

Working Group WG-15 – Soft Matter Physics
Report to the IUPAP Council & Commission Chairs meeting
September 8, 2024

Mandate of the IUPAP Working Group on Soft Matter

1. To organize/assist in organization of the International Soft Matter Conference every 3 years in each geographic region (Europe, America, and Asia/Australia).
2. To coordinate soft-matter-related regional, national & local conferences, meetings & workshops
3. To coordinate soft matter education, such as summer schools and short courses and help organize them if a need appears
4. To promote soft matter research through information exchange, publicity, prizes, publications, etc.
5. To strengthen the connections between academic and industrial soft matter research and development through outreach events, short courses, etc.

Progress since last report:

1. The International Soft Matter Conference (ISMC) was held in Raleigh, North Carolina, USA <https://soft-matter.com/ismc2024/> July 29-August 2, 2024. This was the first ISMC in the Americas and it completes the first cycle of “Soft Matter Around the World in Three Years” – every year on a different continent, which is the first mandate in the IUPAP WG-15 mandate (see above and on <https://iupap.org/who-we-are/internal-organization/working-groups/wg15-soft-matter/>). The two previous ISMCs were held in Osaka, Japan <https://ismc2021.jp/> on September 4-8, 2023 and in Poznan, Poland on September 19-23, 2022 <https://eu-softcomp.net/events/international-soft-matter-conference-2022/>. The ISMC 2024 conference featured 7 plenary talks, 54 invited keynote lectures, 84 contributed oral presentations, and over 270 posters. More than half of the invited speakers were from outside the Americas.
2. The conference series “Soft Matter Around the World in Three Years” is run in coordination between three independent organizations: Soft Matter Association of Asia and Oceania (SMA-AO), Soft Matter Association of the Americas (SMAA), and SoftComp (for European ISMC). The first two associations (SMA-AO and SMAA) were recently formed following the first mandate of IUPAP WG-15 (see above and on <https://iupap.org/who-we-are/internal-organization/working-groups/wg15-soft-matter/>). The third one (SoftComp) was organized 20 years ago. The two new associations (SMA-AO and SMAA) implement the first mandate of IUPAP WG-15 in the corresponding regions (Asia-Oceania and the Americas). They are responsible for organizing ISMC in their regions and for coordinating information exchange about existing conferences, meetings, summer/winter schools connecting them to professional societies and publicizing events in the corresponding countries. The next two ISMC conferences of the “Soft Matter Around the World in Three Years” series will be in Chania, Crete, Greece on 29 September – 3 October, 2025 and in Goa, India on May 25-29, 2026. The call for the proposals for the next location of ISMC 2027 in the Americas is out and the location will be selected early next year.

3. In addition to the main ISMC 2024 conference there were two satellite events this year in North Carolina organized by Soft Matter Association of the Americas: (i) Young Investigator Workshop for 120 students and post-docs <https://smaa.eventsair.com/cmspreview/ismc-yiw-2024/#young-investigator-workshop> on the campus of North Carolina State University and (ii) Duke Soft Matter Day <https://softmatter.duke.edu/duke-soft-matter-day>.

4. The Soft Matter Association of the Americas has organized several ad hoc committees: (a) committee to determine the by-laws of the Association its structure and rules including the executive committee, rotations, elections, etc.; (b) committee to broadcast the call for proposals for the location of the next ISMC in the Americas and to collect proposals and present them to the selection committee; (c) educational committee the goal of which is the development of short educational videos explaining concepts of soft matter both for students and for general public in addition to short courses for industry or academia, and collecting the educational material for SMAA website, (d) web design committee that will include SMAA webmaster responsible for the content updates, listings of regular zoom seminars, other events and activities, job listings, educational information, etc. In addition to these four ad hoc committees, Soft Matter Association of the Americas consists of the four permanent councils:
(i) Council of local organizations responsible for coordinating activities between local soft matter organizations and for helping to start new ones, (ii) Industrial Council responsible for contacts with companies working in the soft matter sector of industries, (iii) Council of professional organizations responsible for coordination of activities with various professional organizations related to soft matter science, and (iv) Council of the Americas coordinating activities between different countries of the Americas.