

Curriculum Vitae

Dr. Nicola Briguglio (male) has been working in the energy field at Italian National Council of Research (CNR), Institute for Advanced Energy Technologies (ITAE) since 2005. In 2008 he received a PhD degree from University of Messina with a thesis titled: "Simulation Tools for Hydrogen Production from Renewable Energy". Presently, he works at the CNRTAE Institute "Nicola Giordano" in Messina as senior researcher. In particular, dr. Nicola Briguglio is a member of "Electrochemical Processes for Energy Conversion" and "Advanced Energy and Transportation Systems" groups at the CNR-ITAE Institute. He is involved in research programs related to the development of energy technologies and have developed prototypes of PEM electrolysis system and batteries (Zebra and vanadium Vanadium flow battery).

Competences of Dr. Briguglio cover technical evaluations of Life Cycle Assessment and CFD analysis He is referee for the International Journal of Hydrogen Energy and Fuel Processing Technology. He is the author of several international publications, technical reports, oral presentations at international congresses and contributions in books about hydrogen technologies. He has been professor in master and specialist courses about hydrogen technologies. He is involved in different European and National research Projects in Fuel cells, PEM Electrolysis and Batteries. He has participated in research activities, both experimental and theoretical, in the fields of hydrogen production from renewable energy by PEM electrolysis and the use of fuel cells in automotive and stationary applications. He has been involved in the training of Ph.D. students and he has taught national and international courses. He was involved in contracts with FIAMM for the development of batteries and Tozzi Renewable energies for the development of PEM electrolyzers.

Scientific activity is currently addressed towards the following points reported below:

- Development of systems for Polymer Electrolyte Fuel Cell (PEFC);
- Studies on hydrogen production from renewable energy system: PEM Electrolyzer;
- Development of PEM Electrolyzer systems and stack; Electrochemical characterization of innovative materials and components in single cell configuration and short stack;
- Development of components and stacks for REGENERATIVE Fuel Cell;

LIST OF MOST RELEVANT EUROPEAN PROJECT PARTICIPATIONS ON ELECTROLYSIS:

ELECTROLIFE G.A. 101137802 ENHANCE KNOWLEDGE ON COMPREHENSIVE ELECTROLYSERS TECHNOLOGIES
DEGRADATION THROUGH MODELING, TESTING AND LIFETIME PREVISION, TOWARD INDUSTRIAL IMPLEMENTATION

HORIZON HYSSCALE G.A. 101112055 ECONOMIC GREEN HYDROGEN PRODUCTION AT SCALE VIA A NOVEL, CRITICAL
RAW MATERIAL FREE, HIGHLY EFFICIENT AND LOW-CAPEX ADVANCED ALKALINE MEMBRANE WATER ELECTROLYSIS
TECHNOLOGY

H2020 ADVANCEDPEM G.A. 101101318. Advanced High Pressure and Cost-Effective PEM Water Electrolysis
Technology

H2020 FCH JU NEPTUNE - G.A. 779540 Next Generation PEM Electrolyser under New Extremes

H2020 FCH JU ANIONE G.A. 700008 Anion Exchange Membrane Electrolysis for Renewable Hydrogen Production on a Wide-Scale

H2020 PROMETH2 862253 Cost-effective PROton Exchange MEmbrane WaTer Electrolyser for Efficient and Sustainable Power-to-H2 Technology

H2020 FCH JU HPEM2GAS G.A. 700008 High Performance PEM Electrolyzer for Cost-effective Grid Balancing Applications

FP7 FCH JU Project Electrohypem 300081 Enhanced performance and cost-effective materials for long-term operation of PEM water electrolyzers coupled to renewable power sources