

**Name of the Union**  
**Activities' Report - Year 2017**

**Delegate/Author Name**

**Mario Malinconico**

**1. Introduction**

During the course of 2017, Dr. Mario Malinconico performed the following activity. The members of the Italian National Committee for IUPAC participated in the activities from time to time **Main activities carried on by (Union name) during 2017 relevant for Italy and for CNR**

**2. Main activities carried on by (Union name) during 2017 relevant for Italy and for CNR**

- Project "Categorizing Chalcogen, Pnictogen, and Tetrel Bonds, and Other Interactions Involving Groups 14-16 Elements" (Project No. : 2016-001-2-300, Division 300, Chategorizing Chalcogen): The inaugural event of the project was organized in Milan (6 February 2017) and the poster for the announcement of the event is attached. All Task Group Members attended the event except Steve Scheiner (USA). The scientific session was open to the scientific community and the participants came from Europe, America and Asia. The report of the event was published as Editorial on Crystal Growth & Design (2017, 17, 1439; see CGD 2017, 17, 1439) (Journal of the American Chemical Society, IF 2016: 4.055) and has already received 4 citations.

- on October 10th a meeting was held with the IUPAC past president Leiv Sydnes at the DSCTM in Rome. The meeting addressed the discussion on the follow-up of the CHEMRAWN Conference in Rome in 2016 and on a possible involvement of the CNR in the publishing activity of a book on the management of solid urban waste. The dott. Maurizio Peruzzini was present at the Meeting.

- On October 21, during a skype conference, it was decided to set up an IUPAC group for the Centenary, which includes dr. Mario Malinconico, the dott. Maurizio Peruzzini, the prof. Pietro Tundo, the prof. Michele Laus (president of AIM), Prof. Angela Agostiniano (President of SCI), Prof. Francesco Nicotra. The group will meet in 2018 to elaborate proposals for the participation of Italy in the celebration of the centenary and in the International Year of the Periodic Table of the elements of the 150th anniversary.....

**3. Activities carried on by (Italian Delegate name) within the Union during 2017 and impact on the Italian scientific community**

Dr. Malinconico participated in the IUPAC Polymer Division with the presentation of a project on "Additives intended to promote the Degradation of Polyolefins. The project is under approval, and will result in an IUPAC contribution of around € 5000. Italian (Novamont) and international representatives participate in the working group.

Dr. Malinconico also actively followed the IUPAC elections by promoting the appointment in the divisions and in the CNR staff committees. As an example, during the course of 2017, Dr. Margherita Gavagnin, of the ICB-CNR of Pozzuoli, has been elected associate member of the IUPAC Bibliographic Committee

**4. Evaluation of the participation in terms of benefits and membership cost**

The Italian CNR membership has as main implication the visibility of the Italian scientific community and that of the CNR particularly at the international level. It is also important to underline that for the first time in IUPAC history an Italian representative has been elected in the Bureau, and this entails the concrete possibility of increasing IUPAC funding to the activities that take place in Italy.

**5. Evaluation of Italians' attendance and how to improve interest and involvement**

The anniversary of the 100th of the IUPAC Foundation and the 150th anniversary of the Periodic Table of Elements will fall during 2019. The Italian participation in these events is being organized, with the involvement of the Universities, the CNR and the Italian Academies.

#### **6. Italian experts with important roles within the Union or within related Commissions and Programs (if known)**

Prof. Piero Tundo, Venice, member of the Bureau.

Prof. Francesco Nicotra, Milan, President of Division III Organic Chemistry.....

#### **7. If Union with CNR Commission, short summary about the 2017 CNR Commission activities**

27 June 2017: participation in the Committee meeting at the CNR office (P.zza Aldo Moro). Particularly important activity was carried out by Prof. Giuseppe Resnati as chairman of two IUPAC projects:

- "Basic Terminology of Crystal Engineering" project (project No. : 2012-044-1-100, Division 100, Basic Terminology): a meeting with useful discussions was held with other members of the Task Group (Christer B. Aakeröy, Alessia Bacchi, Len Barbour, Gautam Desiraju, TN Guru Row, Kari Rissanen) during the 24th Congress of the International Union of Crystallography (21- August 28th 2017, Hyderabad, India)

- Project "Categorizing Chalcogen, Pnictogen, and Tetrel Bonds, and Other Interactions Involving Groups 14-16 Elements" (Project No. : 2016-001-2-300, Division 300, Chategorizing Chalcogen): The inaugural event of the project was organized in Milan (6 February 2017) and is attached the poster for the announcement of the event. All Task Group Members attended the event except Steve Scheiner (USA). The scientific session was open to the scientific community and the participants came from Europe, America and Asia. The report of the event was published as Editorial on Crystal Growth & Design (2017, 17, 1439; see attached file or CGD 2017, 17, 1439) (Journal of the American Chemical Society, IF 2016: 4.055) and has already received 4 citations.

