Competitive Structural and Electronic States under Pressure

January 23: Jon Eggert, Lawrence Livermore National Laboratory (187 registrants)

Laser-driven dynamic compression of materials

March 6: Valery Levitas, Iowa State University (>144 registrants)

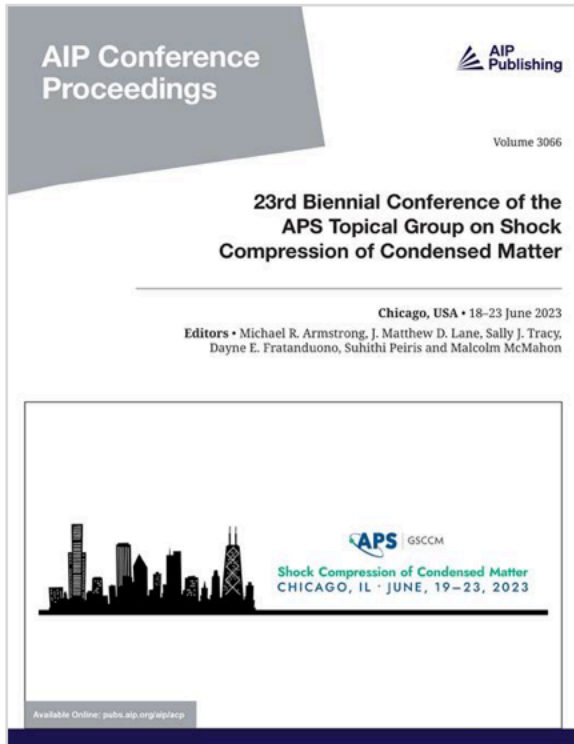
**New Rules of Coupled Severe Plastic Deformations, Phase Transformations,
and Microstructure Evolution under High Pressure**



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Volume 3066, Issue 1

9 December 2024



23RD BIENNIAL CONFERENCE OF THE APS TOPICAL GROUP ON SHOCK COMPRESSION OF CONDENSED MATTER

18–23 June 2023

Chicago, USA

2023 SCCM Proceedings are now available online!

Fratanduono, Dayne, Suhithi Peiris, Malcolm McMahon, Mike Armstrong, Sally Tracy, and Matt Lane. "Preface: 23rd Biennial APS Conference on Shock Compression of Condensed Matter." In *AIP Conference Proceedings*, vol. 3066, no. 1, pp. 1-3. American Institute of Physics, 2024.

RESEARCH ARTICLE | DECEMBER 09 2024

Preface: 23nd Biennial APS Conference on Shock Compression of Condensed Matter 🛒

AIP Conf. Proc. 3066, 010001 (2024)

<https://doi.org/10.1063/12.0020858>



Open Discussion

- Membership recruitment
- How do we make the most of the annual March meetings and Biennial Meetings?
 - Input please!
 - If you think of something later, please contact any board member
- Requests from community

