# Working Group WG-15 – Soft Matter Physics Report to the IUPAP Council & Commission Chairs meeting and 29<sup>th</sup> IUPAP General Assembly, Sao Paulo, Brazil, 9 – 13 October 2017

## September 2017

The Interim Working Group on Soft Matter Physics (WG15), formed on June 23, 2017, has concluded that the needs of soft matter physicists worldwide will be best served by creating an IUPAP Working Group on Soft Matter with a mandate that includes organizing "Soft Matter Around the World" - International Soft Matter Conferences taking place every 3 years in each of the three IUPAP-designated geographical regions (Europe, Americas, and Asia/Australia/Africa). In addition, WG15 recommended that the new Working Group should coordinate and publicize soft-matter-related regional, national & local conferences, meetings & workshops as well as soft matter education, such as summer schools and short courses, to promote soft matter research and to strengthen the connection between academic and industrial soft matter research and development.

#### Background

At the 27<sup>th</sup> IUPAP General Assembly in London (November 2011), German delegates proposed the creation of "Commission on Soft Matter" dedicated to the emerging field of soft matter physics. In order to bring this proposal into action, the IUPAP Council requested Dr. Y. Fujii, Chair of C10, to consult C10 members and the broader community on this issue. A Study Group on Soft Matter was formed to recommend how to accommodate Soft Matter within IUPAP. The Study Group, Chaired by Dr. Y. Fujii, reached the unanimous recommendation, summarized in its report to IUPAP Council of April 10, 2014, that a new "Commission on Soft Matter" be formed in IUPAP to promote this important field. This report was evaluated at the IUPAP C&CC and 28<sup>th</sup> General Assembly (Singapore, November 2014) and Resolution 8 was passed.

#### **Resolution 8. Advisory Working Group on Soft Matter**

On the recommendation of the Executive Council the 28<sup>th</sup> General Assembly of IUPAP resolves:

- A. to establish an Advisory Working Group on Soft Matter, to be convened by a recognized expert on Soft Matter Physics,
- B. that the representatives of IUPAP Commissions C3, C6, C8, C10, C20 and a representative of IUPAP Affiliated Commission AC4 should constitute the nucleus of the Advisory Working Group on Soft Matter,
- C. to charge the Advisory Working Group on Soft Matter with the task of
  - a. recommending whether the field of Soft Matter Physics should be represented by a new Working Group or a new Commission, and
  - b. defining the mandate for this new body,
- D. to delegate to the Executive Council the authority to implement the recommendations of the Advisory Working Group on Soft Matter.

## Interim Working Group on Soft Matter Physics (WG15)

To implement this resolution, the IUPAP Executive Council has approved setting up the Interim Working Group on Soft Matter Physics (WG15) with the following mandate:

- To advise the IUPAP on how it should best cover the activities of soft matter physicists, either by:
  - o Establishing a Commission for Soft Matter Physics, or
  - Establishing a Working Group on Soft Matter Physics
- To propose the mandate of this new body Commission/Working Group
- To propose the initial members of the Commission/Working Group

On June 23, 2017, the Interim Working Group 15 on Soft Matter Physics has been formed - see Appendix for the list of members of WG15.

#### Recommendation

Members of Working Group 15 performed the analysis of the soft matter landscape on different continents and discussed the needs of soft matter scientists during five WebEx teleconferences – two general ones (held on July 6<sup>th</sup> and August 15<sup>th</sup>) and three teleconferences concentrating on the individual needs of Americas, Asia, and Europe (held on July 5<sup>th</sup>, July 7<sup>th</sup>, and July 13<sup>th</sup>, respectively) and unanimously concluded that:

• Establishing an IUPAP Working Group on Soft Matter would be highly beneficial for soft matter physicists on all continents and recommended the following mandate.

## • Mandate of the proposed IUPAP Working Group on Soft Matter

- 1. To organize/assist in organization of an International Conference "Soft Matter Around the World" which rotates every 3 years to 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/winter 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.

## • Proposed structure of the Soft Matter Working Group:

The Working Group will consist of the Chair, a balanced representation from each of the three geographic regions, and an executive director. Each member of the Working Group will Chair one Regional Subcommittee and/or participate in several additional Subcommittees related to the articles of the mandate.

In addition to the executive committee members, the Soft Matter Working Group will have **associate members** including representatives from professional societies and from industry. Associate members can participate in WG activities including recommendations of topics/speakers to the program committees for the International Conferences, suggestions for and organization of meetings, workshops, schools and other activities.

• Initial members of the IUPAP Working Group on Soft Matter

The list of the proposed members of the Working Group on Soft Matter will be submitted in a separate letter to the President of IUPAP, Dr. Bruce H J McKellar, to be taken to the Council for its consideration at the October 2017 C&CC Meeting.

## Appendix Members of Interim Working Group on Soft Matter Physics (WG15)

1. Chair: Michael Rubinstein (University of North Carolina at Chapel Hill, USA)

## Americas:

- 2. David Weitz (Harvard University, USA)
- 3. Seth Fraden (Brandeis University, USA)

## **Europe:**

- 4. Tom McLeish (Durham University, UK)
- 5. Gerhard Gompper (Research Center Jülich, Germany)

## Asia/Australia/Africa:

- 6. Sriram Ramaswamy (Indian Institute of Science, India)
- 7. Hajime Tanaka (University of Tokyo, Japan)