Alfonso Franciosi

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Alfonso Franciosi, a national of Italy and of the U.S., is currently the Chairman of the Board (Presidente) and Chief Executive Officer (Amministratore Delegato) of Elettra-Sincrotrone Trieste S.C.p.A., and a Full Professor of Physics with the University of Trieste. Additional recent service activities include serving on the Assessment Expert Group (AEG) established by the European Commission to assess the status of the large scale research infrastructure projects included in the Roadmap of the European Strategy Forum on Research Infrastructures, on the International Advisory Committee of the International Conference on the Physics of Semiconductors, and on the Accelerator Collaboration Board of the European Spallation Source.

Alfonso Franciosi was born in 1955 and graduated summa cum laude in Physics from the University of Rome "La Sapienza" in 1978. He was a postdoctoral fellow with the University of Wisconsin-Madison from 1980 to 1981, mostly focusing his work on the characterization of the electronic properties of transition metal silicides and metal/silicon interface chemistry by means of synchrotron radiation techniques. In 1982 he joined the Department of Chemical Engineering and Materials Science of the University of Minnesota in Minneapolis as an Associate Scientist. In 1983 he was offered faculty positions by the University of Illinois, Purdue University, Syracuse University, Wesleyan University and the University of Minnesota, and elected to become an Assistant Professor of Chemical Engineering and Materials Science in Minneapolis, establishing a research program in the area of electronic materials growth and characterization by synchrotron radiation analytical tools. He was promoted to tenured Associate Professor in 1988.

During his years in the U.S. he has had the privilege of working with some of the first dedicated synchrotron radiation sources in the world - the 240 MeV Tantalus storage ring, now at the Smithsonian Institute, and the 1 GeV source Aladdin - at the Physical Sciences Laboratory of Stoughton, Wisconsin. He has been Principal Investigator of numerous research projects funded by the U.S. Army Research Office, the Office of Naval Research, the National Science Foundation (NSF), 3M, Honeywell, Sperry, Control Data Corporation, etc., and from 1987 through 1993 served as Nucleation and Growth Focus Leader of the NSF Center for Interfacial Engineering, a private-public 50-50 partnership that developed a major research infrastructure in Minneapolis to host joint industry-University research teams.

From 1993 to 1999 professor Franciosi held concurrent appointments as Director of the TASC National Laboratory of the Istituto Nazionale per la Fisica della Materia (INFM) in Trieste, Associate Professor of Physics with the University of Trieste, and Associate

Professor of Chemical Engineering and Materials Science with the University of Minnesota. As Director of TASC-INFM he was responsible for the activities of its 5 Divisions (Materials, Quantum Devices, Surface Structures, Chemisorption, and Analytical). He stepped down as a Director in July 2000 after two consecutive 3-year terms, having presided over a 300% increase in the total funding of the Laboratory, new major equipment acquisitions (double crystal diffractometer, 200 KeV TEM, PECVD and RIE instruments, high-mobility III-V MBE facility, new synchrotron radiation beamlines at the Italian synchrotron radiation facility Elettra in Trieste), and the implementation of the new dedicated building that now houses the IOM-CNR Laboratory at the Elettra site.

From 2000 through 2004 professor Franciosi chaired the INFM National Committee for Synchrotron Radiation Research and served on the Board of Elettra-Sincrotrone Trieste S.C.p.A., the managing company of the Italian synchrotron radiation facility. Since 2000 he is a Professor of Physics with the University of Trieste and continues to lead the Materials Division of the TASC Laboratory of IOM-CNR.

Since 2004 professor Franciosi serves as Chief Executive Officer of Elettra-Sincrotrone Trieste S.C.p.A, in his capacity of managing director on the company's Board and since 2014 he serves also as Chairman of the Board. As such he is responsible for the operation of the 2.4 GeV, third-generation synchrotron radiation source Elettra and of the new free-electron laser based, fourth-generation source FERMI, as well as for their scientific activities and development plans. Highlights includes the successful completion - on time and on budget - of a 15 million euro Elettra upgrade plan, which implemented full-energy injection and top-up operation, and the 160 million euro construction of FERMI, the first seeded free-electron laser user facility currently in operation worldwide. In 2004 through 2013 the certified accounts of Elettra-Sincrotrone Trieste S.C.p.A. have shown a threefold increase in turnover (from 18.6 million euros in 2004 to 55.8 million euros in 2013) and a net result that went from a 15 million euro loss in 2004 to a profit in 2010, 2011, 2012 and 2013.

The publication list of professor Franciosi includes over 300 articles in refereed international journals on the physics and materials science of semiconductors, semiconductor heterostructures, superlattices, quantum wells, metal/semiconductor contacts, thin film nucleation and growth, lasers and optical modulators, synchrotron radiation spectroscopies and microscopies, and he holds 3 U.S. patents in such fields. In 2001 he was elected a Fellow of the American Physical Society "for his contribution to the understanding of the properties of interfaces, including semiconductor heterojunctions and metal/semiconductor contacts, and his efforts to bridge the gap between basic interface science and applications".

Professor Franciosi has taught in the past and continues to teach today graduate and undergraduate courses on the mechanical properties of materials, electronic properties of materials, electromagnetism, processing of electronic materials and solid state electronics and has been the advisor of more than 30 doctoral and master students in Italy and in the U.S. Most of his former students are now employed by industrial concerns such as Intel, 3M, IBM, Xerox, Cypress Semiconductor Corporation, Bosch, Insiel, etc. A few hold faculty positions in Cambridge, Bristol, Cork, Linz, Minneapolis, Nova Gorica, etc.