

## Introduction: Proceedings of the 2<sup>nd</sup> NanoWorld Conference in Boston (NWC-2017)

### Introduction

Claudio Nicolini

*President (Fondazione ELBA Nicolini, Bergamo-Italy, 1993–now; NanoWorld Journal Editor in Chief, 2015–now; NanoWorld High Tech LLC USA, now); Member (Italian Science Technology Council, 1990–99; Russian Academy Sciences, 2008–now); University Eminent Chair of Biophysics (Philadelphia-USA, 1976–1984; Genova-Italy, 1985–2012; Moscow State University -Russia, 2010–now)*

From April 3 to 5, 2017 in Newton (Boston, USA) we set the second NanoWorld Conference (NWC) around the theme “Useful Science and Technology for a Just World” to focus on progresses in Nanotechnology and Nanosciences capable to address open problems from Energy to Environment, from Cancer to Hardware, from Space to Science and Society. Towards this end we improved present evaluation of excellence, so far typically carried out worldwide using total H-index of each author regardless the number of coauthors and of his position in each of the quoted papers, which most times is highly misleading and biased towards the size of the scientific community. In a recent study [1], deciles and author position using strictly Science Citation Index Journal Impact Factor appear indeed needed to select the best scientists competing for editorial board, referee, career progression and grant awards, by ranking them by the number and the total impact factor of their publications as first authors falling into 10 out of 10 deciles [1]. Attendance to the future NanoWorld Conferences will be indeed selected utilizing these indicators [1]. This is exemplified in the Plenary Keynote Session of both the First and Second NWC where renown lecturers at the crossing of Electronics, Biotechnology and Nanotechnology were selected among members of world leading Academies of Sciences and Universities. Indeed, protein-protein interactions play a major role in Cancer Control and their detailed understanding by Label-Free Nanotechnologies (QCM\_D nanoconductimetry, NAPPA microarrays, SNAP tag, MALDITOF Mass Spectrometry, SpADS Preprocessing, Protein Using Recombinant Elements PURE, Langmuir-Blodgett) is essential [2]. Similarly, with the Exploration of the Nano-world of Biomolecules in Action with Free Electron Lasers [3]. NWC-2017 created four plenary platforms to discuss the ways to advance in finding the solutions to the problems still facing evolving key sectors of \* Applications to Space, Energy and Environment of Nano-Materials, -Devices and -Systems, \* Protein structure at atomic scale by Synchrotron, CryoEM and XFEL, \* Unfolding the nanoworld of stem cells towards a self-healing potential. Particular attention has been paid to \* World Peace Forum, moved to the end of the Conference and thereby of these Proceedings considering that the time appeared to run out on humanity to solve the dramatic situations in energy, environment, politics made worst by the recent change in the White House, the incumbent Near-Earth Objects bigger than 1,300 feet ongoing to smash Earth, the nuclear reactors progressively deteriorating everywhere except where referendum (Italy) and government (Germany) stopped them. It was thereby concluded that the transfer of resources from nuclear and strategic armaments to science and technology could become a solution to jointly overcome the above open problems [4]. In close synphony with the Erice statement written in 1982 by Dirac, Kapitza and Zichichi (still largely unattended), it has been decided to propose the creation of an ad hoc international organization [4] to those institutions who worldwide already expressed an interest (Ettore Majorana Center Scientific Culture, Fondazionne ELBA Nicolini, Russian Academy of Science, United Scientific Group in USA, Skolkovo Institute of Science and Technology, Massachusetts Institute Technology, European Synchrotron Radiation Facility, Belfer Center of JF Kennedy School at Harvard University, Obama Foundation, Gorbachev Foundation) and have their employees attending this Conference from 38 different nations. The starting point could be the circulation of my proposal (4) distributed at the Conference and to several of the above organizations. It is from here that we have to start again by taking to completion the total nuclear and strategic disarmament initiated by the SALT treaties which will free enormous resources from both Russia, USA and elsewhere to be invested promptly in Research and Development to find solution to the humanity open problems described before. Later following are poster presentations and 120 speakers selected worldwide addressing in numerous parallel sessions the advances in Nanotechnology and Nanosciences.

The NWJ under the joint sponsorship of United Scientific Group (USA) and Fondazione EL.B.A. Nicolini (Italy) hosted the Conference with keynote and featured speakers covering different fields of nanotechnology from reputed academic institutions and cutting edge nanotechnological companies to deliver the transition from laboratories to commercial applications for the benefit of Society. 203 Scientists from 37 Countries attending the NWC-2017 constituted a platform for discussing the ways to advance in finding the solutions through nanotechnology and nanoscience for the problems facing the world in the key sectors of energy, environment, space, hardware and cancer with the involvement of overall society. The Conference has seen the participation of the world's leading innovators, experts, scholars from many technology and industry sectors, including USA and European Space agencies, to add new elements to the existing scientific and commercial developments. Supporter for the meeting were Stem Wave Institute for Tissue Healing (SWITH), Italy; Ettore Sansavini Health Science Foundation, Italy; Guna Terapie d'avanguardia, Italy and Springer Nature, USA.

## References

1. Nicolini C. 2016. How bibliometric indicators should be used to assess excellence in science and technology. *NanoWorld J* 2(3): 35-40.
2. Nicolini C, Bragazzi NL, Pechkova E. 2016. Microarray-based functional nanoproteomics for an industrial approach to cancer. II mass spectrometry and nanoconductimetry *NanoWorld J* 1(4): 130-134.
3. Fromme P, Spence JC. 2011. Femtosecond nanocrystallography using X-Ray lasers for membrane protein structure determination. *Curr Opin Struct Biol* 21(4): 509-516.
4. Nicolini C. 2016. From nuclear and strategic disarmament to joint worldwide research and development for humanity survival. *NanoWorld J* 2(4): 84-91.

**Citation:** Nicolini C. 2017. Introduction: Proceedings of the 2<sup>nd</sup> NanoWorld Conference in Boston (NWC-2017). *NanoWorld J* 3(Suppl 1): S1-S2.

**Copyright:** This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY) (<http://creativecommons.org/licenses/by/4.0/>) which permits commercial use, including reproduction, adaptation, and distribution of the article provided the original author and source are credited. Published by United Scientific Group.

**Received:** June 13, 2017   **Accepted:** July 06, 2017   **Published:** July 10, 2017