

## **Influence of the Action on Policy Makers and Standardisation bodies**

In 2018, the ECS SRA (Electronics Components and Systems Strategic Research Agenda) will replace the separate research agendas of the three industry associations AENEAS, ARTEMIS-IA and EPoSS. Up to 2016, these agendas were merged to constitute the Multi-Annual Strategic Research and Innovation Agenda (MASRIA), which was subsequently incorporated into the ECSEL Multi-Annual Strategic Plan (MASP). In the future, the ECS SRA will be identical to the MASRIA of the industry associations. The ECS SRA will contain 10 chapters, five of which have an ‘enabling technology’ signature (including computing and storage), whereas the other five are application-directed.

AENEAS/ENIAC Scientific Committee Council (AENEAS = Association for European NanoElectronics Activities) consist of members both from academia and industry and part of their job is to review the research agenda’s and provide feedback and input in order to make sure that the agenda covers a wide range of topic including emerging one.

Prof Said Hamdioui, Management Committee member of the Action, is also a member of AENEAS/ENIAC council. That created a direct channel to influence the ECS SRA and ensure that all the topics covered related to this action are included in the research agenda. In the current version of ECS SRA, the chapter on computing and storage will cover also memristive device- based circuit design, computing, storage, etc. This will ensure that memristive related topics would be included in the upcoming project calls, therefore giving the opportunity for the Action’s community to submit project proposals in related areas.

Furthermore, it is worth noting that various initiatives have started by the European Commission in preparation for the 9<sup>th</sup> Framework Programme. A Workshop on the Future of Electronic Components and Systems was organized by Colette Maloney (Head of Unit Competitive Electronics Industry, DG CONNECT) on April 27, 2017. The workshop was attended by some AENEAS/ENIAC Scientific Committee Council members. This was another route to stress the importance of the topics related to this COST action and to ensure that these topics will be included in the 9<sup>th</sup> Framework Programme.

In addition, in the last meeting of the AENEAS/ENIAC Scientific Committee Council that took place on Dec 4, 2017 in Brussels, the research agenda and the collected feedback were discussed including a further discussion on memristor-related subjects.

Other than influencing scientific committees, several members of the Actions such as Prof Themistoklis Prodromakis, Prof Sabina Spinga, Prof Giacomo Indiveri and the Action’s Chair, Prof Julius Georgiou among others, have put together a FET Flagship proposal on memristor technology entitled “MEMRISTOR: Exploiting Memristive Materials, Devices and Systems as a Viable Pathway for Beyond Moore Electronics”.

FET Flagships are visionary, science-driven, large-scale research initiatives addressing grand Scientific and Technological challenges. They are long-term initiatives bringing together excellent research teams across various disciplines, sharing a unifying goal and an ambitious research roadmap on how to achieve it. FET Flagships are aimed to establish



Europe as the leader in their specific domains and a pole of attraction for international cooperation; they will nurture creativity, flair and talent, attracting the best minds all over the world and creating the skilful multi-disciplinary researchers Europe needs. FET Flagships are expected to run for about 10 years, and they will bring together a large number of research organisations, including academia, large industry and SMEs.

The Flagship proposal targets to develop a fundamental platform of new generation non von Neumann technology to address all these issues using the advanced properties of the memristor. Adoption of memristors in applications combining biological cells e.g. nerves to form bio-electronic interfaces for transferring/processing signals between artificial and biological system is the key to develop the new paradigm platform for beyond von Neumann systems ranging from commercial products to highly profiled applications.