- a meeting with useful discussions was held with other members of the Task Group (Christer B. Aakeröy, Gautam Desiraju, Kari Rissanen, Giancarlo Terraneo) during the 24th Congress of the International Union of Crystallography (21-28 August 2017; Hyderabad, India )

- a keynote lecture entitled "The halogen bond in crystal chemistry and beyond" was held on August 27th 2017 (09:00 - 10:00, IUCr - Keynotes) to present the project during the 24th Congress and General Assembly of the International Union of Crystallography (Hyderabad, India)

- a plenary lecture entitled "Halogen Bond and Beyond" was held on September 9th 2017 (2:00 - 2:40 pm, HBOND 2017 - plenary) to present the project during the HBOND 2017 symposium (Jyväskylä, Finland).

- on October 10th a meeting was held with the IUPAC past president Leiv Sydnes at the DSCTM in Rome. The meeting addressed the discussion on the follow-up of the CHEMRAWN Conference in Rome in 2016 and on a possible involvement of the CNR in the publishing activity of a book on the management of solid urban waste. The dott. Maurizio Peruzzini was present at the Meeting.

- On October 21, during a skype conference, it was decided to set up an IUPAC group for the Centenary, which includes dr. Mario Malinconico, the dott. Maurizio Peruzzini, the prof. Pietro Tundo, the prof. Michele Laus (president of AIM), Prof. Angela Agostiniano (President of SCI), Prof. Francesco Nicotra. The group will meet in 2018 to elaborate proposals for the participation of Italy in the celebration of the centenary and in the International Year of the Periodic Table of the elements of the 150th anniversary.

- participation in the "IUPAC100 Periodic Table Challenge" project which can be found at the following link: [https://iupac.org/projects/project-details/?project\\_nr=2017-031-1-050](https://iupac.org/projects/project-details/?project_nr=2017-031-1-050)

- preparation of the IUPAC project entitled "Towards a global definition of value" which will be presented shortly. The president of the working group is Professor Pavel Karen, chemistry department of the University of Oslo, and the members of the working group are Prof. Nicotra and

Professor Daniel Rabinovich, chemistry department of the University of North Carolina in Charlotte

- preparatory activity for participation in the science and technology fair organized by Focus magazine in Milan (November 8-11). We will participate as UniPD and as CNR with dissemination activities

which will also concern the periodic table and the elements.

- interaction with the Italian Chemical Society to define the correct denomination in Italian of the 4 new elements and the preparation of the press release.

- The dott. Mario Malinconico, the prof. Pietro Tundo, the prof. Giuseppe Resnati, the prof. Francesco Nicotra, the dott. Lidia Armelao participated in the World Congress and the IUPAC General Assembly in Sao Paulo, Brazil, from 7 July to 16 July, also taking part in Division meetings.

- Prof. Piero Tundo organized the IUPAC Summer School on "SUSTAINABLE DEVELOPMENT THROUGH GREEN CHEMISTRY" which was held in Venice from 7 to 14 July 2017

- Prof. Nicotra spoke to the General Assembly of IUPAC held in Sao Paulo, and was invited to participate in the Bureau Meeting as "incoming President" of Division III. Prof. Pietro Tundo, a member elected for Italy, was also present at the Bureau Meeting.

- Prof. Nicotra and Tundo participated in, and presided over, the Election Committees to identify the TM, AM and NR nuances of the Division III and Division VI, respectively, for the two year period 2018-19.

- As regards the Conferences under the IUPAC sponsorship to be organized in Italy, Nicotra has promoted and contributed to the organization of the "International Conference on Organic Synthesis" which will take place in September 2018 in Florence, and at the Eurasia Conference<sup>15</sup> which will take place in Rome. next September 2018. Both events were sponsored by IUPAC, at the request of the IUPAC Italian Committee.

Prof. Nicotra participated in 2017 in the presentation of an IUPAC project entitled "Bridging Ethnic Food Cultures through Chemistry".

## 8. Conclusions

The ongoing activities of Representative Mario Malinconico and members of the Italian IUPAC Committee have significantly improved Italy's participation in IUPAC and increased IUPAC events in Italy and the ability to attract resources.

It is essential that the CNR resumes contributing to the living expenses of the Italian Committee for IUPAC and that it allocates a budget to promote the participation of young researchers in international and national events organized by IUPAC.....

Signature



Pozzuoli, 05/07/2018